

ENGINEERING DRAWINGS AND ASSOCIATED LISTS

**EVANS & SUTHERLAND
FLOPPY QUAD
DISK STORAGE SYSTEM**

EVANS & SUTHERLAND COMPUTER CORPORATION

The symbols and their meanings to be used within this manual for warnings, cautions and notes are listed below:

WARNING

An operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in injury to or death of personnel.

CAUTION

An operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in damage to, or destruction of, equipment or loss of mission effectiveness.

NOTE

An essential operating or maintenance procedure, condition, or statement, which must be highlighted.

SAFETY SUMMARY

The following general safety precautions are not related to any specific procedures and therefore do not appear elsewhere in this publication. These are recommended precautions that personnel must understand and apply during many phases of operation and maintenance.

KEEP AWAY FROM LIVE CIRCUITS

Operating personnel must at all times observe all safety regulations. Do not replace components or make adjustments inside the equipment with high voltage supplies turned on. Under certain conditions, dangerous potentials may exist when the power controller is in the OFF position because of charges retained by capacitors. To avoid casualties, always remove power and discharge and ground a circuit before touching it.

DO NOT SERVICE OR ADJUST ALONE

Under no circumstances should any person reach into the enclosure for the purpose of servicing or adjusting the equipment except in the presence of someone who is capable of rendering aid.

RESUSCITATION

Personnel working with or near high voltages should be familiar with methods of resuscitation.

LIST OF EFFECTIVE PAGES

NOTE: On a changed text page, the portion affected by the latest change is indicated by a vertical line in the outer margin of the page. Change number 0 indicates an original page.

Dates Of Issue For Original And Changed Pages Are:

Original 10 October 84
Changes 19 December 89

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 108
CONSISTING OF THE FOLLOWING:

PAGE NO.	CHANGE NO.
Cover	10
i - ii	10
1-1 - 1-8	1
2-1 - 2-2	10
801807-006 THRU 801900-002.....	10

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Salt Lake City, Utah

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The technical data contained herein is for general reference purposes only and is neither contractual nor warranted to reflect the exact technical configuration or performance of a particular product. Refer to your contract or purchase order for specific details and specifications applicable to your product.

CONTENTS

SECTION 1: Cage Code
1.1 IntroductionSECTION 2: SYSTEM DATA
2.1 Introduction

<u>Part Number</u>	<u>Rev</u>	<u>Description</u>
801807-006	AH	Floppy Drive Assembly
200470-101	B2	Cd, 6200 Drive
200470-601	B2	Logics
200471-100	C4	Cd, 6200 Formatter
200471-600	C4	Logics
200472-100	A2	Power Supply, Floppy Disk
200473-100	A1	Cable Assy, D.C. Power
200474-100	A1	Cd, AC Distribution
200479-100	A1	DC Distribution
200480-100	A0	Cable, Ground
200481-100	A2	Panel, Front
200482-100	A1	AC Distribution
200483-100	A1	Panel, Rear
200489-100	A1	Cd, Adapter, Qume Drive
200490-100	A0	Wire, Ground, Extension
200491-100	A3	Cable Assy, +5V, +24V
204067-001	NC	Cable Assy, BP Jumper
801900-002	A2	Cable Assy, Flat Ribbon



SECTION 1

CAGE CODE

1.1 INTRODUCTION

The commercial and government entities (CAGE) Code provides a cross reference between the part number and the manufacturers' names and addresses. To acquire the name and address of a manufacturer, obtain the CAGE code number from the appropriate parts list and refer to Cataloging Handbook H4/H8 Commercial and Government Entity (CAGE), Sections A and B.



SECTION 2

SYSTEM DATA

2.1 INTRODUCTION

This section contains engineering drawings that show system units and cabling interconnection between the units and subunits of the system.



MAINTENANCE PARTS LIST

ASSEMBLY: PL 801807-006

REV: AH

DESC: *SCD*,DRIVE ASSY,QUAD FLOPPY,DUAL HEAD,230V,60HZ

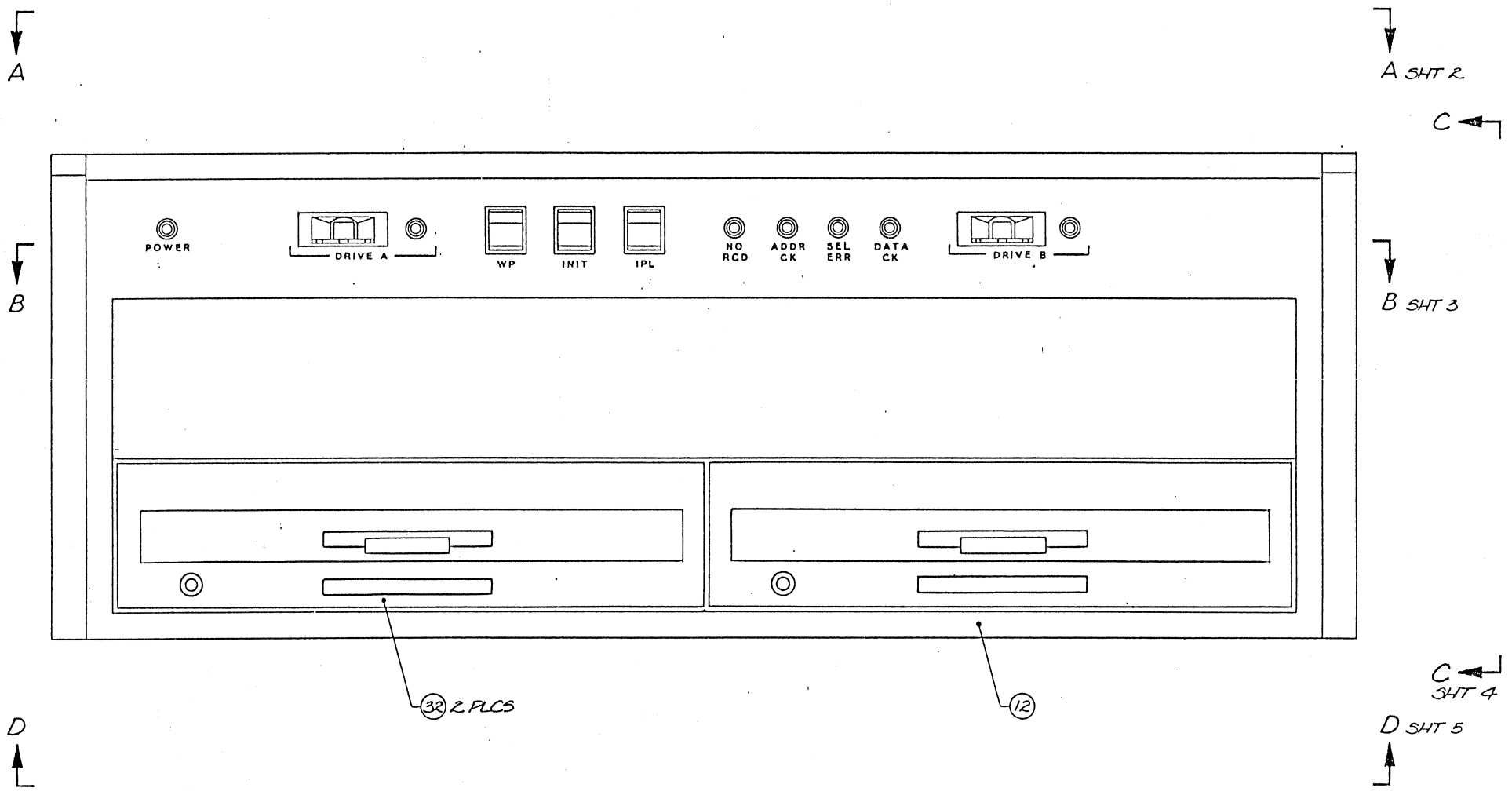
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	CD,6200 LD DRIVE BD P	53938	EVANS & SUTHERLAND.	200470-101	200470-101	1
002	CD,E&S,6200 FRMTR PC	53938	EVANS & SUTHERLAND.	200471-100	200471-100	1
003	*OBS*,USE 200832-100		? UNDELETABL	*NO VEND PART NO*	801900-002	1
004	CBL,BP JUMPER,50 COND	53938	EVANS & SUTHERLAND.	204067-001	204067-001	1
005	BRKT,FRMTR BD,RT	53938	EVANS & SUTHERLAND.	500474-001	500474-001	1
006	BRKT,FORMATIER BD,LFT	53938	EVANS & SUTHERLAND.	500474-002	500474-002	1
007	PLATE,BASE	53938	EVANS & SUTHERLAND.	500470-001	500470-001	1
008	PNL,LFT SIDE	53938	EVANS & SUTHERLAND.	500472-001	500472-001	1
009	PNL,RT SIDE	53938	EVANS & SUTHERLAND.	500472-002	500472-002	1
010	PLATE,CROSS	53938	EVANS & SUTHERLAND.	500473-001	500473-001	1
011	COVER, TOP	53938	EVANS & SUTHERLAND.	500471-001	500471-001	1
012	PNL ASY,FRONT	53938	EVANS & SUTHERLAND.	200481-100	200481-100	1
013	REAR PNL ASY. 6200 LS	53938	EVANS & SUTHERLAND.	200483-100	200483-100	1
015	PWR SPLY ASY,6200 LD	53938	EVANS & SUTHERLAND.	200472-100	200472-100	1
016	SHIELD,FRMTR	53938	EVANS & SUTHERLAND.	500483-001	500483-001	1
017	QUAD FLOPPY DRIVE SPC	53938	EVANS & SUTHERLAND.	500475-002	500475-002	4
018	HW,STDF 5/16STDF	55566	RAF ELECTRONICS HARDWARE	1681-632-N-O	802378-205	3
020	HW,SCR 4-40X1/4	N/A	DISTRIBUTORS	4-40X1/4 (M-F-PH-SS)	802002-302	8
021	HW,SCR 6-32X1/4	N/A	DISTRIBUTORS	6-32X1/4 (M-P-PH-SS)	802003-102	17
022	SCR,FLT-HD,PHIL,6-32X	N/A	DISTRIBUTORS	6-32X3/8 (M-F-PH-SS)	802003-303	4
023	HW,HW-S 8-32X3/8	N/A	DISTRIBUTORS	8-32X3/8 (M-P-PH-SS)	802004-103	6
024	HW,WSHR #6INTLOK	N/A	DISTRIBUTORS	SAE#6,LK INTL,SS	802005-006	12
025	HW,WSHR #8INTLOK	N/A	DISTRIBUTORS	SAE#8,LK INTL,SS	802005-008	12
026	HW,WSHR 5887,#6WSHR	55566	RAF ELECTRONICS HARDWARE	5887-PH-200-150-140	802040-906	6
027	HW,NUT 6-32NUT	N/A	DISTRIBUTORS	NUT-HEX(6-32)NYLON	802143-006	3
028	HW,TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	3
029	HW,CLMP MB-3A	16956	DENNISON MFG CO	08461 (3/4-SQ)	802125-006	2
030	TAPE,VINYL-FOAM,SNGL-	52152	MINN. MINING & MFG.	4504,W=0.5IN(.25THK)	802153-004	20
032	DRIVE,FLOPPY-DISK,DUA	0D2A6	MITSUBISHI ELECTRONICS AM	M2896-63-02U	801809-105	2
034	CBL,+5V,+24V	53938	EVANS & SUTHERLAND.	200491-100	200491-100	2
035	DRIVE ADPT BD ASY	53938	EVANS & SUTHERLAND.	200489-100	200489-100	2
036	SLIDE,3-SECTION,24IN,	16499	STD PRCN INC,ACCURIDE DIV	C830-199-01020304	801543-201	1
038	WASHER,FLT,#12,NYL,ML	55566	RAF ELECTRONICS HARDWARE	5223-N-219	802297-012	6
039	HW,WSHR #6SPLOK	N/A	DISTRIBUTORS	WSHR#6,LOCK/HELIC,SS	802300-006	2
042	SCR,PAN-HD,PHIL,10-32	N/A	DISTRIBUTORS	10-32X3/8 (M-P-PH-SS)	802053-103	8
043	HW,WSHR #10INTLK	N/A	DISTRIBUTORS	SAE#10,LK INTL,SS	802005-010	8
044	SCR,FLT-HD,PHIL,8-32X	N/A	DISTRIBUTORS	8-32X3/8 (M-F-PH-SS)	802004-303	2
045	HW,WSHR #8,FLAT	N/A	DISTRIBUTORS	SAE#8FLAT,SS,.040THK	802007-008	4
046	HW,WSHR #8SPLOK	N/A	DISTRIBUTORS	WSHR#8,LOCK/HELIC,SS	802300-008	4
047	HW,NUT 8-32NUT	N/A	DISTRIBUTORS	NUT-HEX(8-32)SS	802014-008	4
040	USE IF MOUNTING QUME DRIVES					
040	SCR,METRIC,M4-.7X12,P	N/A	DISTRIBUTORS	M4X0.7X12 (M-P-PH-SS)	802803-212	8
041	USE OF MOUNTING MITSUBISHI DRIVES					
041	HW,HW-S 8-32X1/2	N/A	DISTRIBUTORS	8-32X1/2 (M-P-PH-SS)	802004-104	8

42 ITEMS LISTED



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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
-	A0	RELEASED TO A0	0-27-89	[Signature]
-	A1	PARTS LIST CHANGE	10-18-89	[Signature]
-	A2	ADDED ITEM 38	0-23-89	[Signature]
-	A3	ADDED NOTE 4	1-10-89	[Signature]
	RC1	ADDED DETAIL	3-8-85	[Signature]
	A4	CHANGED DISK DRIVES	5-4-85	[Signature]
	A5	CORRECT PLEA ZIBZ & SCREWS	7-7-87	[Signature]
	A6	ADD HARDWARE STACKUPS	5-3-89	[Signature]
	AH	DELETED BUMPERS	89-11-06	[Signature]



NOTES:

- 1. MARK ASSY NO., REV LEVEL AND S/N PER E'S PRODUCTION PROCESSES SECTION E-9.0. LOCATE APPROX AS SHOWN.
- 2. SLIDE RAILS (ITEM 36) ARE FURNISHED IN PAIRS (LEFT AND RIGHT) AND INCLUDE ALL MOUNTING HARDWARE.

- 4. EXCESS RIBBON CABLE TO BE DRESSED IN DIRECTION OF ARROW (SEE SHT 2).
- 5. S/N AND REV LEVEL ON ITEM 31 TO BE PER ASSEMBLY TRAVELER.
- 6. USE ITEM 40 WHEN MOUNTING QUME DRIVES
 USE ITEM 41 WHEN MOUNTING MITSUBISHI DRIVES.

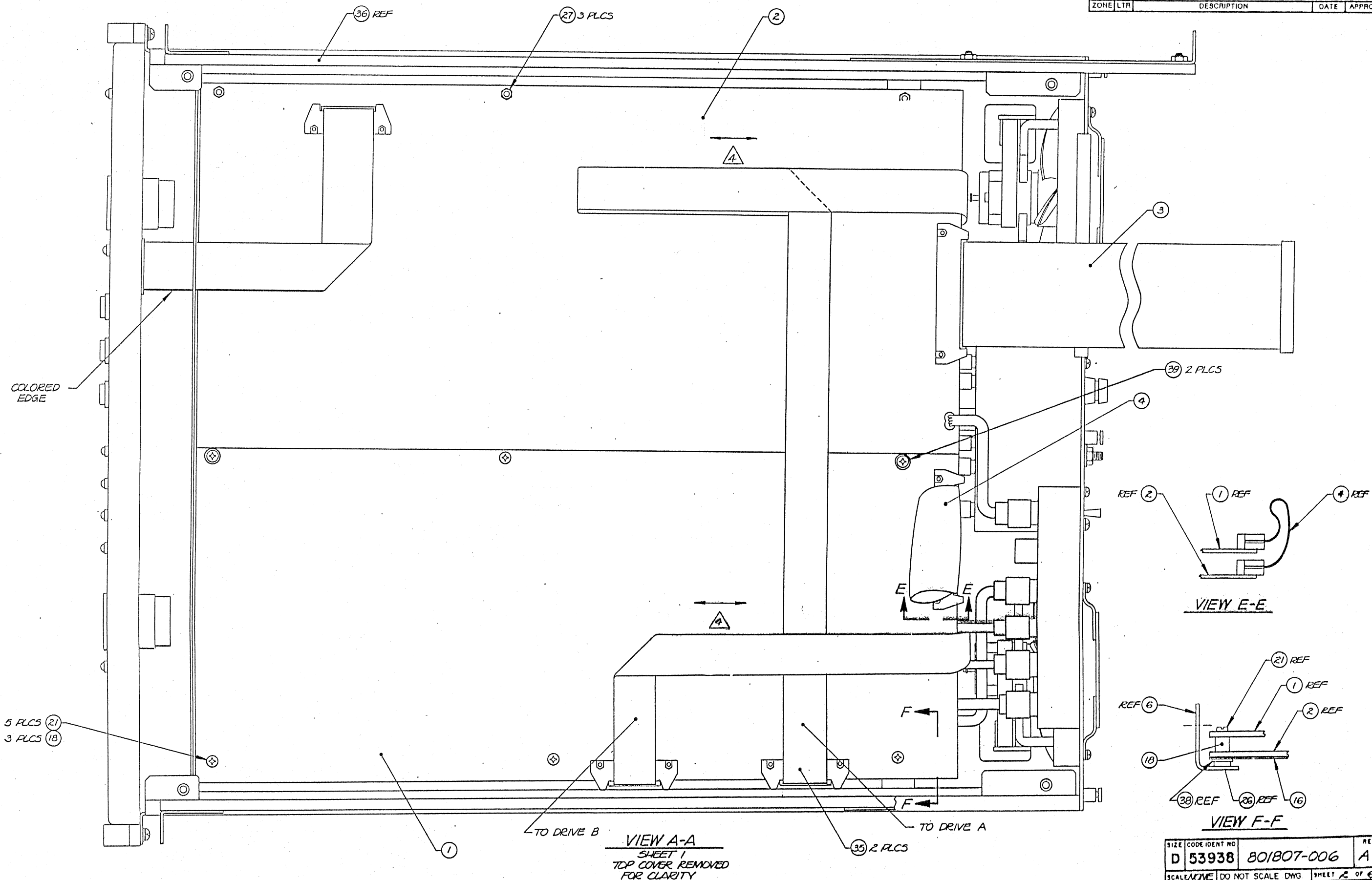
SPECIFICATION CONTROL DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± .XXX ± ANGLES ± ✓	CONTRACT NO.		EVANS & SUTHERLAND SALT LAKE CITY, UTAH 84108		
	DRAWN [Signature]				
	CHECKED [Signature]		DRIVE ASSY. QUAD FLOPPY. E 4 S		
	MECH [Signature]				
ELEC [Signature]		SIZE	CODE IDENT NO	REV	
PROJ. ENG [Signature]		D	53938	801807-006	AH
APPROVED [Signature]		SCALE: NONE		DO NOT SCALE DWG	SHEET 1 OF 6
MATERIAL SEE PARTS LIST					

D
C
B
A
801807-006
A

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



COLORED EDGE

VIEW A-A
SHEET 1
TOP COVER REMOVED
FOR CLARITY

VIEW E-E

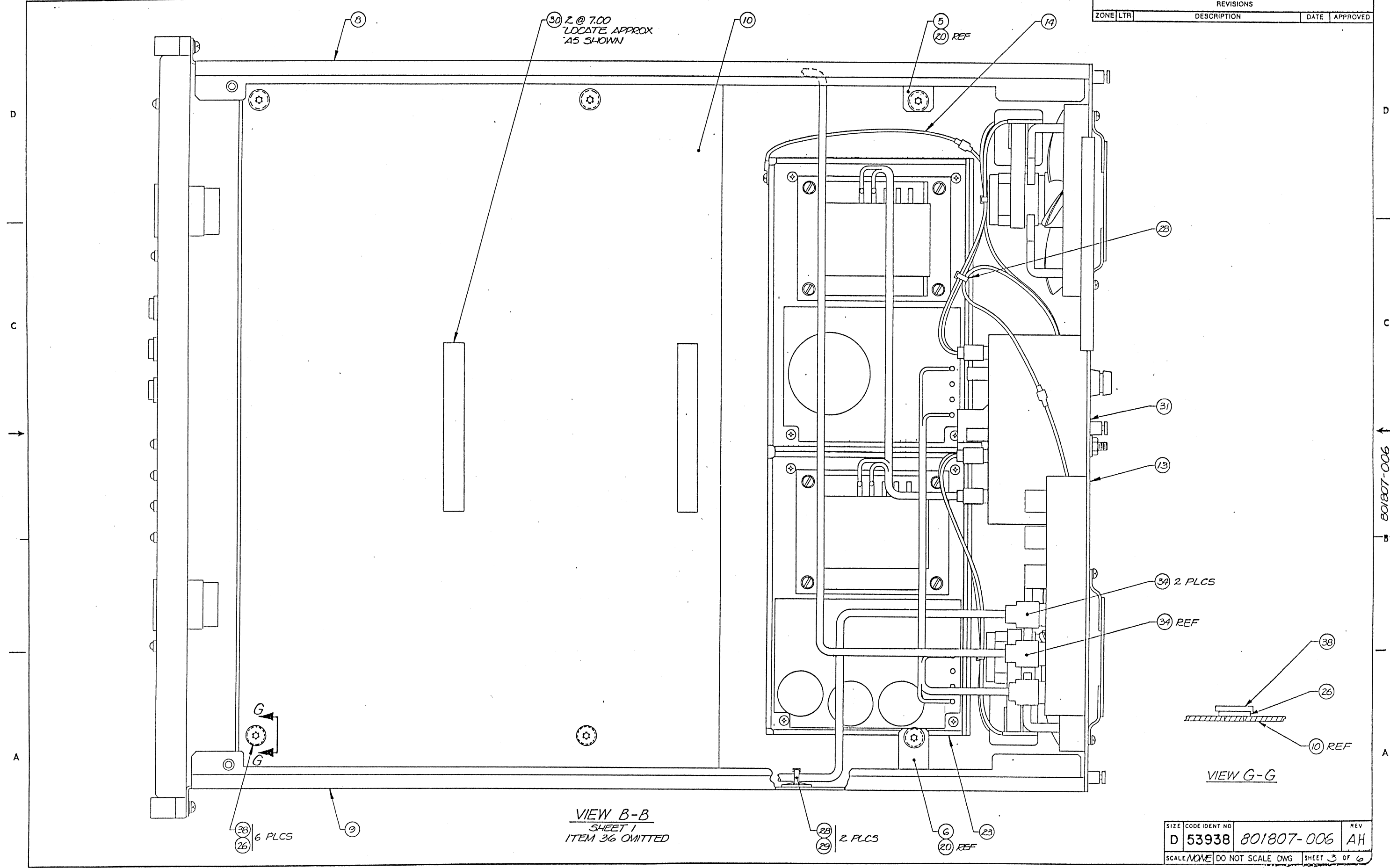
VIEW F-F

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D	53938 801807-006	AH
SCALE	DO NOT SCALE DWG	SHEET 2 OF 6

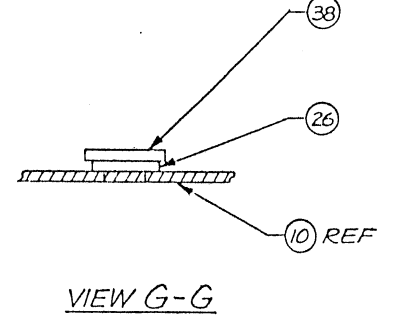
801807-006

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

REVISIONS				
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VIEW B-B
SHEET 1
ITEM 36 OMITTED

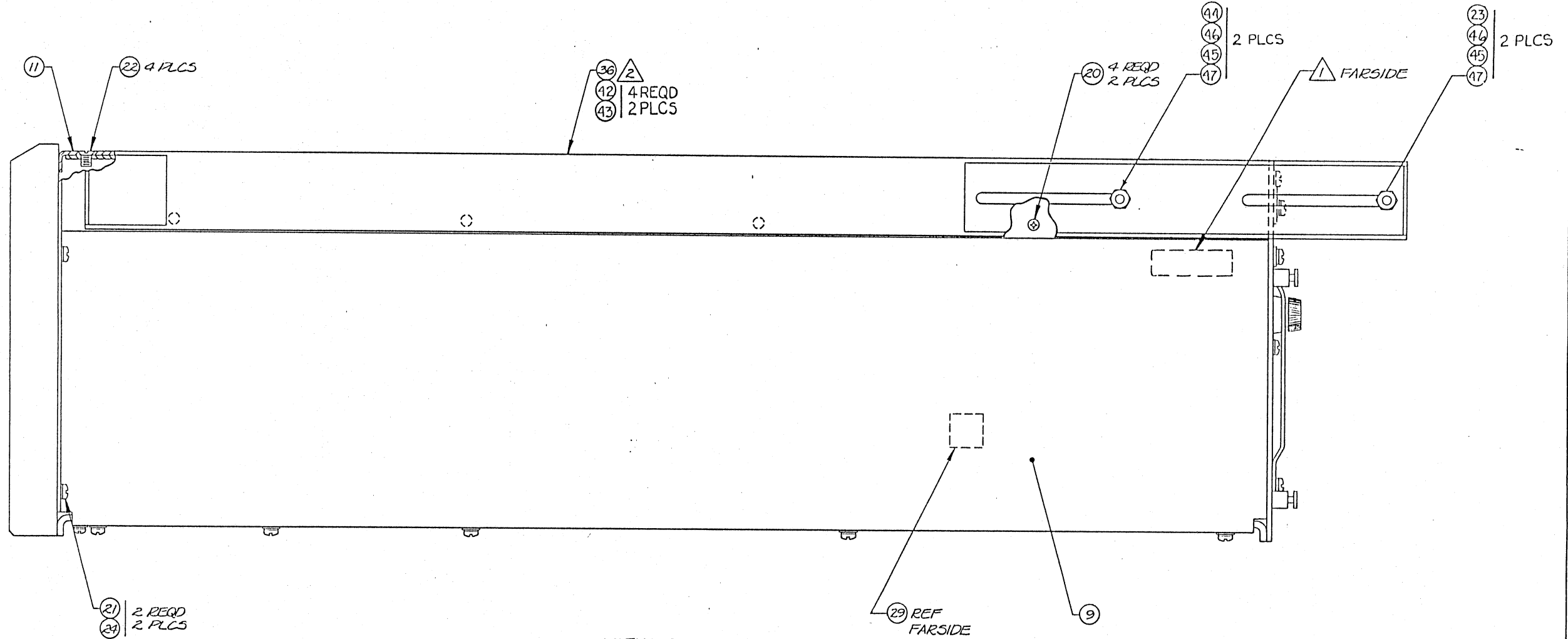


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D	53938 801807-006	AH
SCALE NONE DO NOT SCALE DWG		SHEET 3 OF 6

801807-006

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



VIEW C-C
SHEET 1

801807-006

SIZE	CODE IDENT NO	REV
D	53938	AH
SCALE	DO NOT SCALE DWG	SHEET 4 OF 6

8

7

6

5

4

3

2

1

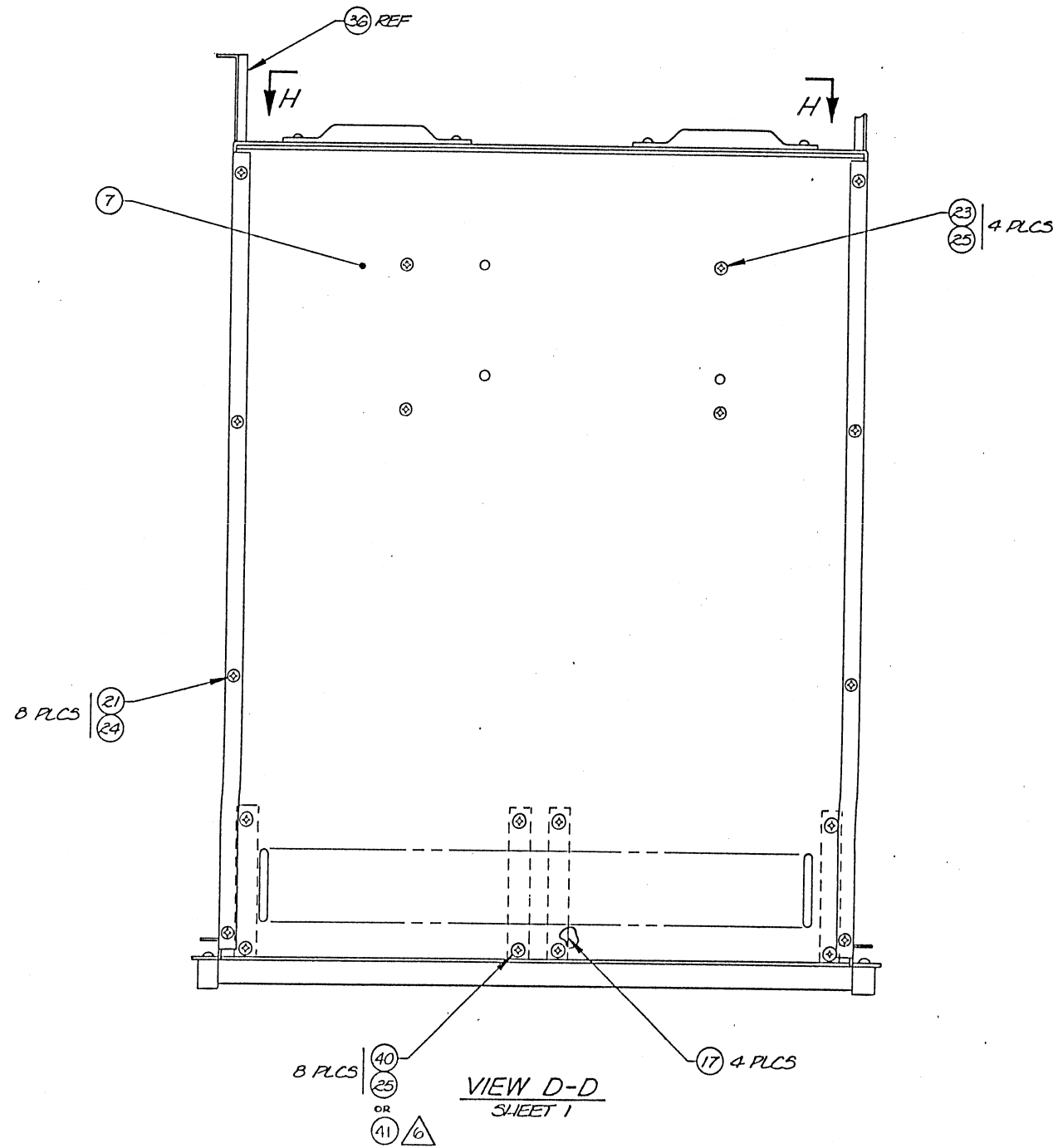
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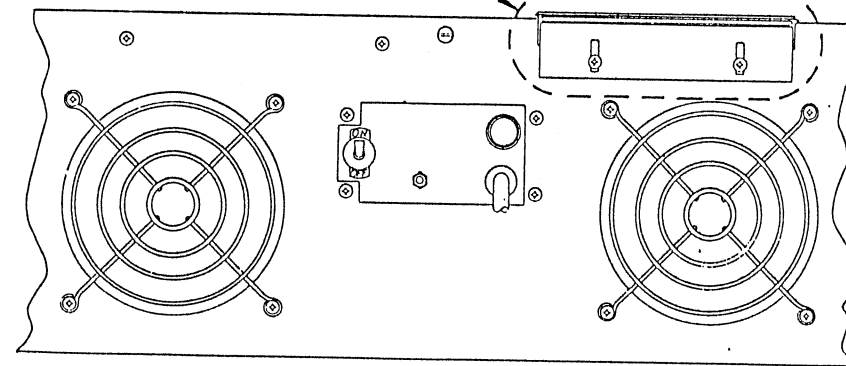
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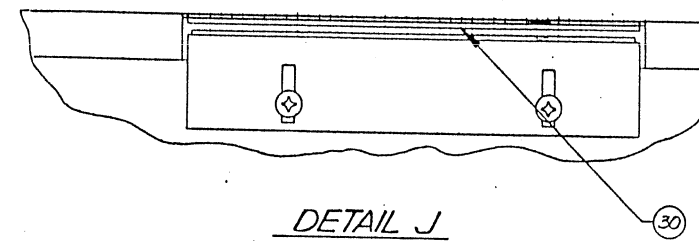
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DETAIL J



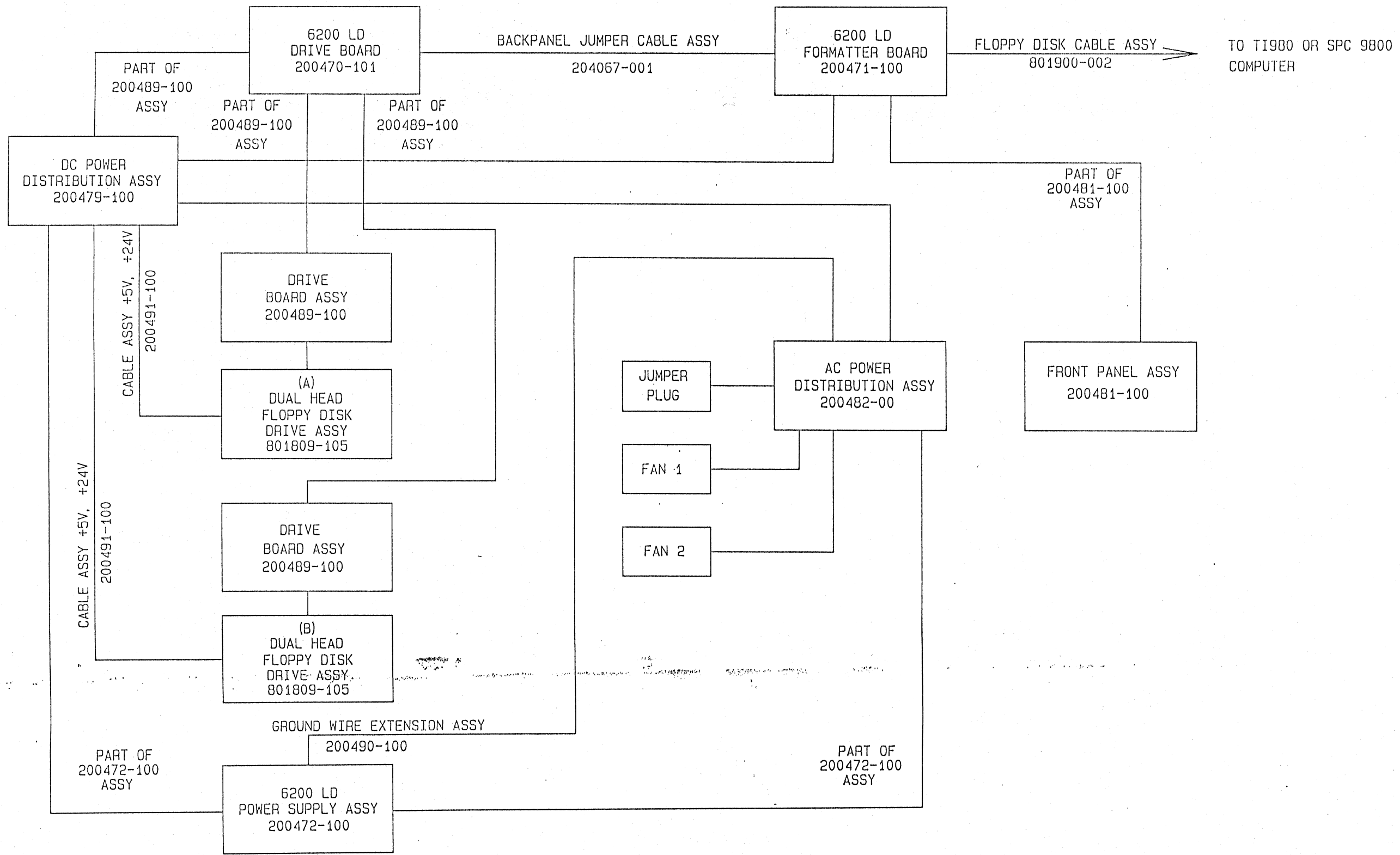
VIEW H-H



801807-006 ↑

SIZE	CODE IDENT NO	REV
D	53938	AH
SCALE: NONE		DO NOT SCALE DWG
SHEET 5 OF 6		

REVISIONS				
NO.	DATE	DESCRIPTION	BY	APPROVED



INTERCONNECT DIAGRAM

SIZE	FORM	REV
B	53938	AH
SCALE 1/1	DO NOT SCALE DIM	SHEET 6 OF 6

801807-006

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200470-101

REV: B2 = BC

DESC: CARD ASSY,6200 LD DRIVE BOARD (PC)

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
C1	BD,PO2H EADD8X18	53938	EVANS & SUTHERLAND.	200470-500	200470-500	1
C2 C3 C4 C5	C,,RDL 100PF	02799	ARCO ELECTRONICS (CAPS)	DM10-101J (100PF)	804104-101	1
C8	C,,AXL 22UF	55680	NICHICON AMERICA CORP.	TKB1C-220-M (22UF)	804134-226	4
C9 C10 C11 C12 C13 C14 C15	C,,AXL 100UF	55680	NICHICON AMERICA CORP.	TKB1C-101-M (100UF)	804134-107	1
C16 C17 C18 C19 C20 C21 C22	C,,RDL .01UF	31433	KEMET ELECTRONICS CORP.	C315C103 (M/K) 5R5CA	804115-103	30
C23 C24 C25 C26 C27 C28 C29						
C30 C31 C32 C33 C34 C35 C36						
C37 C38						
CR1 CR4 CR5	CR,SWTC 1N914	N/A	ITT SEMICONDUCTORS	1N914-1N4148	810914-001	3
CR2	CR,ZENR 1N747A	07263	FAIRCHILD IC'S & SEMICON	1N747A (3.6,ZENR)	810747-001	1
J2 J1	CN,HOUS 26P,RTA	22526	DU PONT E I NEMOURS (CONN)	65268-009	801290-026	2
J5	CN,HOUS 50P,RTA	22526	DU PONT E I NEMOURS (CONN)	65268-011 (2X25)	801290-050	1
M2	HW,CASY VPPCASSY	53938	EVANS & SUTHERLAND.	200473-100	200473-100	1
M3	HW,WIRE 26G-KYNR	71124	BRAND-REX CO	28-128-1422-WHITE	802067-009	4
M6	HW,STDF 5/16STDF	55566	RAF ELECTRONICS HARDWARE	1681-632-N-O	802378-205	1
M7	HW,SCR 6-32X1/4	N/A	DISTRIBUTORS	6-32X1/4 (M-P-PH-SS)	802003-102	1
M8	HW,TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	1
Q1	TR,PNP MPS3640	04713	MOTOROLA INC. SEMI PRODUC	MPS3640 (PNP,TO-92)	823640-001	1
Q2	TR,NPN 2N5137	55464	CENTRAL SEMICONDUCTOR COR	PN5137	825137-001	1
R1 R3 R6 R13 R14 R15 R16 R23	R,,AXL 1K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF102J	803201-102	9
R24						
R12 R21	R,,AXL 390 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF391J	803201-391	2
R2	R,,AXL 27K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF273J	803201-273	1
R22	R,,AXL 270K1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF274J	803201-274	1
R25 R26 R27	R,,AXL 330 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF331J	803201-331	3
R4	R,,AXL 220 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF221J	803201-221	1
R5	R,,AXL 110 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF111J	803201-111	1
R7	R,,AXL 5.1K1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF512J	803201-512	1
R8 R9	R,,AXL 47K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF473J	803201-473	2
U1 U6 U16 U21 U26 U29	IC,TTL 7438	01295	TEXAS INSTR, SEMICON DIV.	SN7438N	807403-642	6
U10 U47	IC,TTL 9602	07263	FAIRCHILD IC'S & SEMICON	9602PC	807690-646	2
U15	IC,TTL 7440	01295	TEXAS INSTR, SEMICON DIV.	SN7440N	807420-642	1
U17 U18 U19 U46 U49	IC,TTL 7474	01295	TEXAS INSTR, SEMICON DIV.	SN7474N/J	807474-646	5
U2 U7 U55	IC,TTL 7402	01295	TEXAS INSTR, SEMICON DIV.	SN7402N	807402-646	3
U20	IC,TTL 7410	27014	NATIONAL SEMICONDUCTOR	DM7410N	807410-646	1
U3 U4 U5 U34 U37	IC,TTL 7404	01295	TEXAS INSTR, SEMICON DIV.	SN7404N	807416-646	5
U31	R,,DIP 330/390R	73138	BECKMAN INDUSTRIES CORP.	898-5-R330/390	807720-391	1
U33 U39	IC,TTL 7401	04713	MOTOROLA INC. SEMI PRODUC	SN7401N/J	807401-646	2
U35	IC,TTL 7430	01295	TEXAS INSTR, SEMICON DIV.	SN7430N/J	807430-646	1
U36 U52	IC,TTL 74153	18324	SIGNETICS CORP. MILITARY	N74153N	807653-646	2
U38 U43	IC,TTL 7406	01295	TEXAS INSTR, SEMICON DIV.	7406N/J	807011-646	2
U44 U45	IC,TTL 74164	01295	TEXAS INSTR, SEMICON DIV.	SN74164N/J	807413-646	2
U48 U53	IC,TTL 74195	01295	TEXAS INSTR, SEMICON DIV.	SN74195N	807695-446	2
U50 U54	IC,TTL 7408	18324	SIGNETICS CORP. MILITARY	N7408N	807408-646	2
U56	HW,JMPR 19PRGJMPR	51167	ARIES ELECTRONIC INC	14-675-190T	801148-107	1
U57 U58	HW,JMPR 7PRGJMPR	51167	ARIES ELECTRONIC INC	14-675-191T	801148-007	2
U8 U27 U28 U30 U32 U40 U51	IC,TTL 7400	01295	TEXAS INSTR, SEMICON DIV.	SN7400N	807400-646	7

TIME=09:14

RUN DATE=04/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 2

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200470-101

REV: B2 = BC

DESC: CARD ASSY, 6200 LD DRIVE BOARD (PC)

ITEM/REFERENCE DESIGNATORS

SHORT DESCRIPTION

CAGE
CODE

MANUFACTURER NAME

MFG PART NUMBER

E/S PART NUMBER

QTY/
ASSY

U9 U13 U14

IC,TTL 7437

01295 TEXAS INSTR, SEMICON DIV. SN7437N

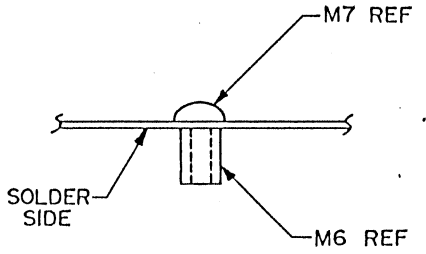
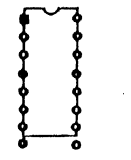
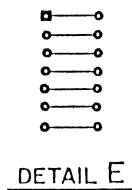
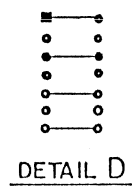
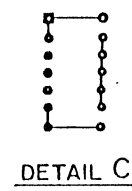
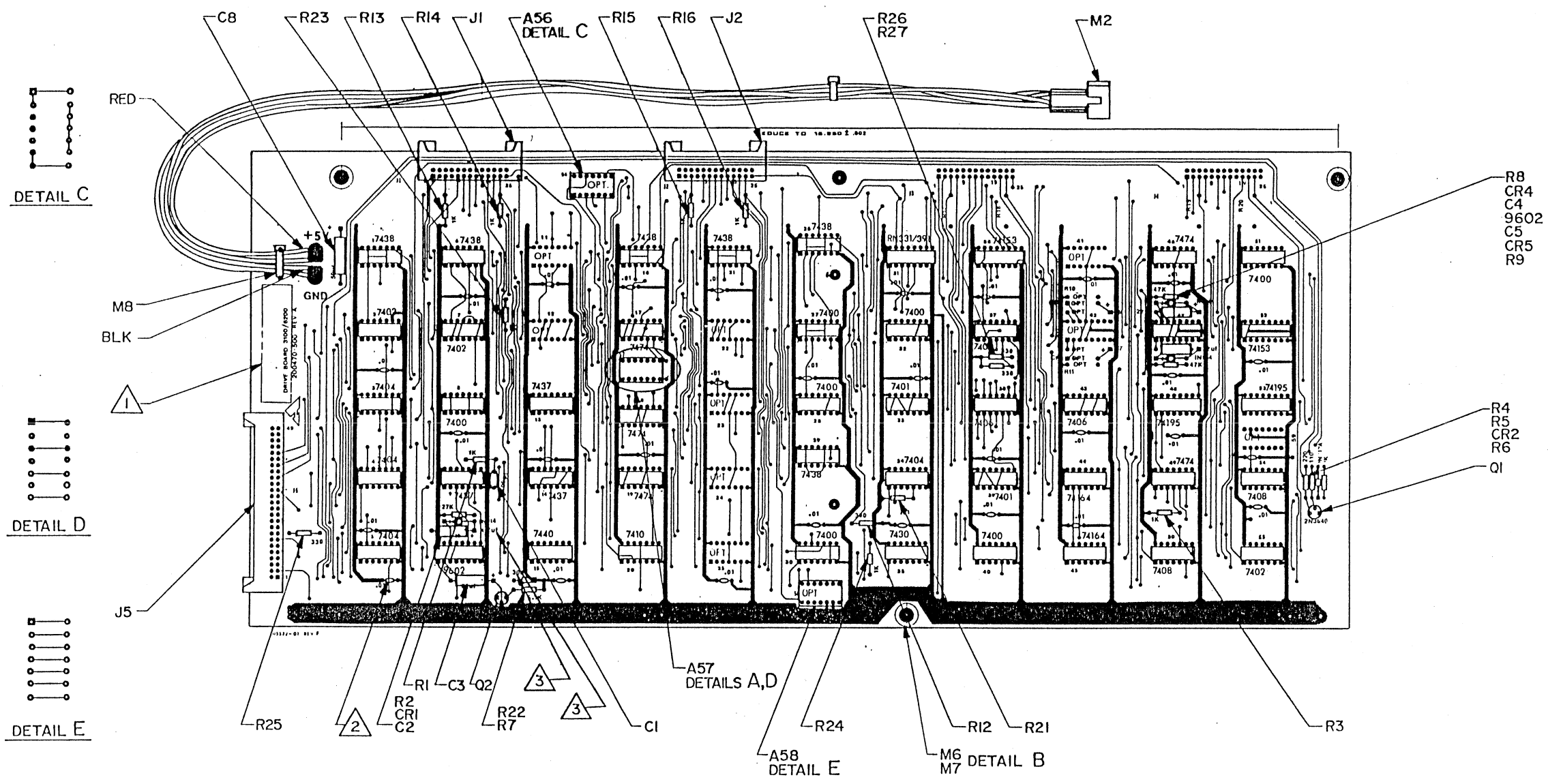
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3

44 ITEMS LISTED

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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A0	RELEASED TO A0	8-8-84	C. GOUDIE
	A1	CHANGED DETAIL C	8-10-85	
	RC1	CORRECTED DETAIL B	8-11-29-85	
	A2	REVISED AND REDRAWN	8-11-29-85	
	B0	ADDED "D" HOLE DIM.	10-15-85	
	B1	CLAIRIFY PART LOCATIONS, ADDED NOTE 3	8-3-86	
	B2	CHANGED U56	9-15-86	



- NOTES:
- 1. MARK ASSY NO., REV LEVEL AND S/N PER E&S PRODUCTION PROCESSES NO. E-9.1 LOCATE APPROX AS SHOWN.
 - 2. CD .01 uF TYPE FOR ALL CAPACITORS SHOWN WITHOUT REF DESIGNATIONS.
 - 3. REMOVE SILKSCREEN NOTATION 300K AND 4.7uf.

REFERENCE DOCUMENTS
 SCHEMATIC200470-601
 PARTS LIST....PL200470-101

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓	CONTRACT NO.	EVANS & SUTHERLAND SALT LAKE CITY, UTAH 84108		
	DRAWN M.D.B. 6-22-84	CARD ASSEMBLY 6200 LD DRIVE BOARD		
MATERIAL SEE PARTS LIST	CHECKED PRPEDESEN 62084	SIZE	CODE IDENT NO	REV
FINISH	MECH ELEC PROJ. ENG C. GOUDIE 7-2-84 APPROVED	D	53938 200470-101	B2
		SCALE 1/1	DO NOT SCALE DWG	SHEET 1 OF 1



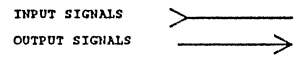
NOTES: UNLESS OTHERWISE SPECIFIED:

1. RESISTANCE VALUES ARE IN OHMS + - 1%, K DENOTES 1000.

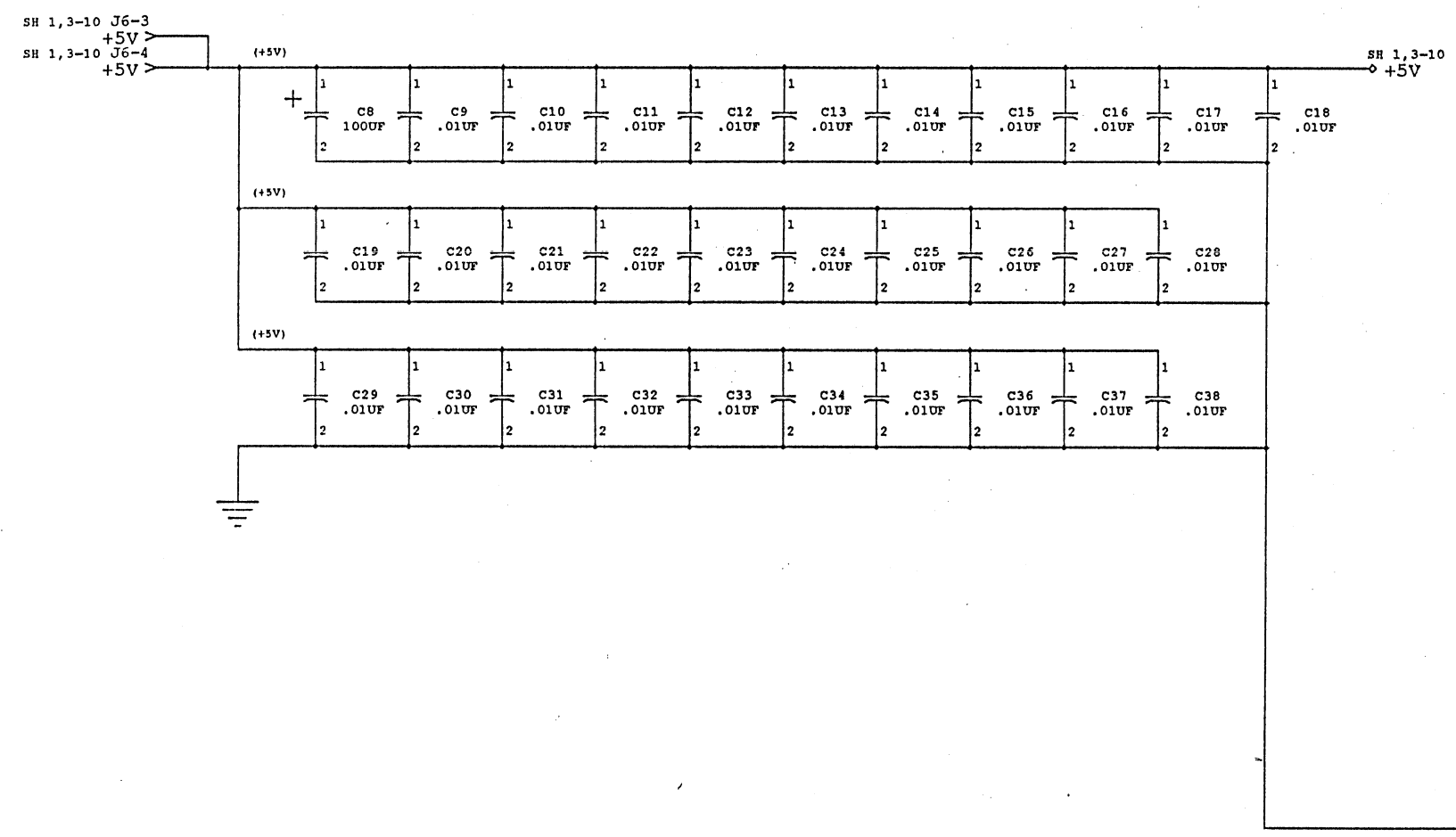
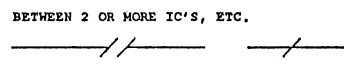
2. ON ALL IC'S, GROUND AND +5V (VCC) ARE AS FOLLOWS:

- 14 PIN IC, 7 AND 14
- 16 PIN IC, 8 AND 16
- 18 PIN IC, 9 AND 18
- 20 PIN IC, 10 AND 20
- 22 PIN IC, 11 AND 22
- 24 PIN IC, 12 AND 24
- 28 PIN IC, 14 AND 28

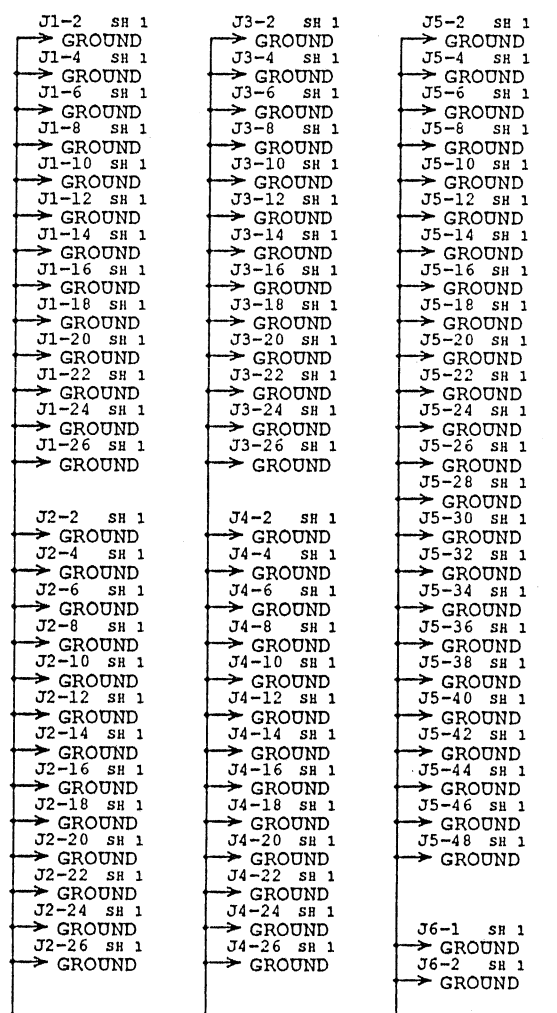
3. CARD CONNECTOR SYMBOL "F1-" DESIGNATES:



4. THE FOLLOWING SYMBOLS DESIGNATE A SUBMERGED IN-LINE CONNECTION BETWEEN 2 OR MORE IC'S, ETC.



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A0	RELEASED TO A0	S.H.	07-23-84
	A1	REVISION LEVEL UPDATE ONLY.	SB	01-04-85
	A2	REVISION LEVEL UPDATE ONLY.	SB	02-01-85
	B0	ADDED JUMPER TO SHT 3	CN	04-08-85
	B1	ELIMINATE INTERMITTENT FAILURES	KJ	07-13-88
	B2	REPLACE U56	KJ	08-15-88



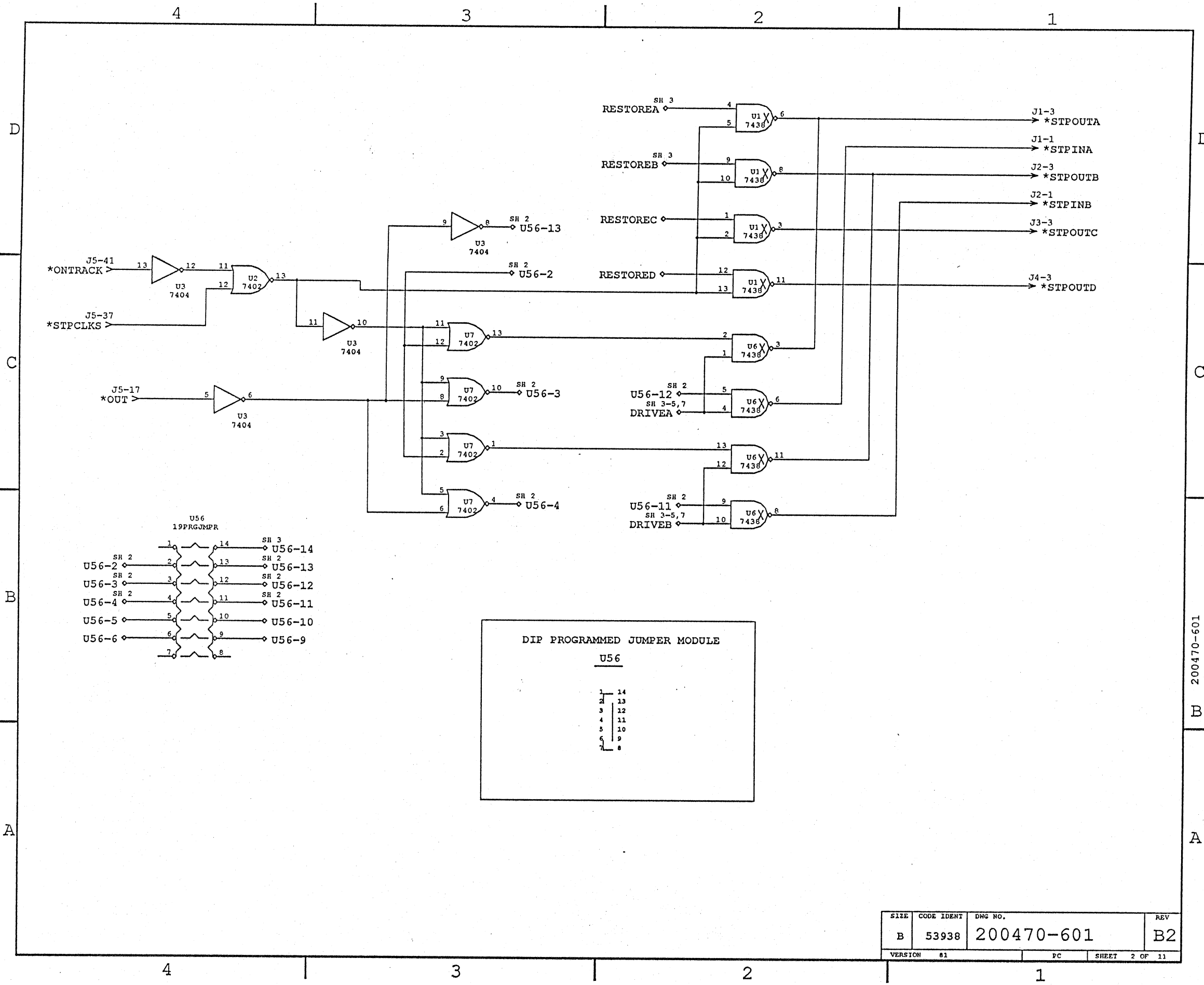
D
C
B
A

D
C
B
A

200470-601

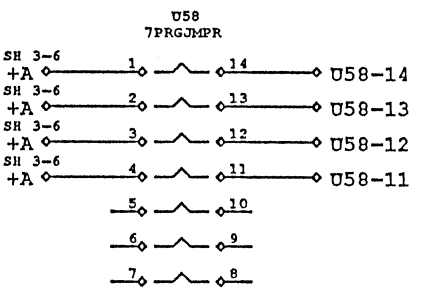
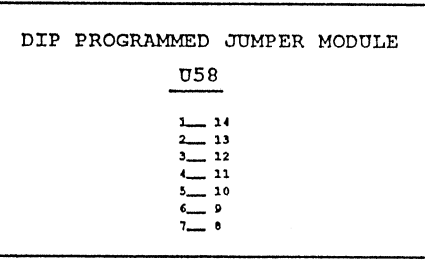
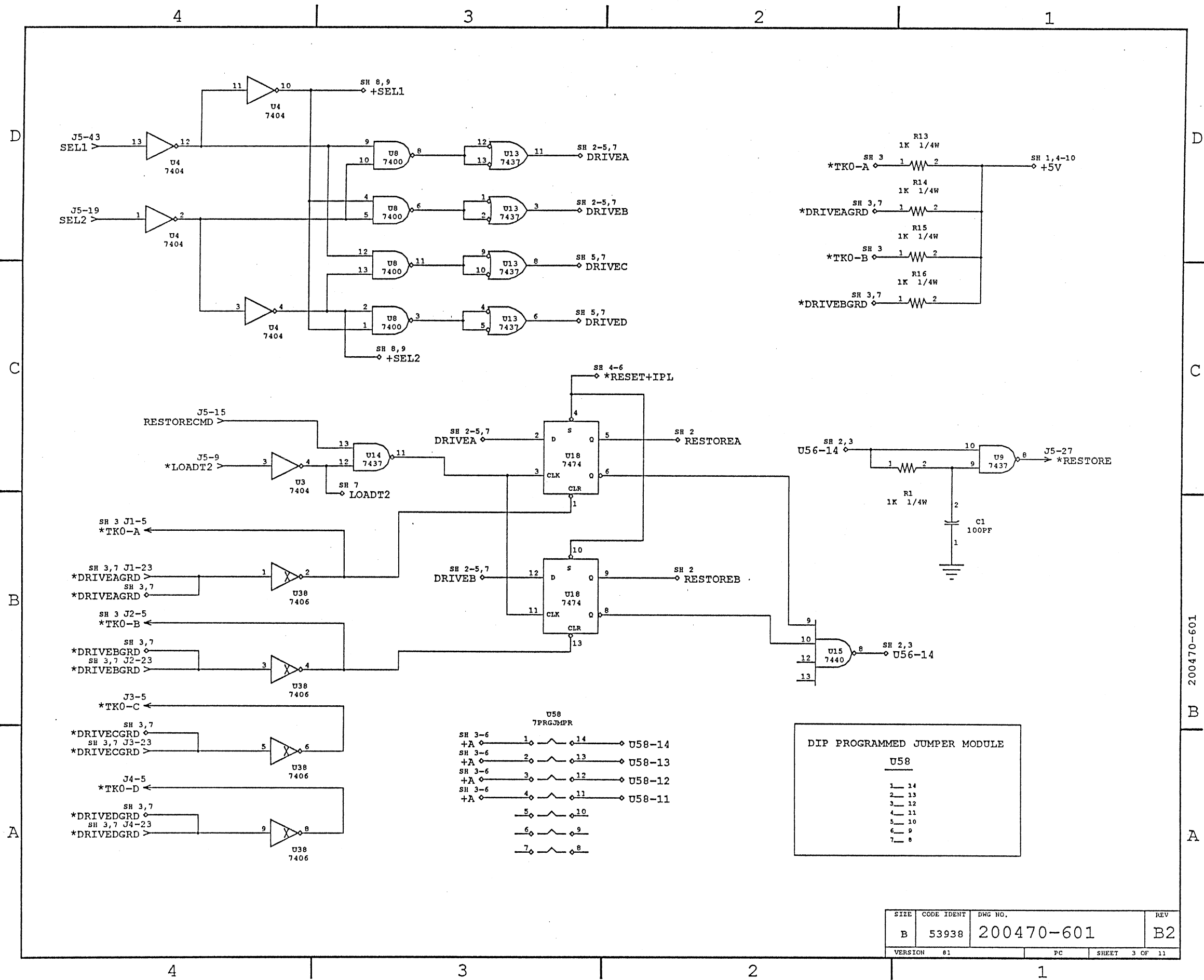
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 CONTRACTOR: EVANS AND SUTHERLAND COMPUTER CORP.
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DRAWN	C NOONE	EVANS & SUTHERLAND SALT LAKE CITY, UTAH 84108		
CHECKED				
ELEC ENG	C. GOODIE	TITLE		
PROJ ENG	C. GOODIE	6200 LD DRIVE BOARD		
APPROVED		(PC)		
NEXT ASSY		SIZE	CODE IDENT	DWG NO.
MODIFIED DATE	15-AUG-88	B	53938	200470-601
CREATION DATE	22-FEB-84			B2
FILE NAME	200470101B2.MDF	VERSION	81	PC
				SHEET 1 OF 11



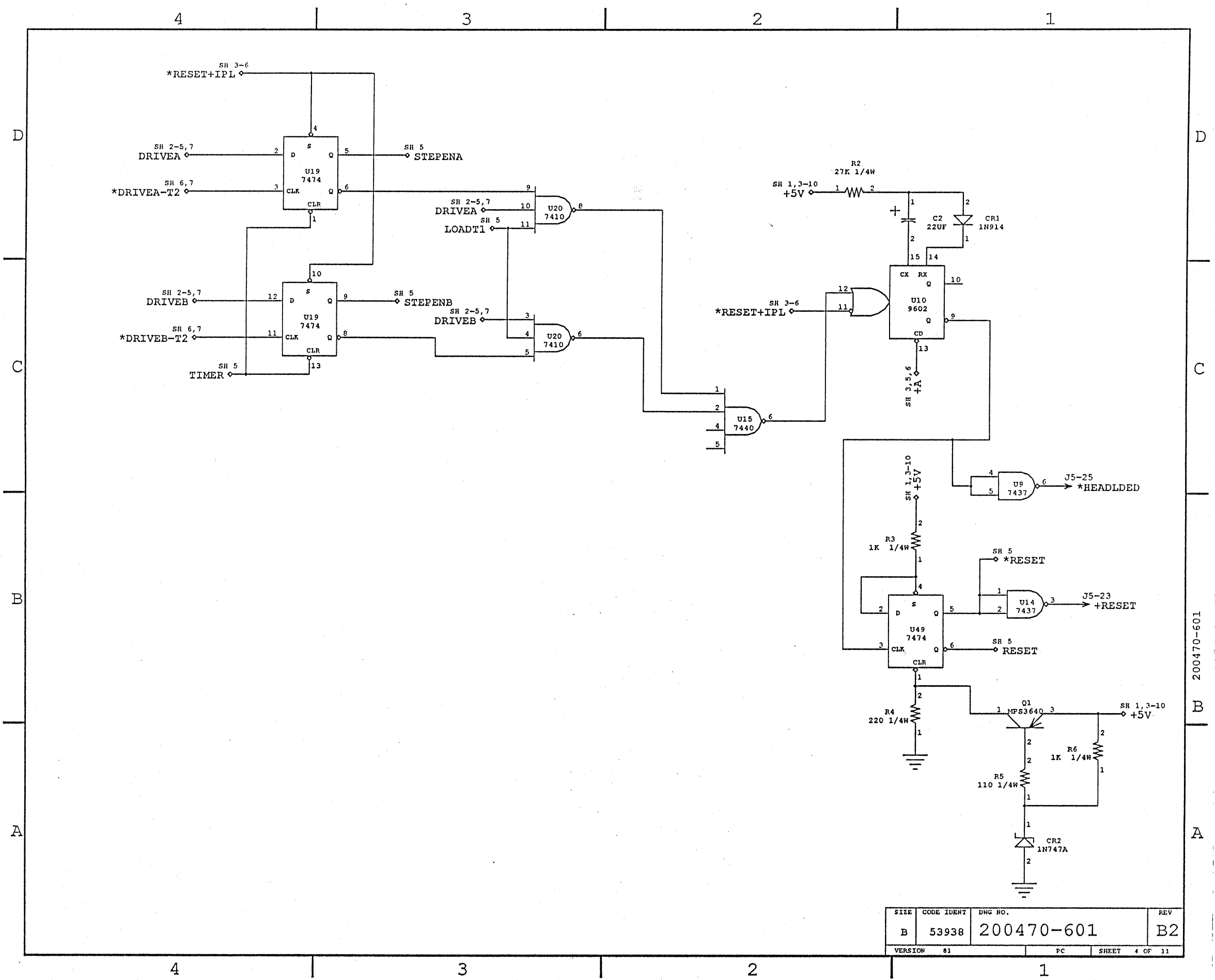
200470-601
B
A

SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	61	FC	SHEET 2 OF 11



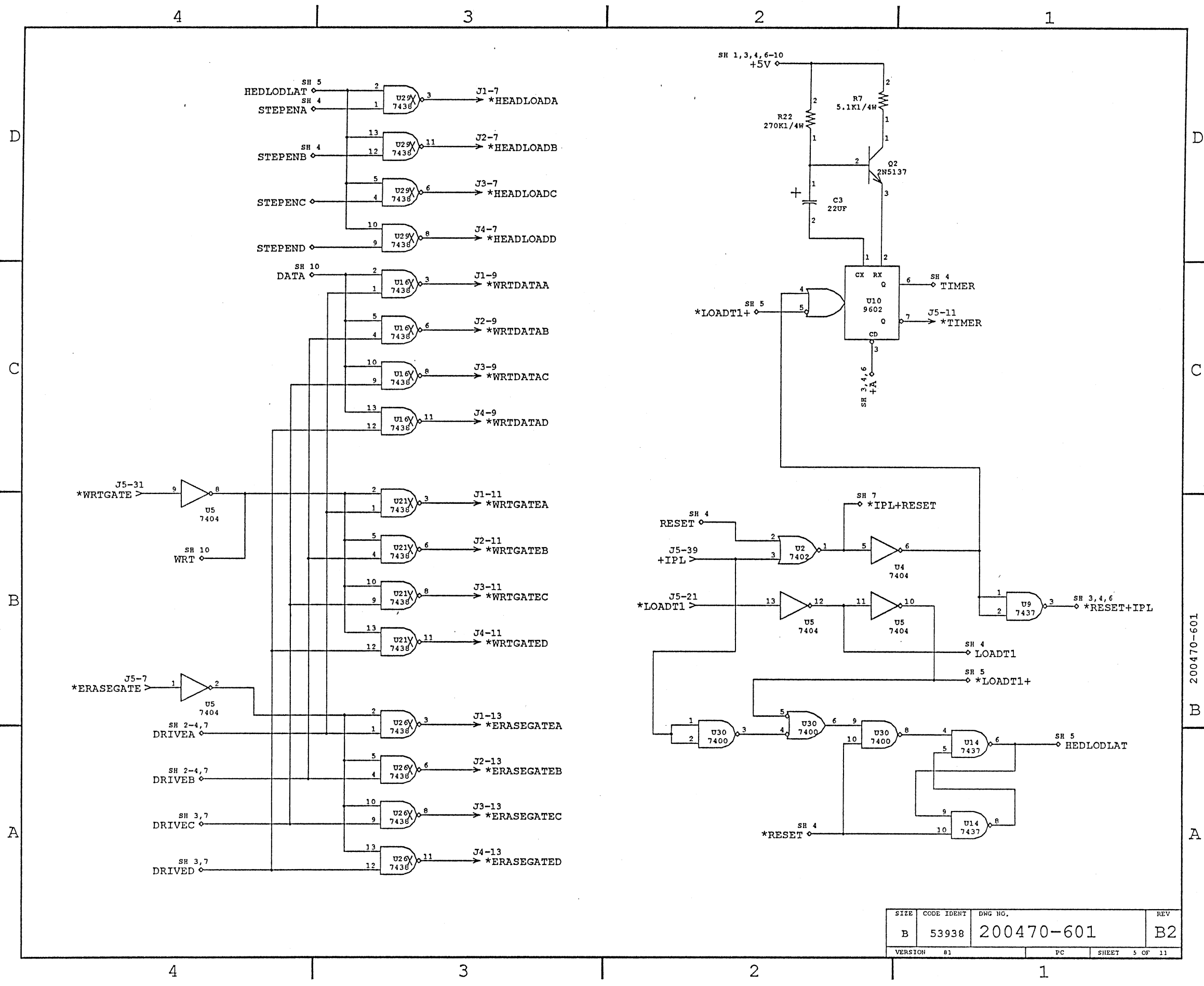
SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	81	PC	SHEET 3 OF 11

200470-601

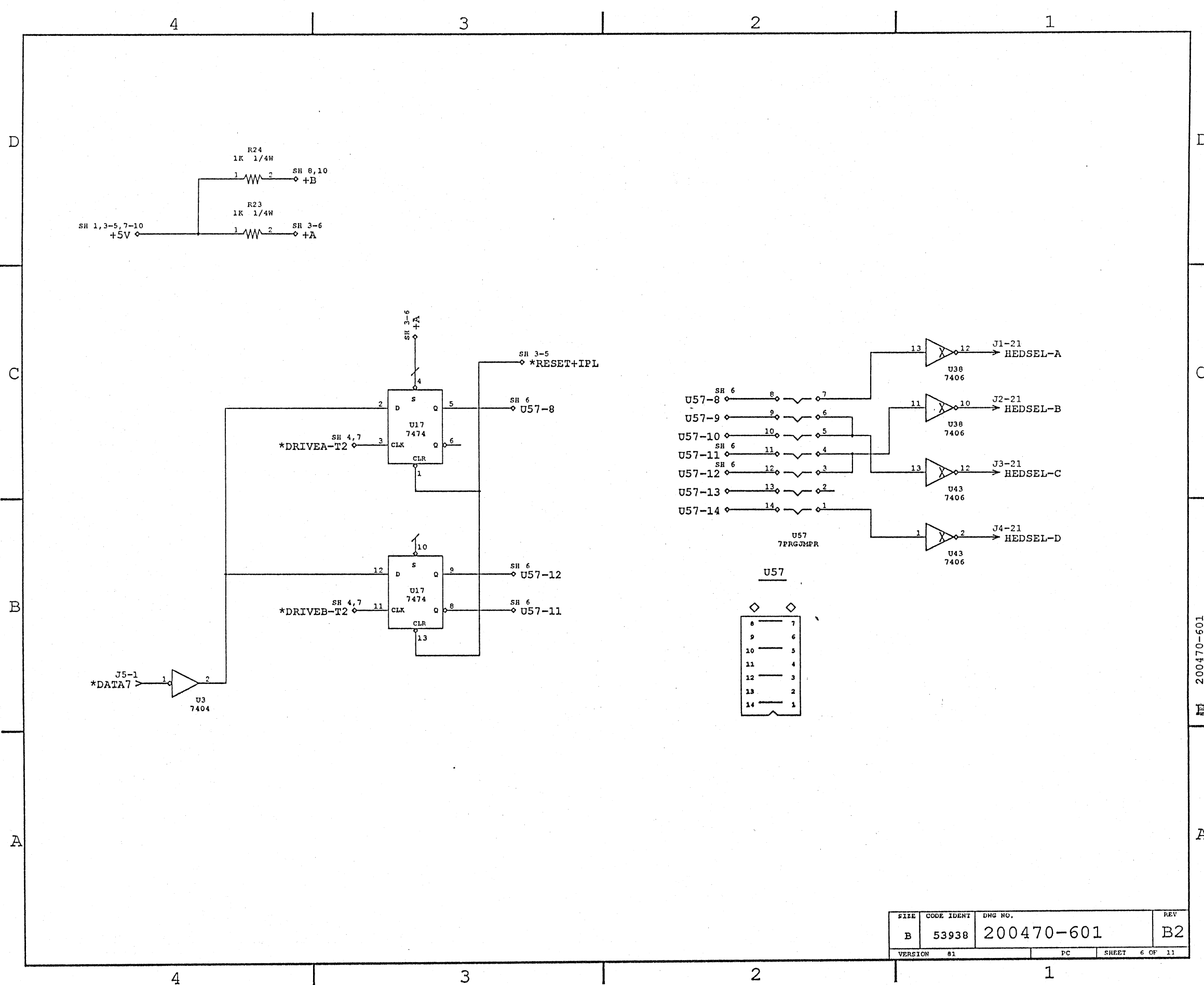


SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	61	PC	SHEET 4 OF 11

200470-601

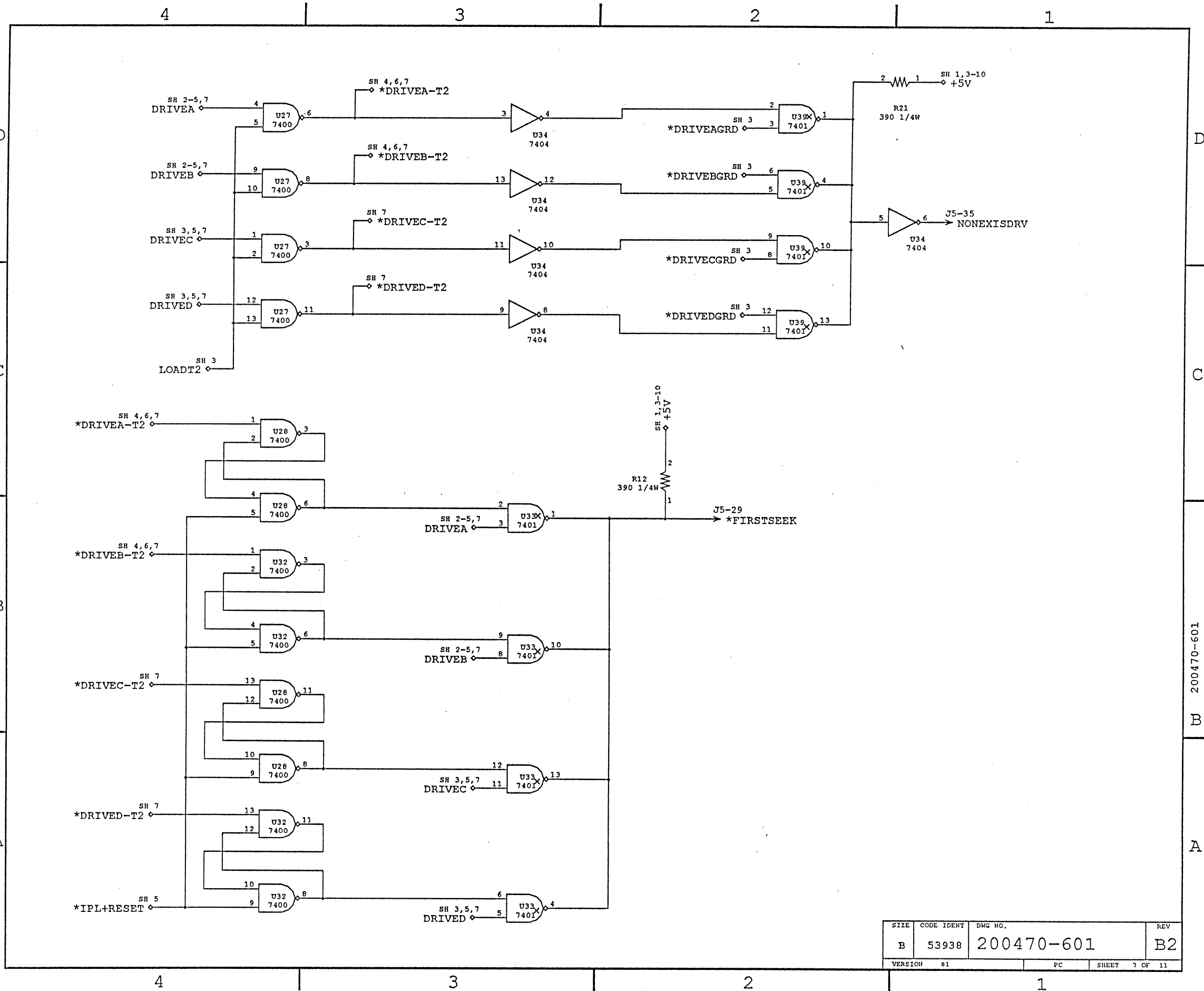


SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	81	PC	SHEET 5 OF 11



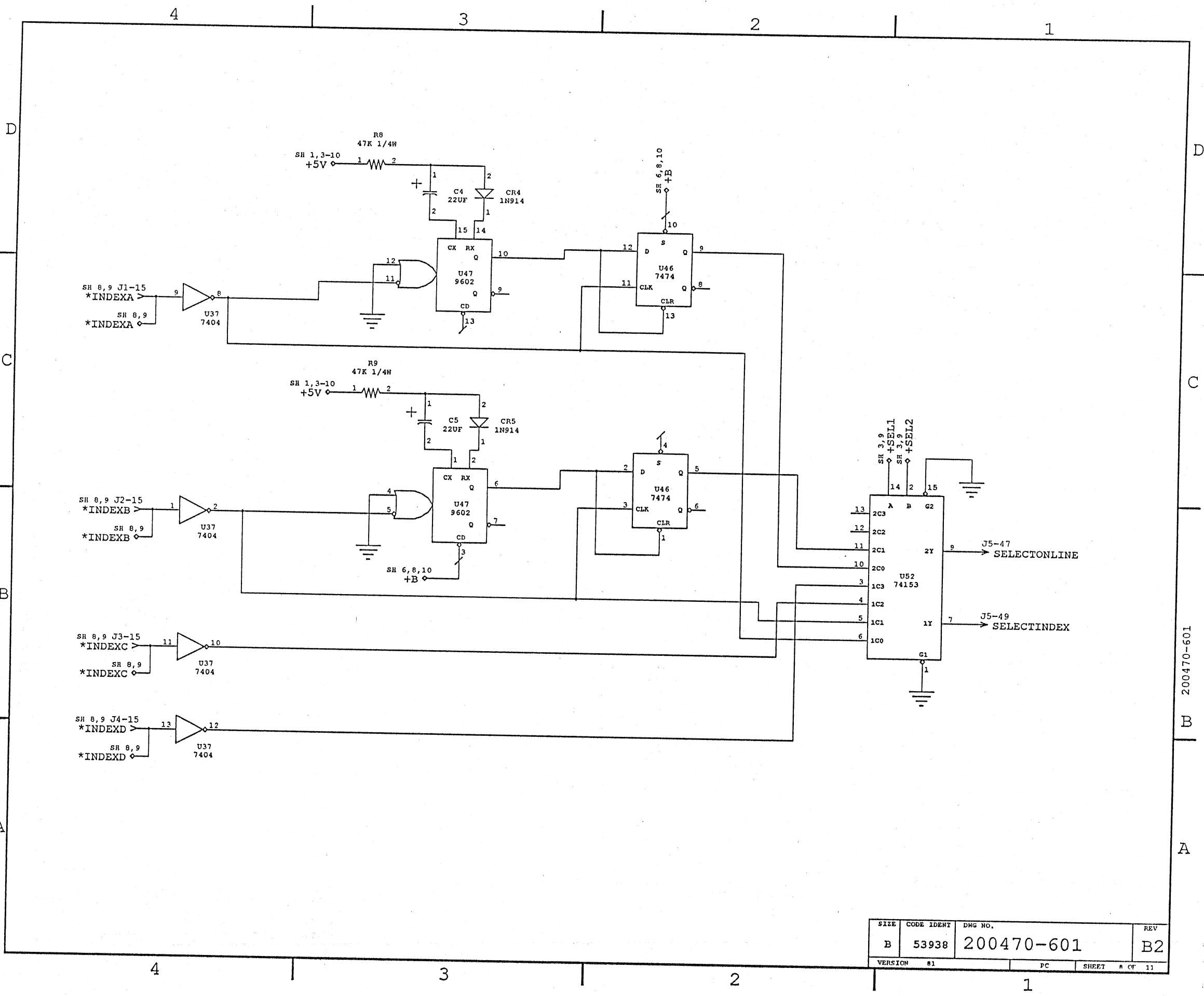
SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	81	PC	SHEET 6 OF 11

200470-601



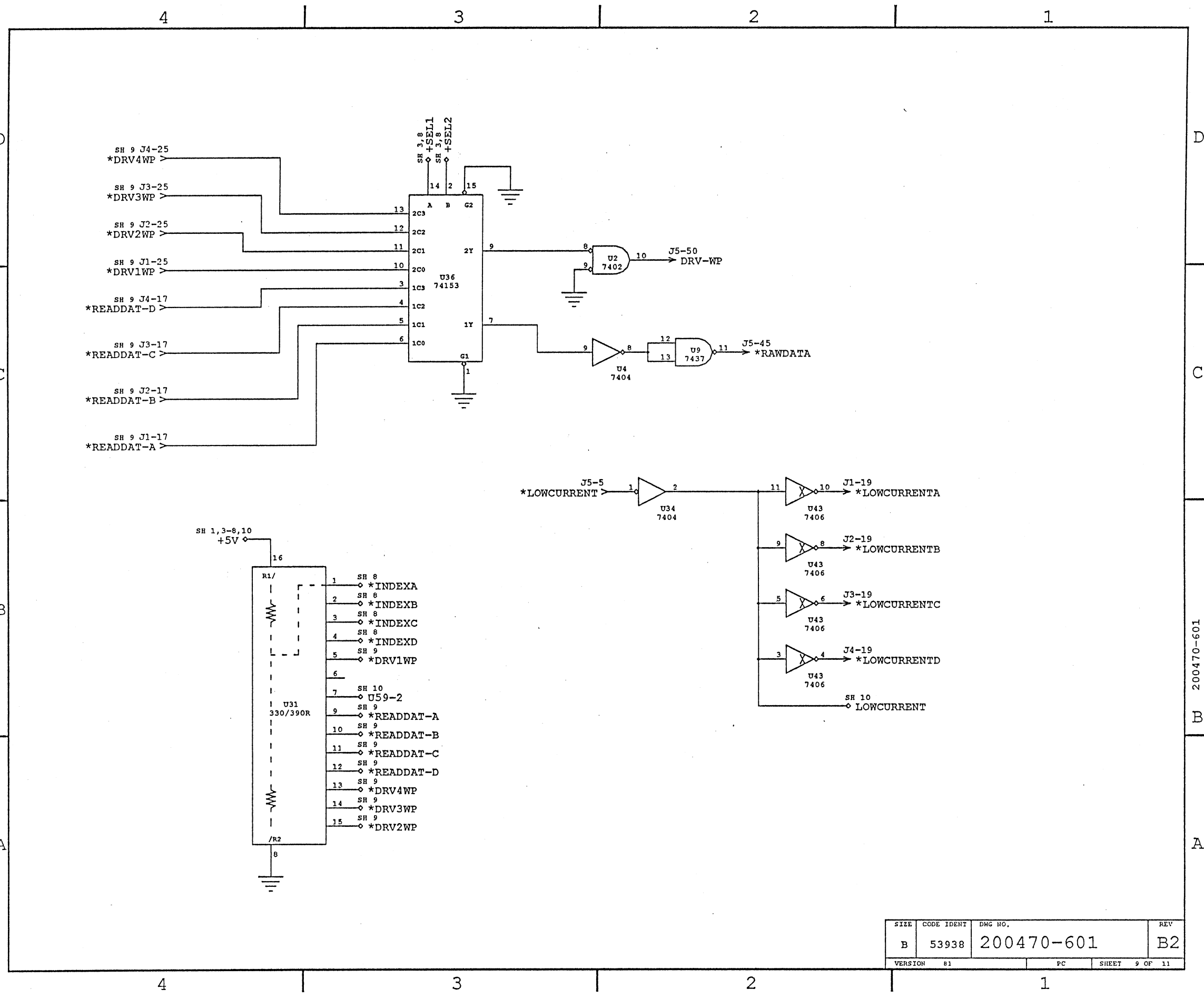
SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	01	PC	SHEET 7 OF 11

B 200470-601



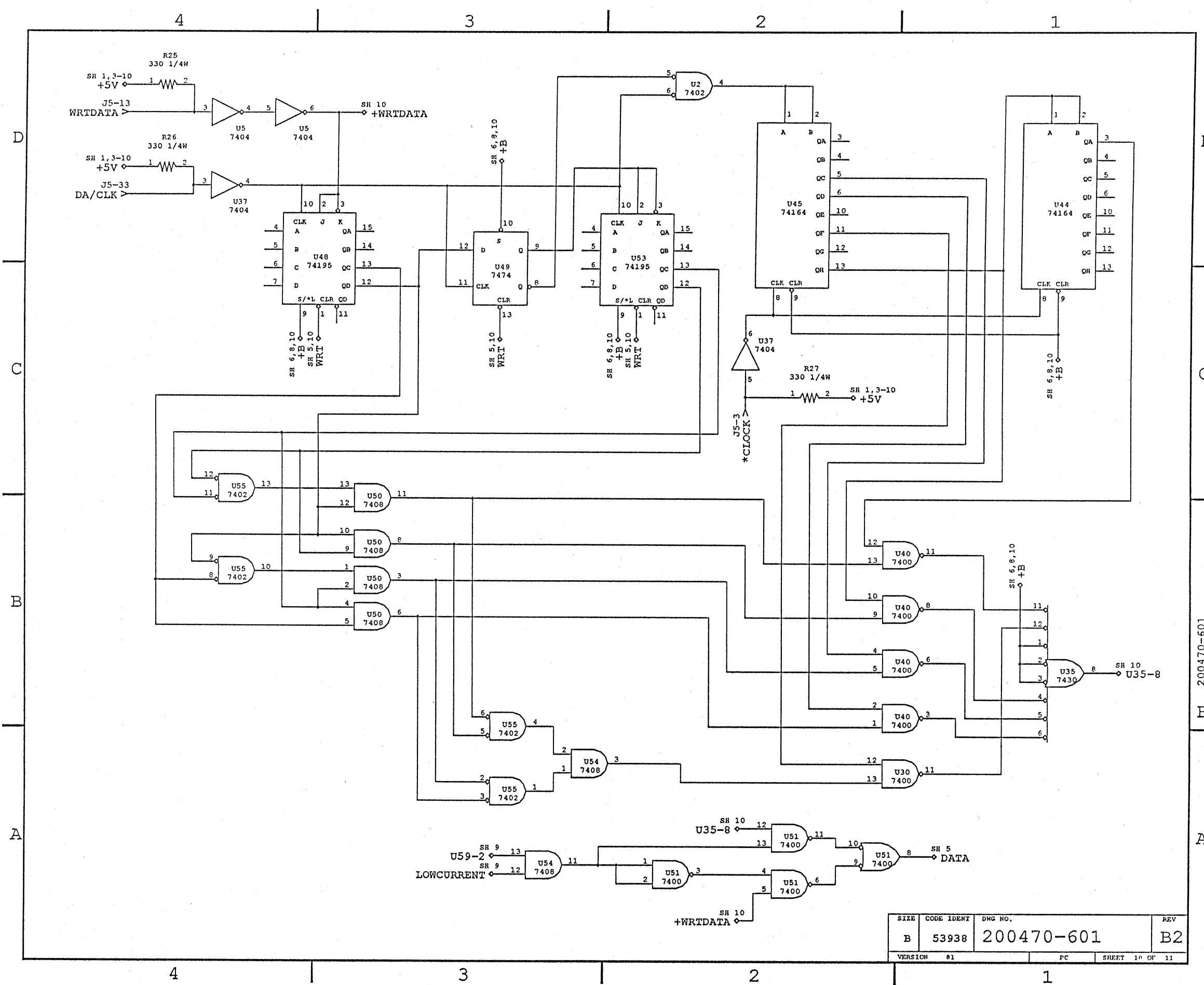
SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	#1	PC	SHEET # OF 11

200470-601

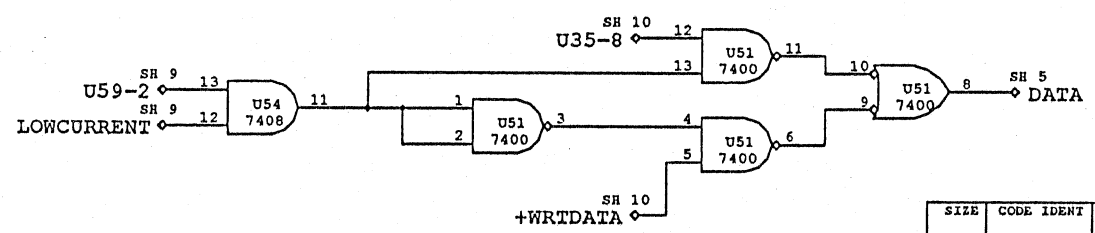


SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	81	PC	SHEET 9 OF 11

200470-601

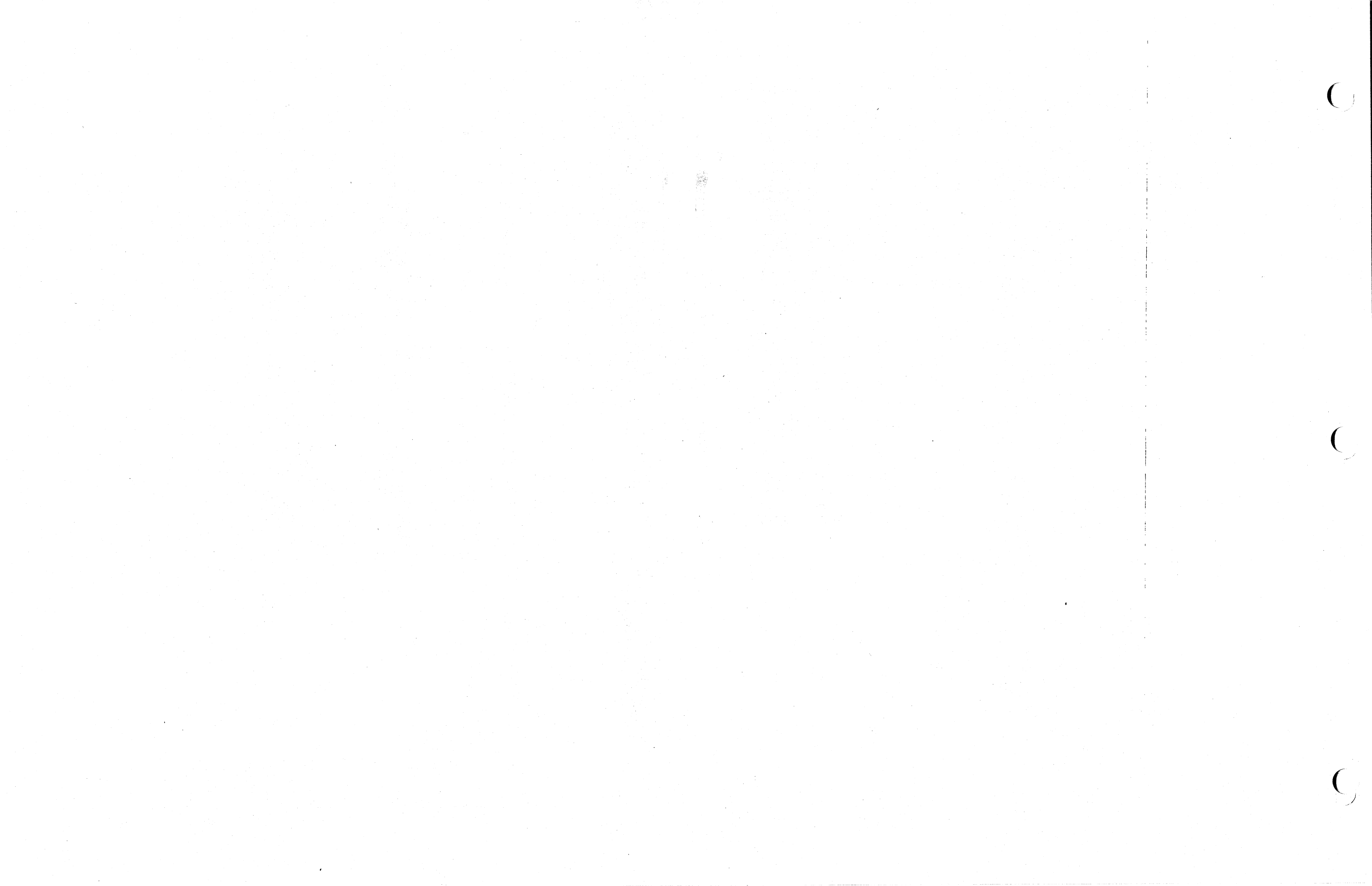


200470-601



SIZE	CODE IDENT	DWG NO.	REV
B	53938	200470-601	B2
VERSION	81	PC	SHEET 10 OF 11

4					3					2					1				
Unit	Pin	Type	String	Sheet	Unit	Pin	Type	String	Sheet	String	Unit	Pin	Type	Sheet	String	Unit	Pin	Type	Sheet
J1	1	Out	*STPINA	2 D1	J4	17	In	*READDAT-D	9 C4	*CLOCK	J5	3	In	10 C2	GROUND	J2	26	Out	1 A2
J1	2	Out	GROUND	1 C2	J4	18	Out	GROUND	9 B1	*DATA7	J5	1	In	6 B4	GROUND	J3	2	Out	1 C1
J1	3	Out	*STPOUTA	2 D1	J4	19	Out	*LOWCURRENTD	9 B2	*DRIVEAGRD	J1	23	In	33 B4	GROUND	J3	4	Out	1 C1
J1	4	Out	GROUND	1 C2	J4	20	Out	GROUND	6 B1	*DRIVEBGRD	J2	23	In	33 B4	GROUND	J3	6	Out	1 C1
J1	5	Out	*TK0-A	1 B4	J4	21	Out	HEDSEL-D	6 B1	*DRIVECGRD	J3	23	In	33 A4	GROUND	J3	8	Out	1 C1
J1	6	Out	GROUND	1 C2	J4	22	Out	GROUND	1 A1	*DRIVEDGRD	J4	23	In	33 A4	GROUND	J3	10	Out	1 C1
J1	7	Out	*HEADLOADA	5 D3	J4	23	In	*DRIVEDGRD	3 A4	*DRV1WP	J1	25	In	9 C4	GROUND	J3	12	Out	1 C1
J1	8	Out	GROUND	1 C2	J4	24	Out	GROUND	1 A1	*DRV2WP	J2	25	In	9 D4	GROUND	J3	14	Out	1 C1
J1	9	Out	*WRTDATAA	5 C3	J4	25	In	*DRV4WP	9 D4	*DRV3WP	J3	25	In	9 D4	GROUND	J3	16	Out	1 C1
J1	10	Out	GROUND	1 C2	J4	26	Out	GROUND	1 A1	*DRV4WP	J4	25	In	9 D4	GROUND	J3	18	Out	1 C1
J1	11	Out	*WRTGATEA	5 B3	J4	1	In	*DATA7	6 B4	*ERASEGATE	J5	7	In	5 B4	GROUND	J3	20	Out	1 C1
J1	12	Out	GROUND	1 C2	J4	2	Out	GROUND	1 C1	*ERASEGATEA	J1	13	Out	5 B3	GROUND	J3	22	Out	1 C1
J1	13	Out	*ERASEGATEA	5 B3	J4	3	In	*CLOCK	10 C2	*ERASEGATEB	J2	13	Out	5 A3	GROUND	J3	24	Out	1 B1
J1	14	Out	GROUND	1 C2	J4	4	Out	GROUND	1 C1	*ERASEGATEC	J3	13	Out	5 A3	GROUND	J3	26	Out	1 B1
J1	15	In	*INDEXA	1 C4	J4	5	In	*LOWCURRENT	9 C2	*ERASEGATE	J4	13	Out	5 A3	GROUND	J4	2	Out	1 B1
J1	16	Out	GROUND	1 C2	J4	6	Out	GROUND	1 C1	*FIRSTSEEK	J5	29	Out	7 B2	GROUND	J4	4	Out	1 B1
J1	17	In	*READDAT-A	1 C4	J4	7	In	*ERASEGATE	5 B4	*HEADLDED	J5	25	Out	4 C1	GROUND	J4	6	Out	1 B1
J1	18	Out	GROUND	1 C2	J4	8	Out	GROUND	1 C1	*HEADLOADA	J1	7	Out	5 D3	GROUND	J4	8	Out	1 B1
J1	19	Out	*LOWCURRENTA	1 C2	J4	9	In	*LOADT2	3 C4	*HEADLOADB	J2	7	Out	5 D3	GROUND	J4	10	Out	1 B1
J1	20	Out	GROUND	1 C2	J4	10	Out	GROUND	1 C1	*HEADLOADC	J3	7	Out	5 D3	GROUND	J4	12	Out	1 B1
J1	21	Out	HEDSEL-A	6 C1	J4	11	Out	*TIMER	5 C1	*HEADLOADD	J4	7	Out	5 D3	GROUND	J4	14	Out	1 B1
J1	22	Out	GROUND	1 C2	J4	12	Out	GROUND	1 C1	*INDEXA	J1	15	In	8 C4	GROUND	J4	16	Out	1 B1
J1	23	In	*DRIVEAGRD	3 B4	J4	13	In	WRTDATA	10 D4	*INDEXB	J2	15	In	8 B4	GROUND	J4	18	Out	1 B1
J1	24	Out	GROUND	1 B2	J4	14	Out	GROUND	1 C1	*INDEXC	J3	15	In	8 B4	GROUND	J4	20	Out	1 B1
J1	25	In	*DRV1WP	1 C4	J4	15	In	RESTORECMD	3 C4	*INDEXD	J4	15	In	8 A4	GROUND	J4	22	Out	1 B1
J1	26	Out	GROUND	1 B2	J4	16	Out	GROUND	1 C1	*LOADT1	J5	21	In	9 C4	GROUND	J4	24	Out	1 A1
J2	1	Out	*STPINB	2 D1	J4	17	In	*OUT	2 C4	*LOADT2	J5	9	In	9 B2	GROUND	J4	28	Out	1 A1
J2	2	Out	GROUND	1 B2	J4	18	Out	GROUND	1 C1	*LOWCURRENT	J5	5	In	9 C4	GROUND	J4	30	Out	1 A1
J2	3	Out	*STPOUTB	2 D1	J4	19	In	SEL2	3 D4	*LOWCURRENTA	J1	19	Out	9 C2	GROUND	J5	2	Out	1 C1
J2	4	Out	GROUND	1 B2	J4	20	Out	GROUND	1 C1	*LOWCURRENTB	J2	19	Out	9 B2	GROUND	J5	4	Out	1 C1
J2	5	Out	*TK0-B	1 B4	J4	21	In	*LOADT1	5 B2	*LOWCURRENTC	J3	19	Out	9 B2	GROUND	J5	6	Out	1 C1
J2	6	Out	GROUND	1 B2	J4	22	Out	GROUND	1 C1	*LOWCURRENTD	J4	19	Out	9 B2	GROUND	J5	8	Out	1 C1
J2	7	Out	*HEADLOADB	5 D3	J4	23	Out	+RESET	4 B1	*ONTRACK	J5	41	In	22 C4	GROUND	J5	10	Out	1 C1
J2	8	Out	GROUND	1 B2	J4	24	Out	GROUND	1 B1	*OUT	J5	17	In	22 C4	GROUND	J5	12	Out	1 C1
J2	9	Out	*WRTDATAB	5 C3	J4	25	Out	*HEADLDED	4 C1	*RAWDATA	J5	45	Out	22 C2	GROUND	J5	14	Out	1 C1
J2	10	Out	GROUND	1 B2	J4	26	Out	GROUND	1 B1	*READDAT-A	J1	17	In	9 C4	GROUND	J5	16	Out	1 C1
J2	11	Out	*WRTGATEB	5 B3	J4	27	Out	*RESTORE	1 C1	*READDAT-B	J2	17	In	9 C4	GROUND	J5	18	Out	1 C1
J2	12	Out	GROUND	1 B2	J4	28	Out	GROUND	1 B1	*READDAT-C	J3	17	In	9 C4	GROUND	J5	20	Out	1 C1
J2	13	Out	*ERASEGATEB	5 A3	J4	29	Out	*FIRSTSEEK	7 B2	*READDAT-D	J4	17	In	9 C4	GROUND	J5	22	Out	1 C1
J2	14	Out	GROUND	1 B2	J4	30	Out	GROUND	1 B1	*RESTORE	J5	27	Out	3 C1	GROUND	J5	24	Out	1 B1
J2	15	In	*INDEXB	1 B4	J4	31	In	*WRTGATE	5 B4	*STPCLKS	J5	37	In	22 C4	GROUND	J5	26	Out	1 B1
J2	16	Out	GROUND	1 B2	J4	32	Out	GROUND	1 B1	*STPINA	J1	1	Out	22 D1	GROUND	J5	28	Out	1 B1
J2	17	In	*READDAT-B	1 C4	J4	33	In	DA/CLK	10 D4	*STPINB	J2	1	Out	22 D1	GROUND	J5	30	Out	1 B1
J2	18	Out	GROUND	1 B2	J4	34	Out	GROUND	1 B1	*STPOUTA	J1	3	Out	22 D1	GROUND	J5	32	Out	1 B1
J2	19	Out	*LOWCURRENTB	1 B2	J4	35	Out	NONEXISDRV	7 D1	*STPOUTB	J2	3	Out	22 D1	GROUND	J5	34	Out	1 B1
J2	20	Out	GROUND	1 B2	J4	36	Out	GROUND	1 B1	*STPOUTC	J3	3	Out	22 D1	GROUND	J5	36	Out	1 B1
J2	21	Out	HEDSEL-B	6 C1	J4	37	In	*STPCLKS	2 C4	*STPOUTD	J4	3	Out	22 C1	GROUND	J5	38	Out	1 B1
J2	22	Out	GROUND	1 A2	J4	38	Out	GROUND	1 B1	*TIMER	J5	11	Out	5 C1	GROUND	J5	40	Out	1 B1
J2	23	In	*DRIVEBGRD	3 B4	J4	39	In	+IPL	5 B2	*TK0-A	J1	5	Out	33 B4	GROUND	J5	42	Out	1 B1
J2	24	Out	GROUND	1 A2	J4	40	Out	GROUND	1 B1	*TK0-B	J2	5	Out	33 B4	GROUND	J5	44	Out	1 B1
J2	25	In	*DRV2WP	1 D4	J4	41	In	*ONTRACK	2 C4	*TK0-C	J3	5	Out	33 B4	GROUND	J5	46	Out	1 B1
J2	26	Out	GROUND	1 A2	J4	42	Out	GROUND	1 B1	*TK0-D	J4	5	Out	33 A4	GROUND	J5	48	Out	1 B1
J3	1	Out	GROUND	1 C1	J4	43	In	SEL1	3 D4	*WRTDATAA	J1	9	Out	55 C3	GROUND	J5	1	Out	1 A1
J3	2	Out	*STPOUTC	2 D1	J4	44	Out	GROUND	1 B1	*WRTDATAB	J2	9	Out	55 C3	HEDSEL-A	J5	21	Out	1 A1
J3	3	Out	GROUND	1 C1	J4	45	Out	*RAWDATA	19 C2	*WRTDATAC	J3	9	Out	55 C3	HEDSEL-B	J5	22	Out	1 C1
J3	4	Out	*TK0-C	3 B4	J4	46	Out	GROUND	1 B1	*WRTDATAD	J4	9	Out	55 C3	HEDSEL-C	J5	23	Out	1 C1
J3	5	Out	GROUND	1 C1	J4	47	Out	SELECTONLINE	8 B1	*WRTGATE	J5	31	In	55 B4	HEDSEL-D	J5	24	Out	1 B1
J3	6	Out	*HEADLOADC	5 D3	J4	48	Out	GROUND	1 B1	*WRTGATEA	J1	11	Out	55 B4	NONEXISDRV	J5	25	Out	1 B1
J3	7	Out	GROUND	1 C1	J4	49	Out	SELECTINDEX	8 B1	*WRTGATEB	J2	11	Out	55 B3	RESTORECMD	J5	35	Out	1 D1
J3	8	Out	GROUND	1 C1	J4	50	Out	DRV-WP	9 D2	*WRTGATEC	J3	11	Out	55 B3	SEL1	J5	15	In	3 C4
J3	9	Out	*WRTDATAC	3 C3	J6	1	Out	GROUND	1 A1	*WRTGATED	J4	11	Out	55 B3	SEL2	J5	43	In	3 D4
J3	10	Out	GROUND	1 C1	J6	2	Out	GROUND	1 A1	+5V	J6	3	In	11 C4	SELECTINDEX	J5	19	In	8 B1
J3	11	Out	*WRTGATEC	3 B3	J6	3	In	+5V	11 C4	+5V	J6	3	In	11 C4	SELECTONLINE	J5	47	Out	8 B1
J3	12	Out	GROUND	1 C1	J6	4	In	+5V	11 C4	+IPL	J5	39	In	5 B2	WRTDATA	J5	13	In	10 D4
J3	13	Out	*ERASEGATEC	5 A3	J6	5	Out	GROUND	1 C4	+RESET	J5	23	Out	4 B1					
J3	14	Out	GROUND	1 C1	J6	6	Out	GROUND	1 C4	DA/CLK	J5	33	In	10 D4					
J3	15	In	*INDEXC	1 B4	J6	7	Out	GROUND	1 C4	DRV-WP	J5	50	Out	9 D2					
J3	16	Out	GROUND	1 B4	J6	8	Out	GROUND	1 C4	GROUND	J1	2	Out	11 C2					
J3	17	In	*READDAT-C	1 C4	J6	9	Out	GROUND	1 C4	GROUND	J1	4	Out	11 C2					
J3	18	Out	GROUND	1 C1	J6	10	Out	GROUND	1 C1	GROUND	J1	6	Out	11 C2					
J3	19	Out	*LOWCURRENTC	1 B2	J6	11	Out	GROUND	1 C1	GROUND	J1	8	Out	11 C2					
J3	20	Out	GROUND	1 C1	J6	12	Out	GROUND	1 C1	GROUND	J1	10	Out	11 C2					
J3	21	Out	HEDSEL-C	6 C1	J6	13	Out	GROUND	1 C1	GROUND	J1	12	Out	11 C2					
J3	22	Out	GROUND	1 C1	J6	14	Out	*DRIVECGRD	3 A4	GROUND	J1	14	Out	11 C2					
J3	23	Out	GROUND	1 C1	J6	15	Out	GROUND	1 B1	GROUND	J1	16	Out	11 C2					
J3	24	In	*DRIVEAGRD	3 B4	J6	16	Out	GROUND	1 B1	GROUND	J1	18	Out	11 C2					
J3	25	In	*DRV3WP	9 D4	J6	17	Out	GROUND	1 B1	GROUND	J1	20	Out	11 C2					
J3	26	Out	GROUND	1 B1	J6	18	Out	GROUND	1 B1	GROUND	J1	22	Out	11 C2					
J4	1	Out	GROUND	1 B1	J6	19	Out	GROUND	1 B1	GROUND	J1	24	Out	11 C2					
J4	2	Out	*STPOUTD	2 C1	J6	20	Out	GROUND	1 B1	GROUND	J1	26	Out	11 B2					
J4	3	Out	GROUND	1 B1	J6	21	Out	GROUND	1 B1	GROUND	J2	2	Out	11 B2					
J4	4	Out	*TK0-D	3 A4	J6	22	Out	GROUND	1 B1	GROUND	J2	4	Out	11 B2					
J4	5	Out	GROUND	1 B1	J6	23	Out	GROUND	1 B1	GROUND	J2	6	Out	11 B2					
J4	6	Out	*HEADLOADD	5 D3	J6	24	Out	GROUND	1 B1	GROUND	J2	8	Out	11 B2					
J4	7	Out	GROUND	1 B1	J6	25	Out	GROUND	1 B1	GROUND	J2	10	Out	11 B2					
J4	8	Out	GROUND	1 B1	J6	26	Out	GROUND	1 B1	GROUND	J2	12	Out	11 B2					
J4	9	Out	*WRTDATAD	5 C3	J6	27	Out	GROUND	1 B1	GROUND	J2	14	Out	11 B2					
J4	10	Out	GROUND	1 B1	J6	28	Out	GROUND	1 B1	GROUND	J2	16	Out	11 B2					
J4	11	Out	*WRTGATED	5 B3	J6	29	Out	GROUND	1 B1	GROUND	J2	18	Out	11 B2					
J4	12	Out	GROUND	1 B1	J6	30	Out</												



MAINTENANCE PARTS LIST

ASSEMBLY: PL 200471-100		REV: C4 = CE	DESC: CARD ASSY,E&S,6200 FORMATTER (PC)			
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	PC,FRMTR BD,6200 LD,D	53938	EVANS & SUTHERLAND.	200471-500	200471-500	1
	C,,RDL .01UF	31433	KEMET ELECTRONICS CORP.	C315C103 (M/K)5R5CA	804115-103	65
	CN,HOUS 26P,RTA	22526	DU PONT E I NEMOURS (CONN)	65268-009	801290-026	1
	CN,HOUS 50P,RTA	22526	DU PONT E I NEMOURS (CONN)	65268-011 (2X25)	801290-050	2
	WIRE,30AWG,SOL-COP,KY	71124	BRAND-REX CO	BR-21211-30-GREEN	802068-005	20
002 M 2	HW,CASY VPPCASSY	53938	EVANS & SUTHERLAND.	200473-100	200473-100	1
003 M 3	HW,TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	1
004 M 4	HW,STDF .312STDF	55566	RAF ELECTRONICS HARDWARE	2101-632-SS-0	802272-005	2
005 M 5	HW,SCR 6-32X1/4	N/A	DISTRIBUTORS	6-32X1/4 (M-P-PH-SS)	802003-102	2
	C1 C9 C15	C,,RDL 100PF	02799	ARCO ELECTRONICS (CAPS)	DM10-101J (100PF)	804104-101
	C12	C,,RDL 470PF	02799	ARCO ELECTRONICS (CAPS)	DM15-471J (470PF)	804104-471
	C14 C17	C,,RDL .1UF	04222	A V X CERAMICS DIV.OF AVX	SR205E104MAA	804115-104
	C18	C,,AXL 100UF	55680	NICHICON AMERICA CORP.	TKB1C-101-M (100UF)	804134-107
	C2 C16	C,,AXL 1UF	56289	SPRAGUE ELECTRONIC CO.	150D105X9035A2	804102-105
	C3 C5	C,,RDL 10PF	14655	CORNELL-DUBILIER ELECTRON	CD15-CD100J03	804104-100
	C4	CAP,.068UF,50/100V,AX	74861	INDUSTRIAL CONDENSER CORP	15-683-1-C (.068UF)	804192-683
	C6	CAP,1.5UF,35V,AXL,10%	56289	SPRAGUE ELECTRONIC CO.	150D155X9035B2	804102-155
	C8 C10 C13	C,,RDL 220PF	02799	ARCO ELECTRONICS (CAPS)	DM15-221J (220PF)	804104-221
	CR1 CR2 CR3 CR4 CR5	CR,SWTC 1N914	N/A	ITT SEMICONDUCTORS	1N914-1N4148	810914-001
006 M6	HW,SCKT 14SCKT(.3LS)	09922	BRUNDY CORP	DILB14P-111 (14SCKT)	801611-514	1
007 M7	SKT,DIP,16-PIN,LOW-P	09922	BRUNDY CORP	DILB16P-111 (16SCKT)	801611-516	4
	Q1 Q2 Q5	TR,PNP MPS3640	04713	MOTOROLA INC. SEMI PRODUC	MPS3640 (PNP,TO-92)	823640-001
	Q3 Q4	TR,NPN 2N3646	04713	MOTOROLA INC. SEMI PRODUC	MPS3646 (NPN,TO-92)	823646-001
	R1 R3	R,,AXL 220 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF221J	803201-221
	R10	R,,AXL 75 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF750J	803201-750
	R12	R,,AXL 6.8K1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF682J	803201-682
	R13 R18	R,,AXL 22 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF220J	803201-220
	R14 R17 R19 R20	R,,AXL 110 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF111J	803201-111
	R15 R16	R,,AXL 390 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF391J	803201-391
	R2	R,,AXL 330 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF331J	803201-331
	R21 R22 R29	R,,AXL 1.5K1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF152J	803201-152
	R23 R25 R31	R,,AXL 1K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF102J	803201-102
	R24	R,,AXL 10K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF103J	803201-103
	R26	RES,1/4W,56-OHM,5%,CA	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF560J	803201-560
	R27	R,,AXL 12K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF123J	803201-123
	R28	R,,AXL 100 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF101J	803201-101
	R30 R32	R,,AXL 39K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF393J	803201-393
	R33	RES,1/4W,10.0K,1%,100	24546	BRADFORD ELECTRONIC (RES)	NA60-10.0K-1%	803414-100
	R34	R,,AXL 30K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF303J	803201-303
	R35	R,,AXL 4.7K1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF472J	803201-472
	R4	R,,AXL 15K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF153J	803201-153
	R5	R,,AXL 200 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF201J	803201-201
	R6	R,,AXL 180 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF181J	803201-181
	R7	R,,AXL 51K 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF513J	803201-513
	R8	R,,POT 5K-20T	50139	ALLEN-BRADLEY CO. ELECTRO	94P502 (5K)	803510-502
	R9 R11	R,,AXL 620 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF621J	803201-621
	U1 U10 U19 U21 U34 U43 U44	IC,TTL 7474	01295	TEXAS INSTR, SEMICON DIV.	SN7474N/J	807474-646
	U45 U48 U76 U79 U82 U83 U87					24

TIME=09:14

RUN DATE=04/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 2

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200471-100

REV: C4 = CE

DESC: CARD ASSY,E&S,6200 FORMATTER (PC)

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
U88 U96 U98 U101 U112 U114						
U115 U124 U130 U138						
U118	IC,TTL 7430	01295	TEXAS INSTR, SEMICON DIV.	SN7430N/J	807430-646	1
U116	IC,TTL 7490	07263	FAIRCHILD IC'S & SEMICOND	7490APC	807490-646	1
U126	IC,TTL 7440	01295	TEXAS INSTR, SEMICON DIV.	SN7440N	807420-642	1
U122 U123 U136 U137 U150	IC,TTL 74193	01295	TEXAS INSTR, SEMICON DIV.	SN74193N	807619-246	7
U163 U164						
U129	R,,DIP 220(R8)	73138	BECKMAN INDUSTRIES CORP.	898-3-R220 (2%)	807750-221	1
U121 U135	IC,TTL 7485	01295	TEXAS INSTR, SEMICON DIV.	SN7485N	807685-246	2
U125	DL,TTL ST08CB-250	20933	KAPPA NETWORKS INC.	ST08CB-250 (25NS)	808500-025	1
U13 U16	R,,DIP 330/390R	73138	BECKMAN INDUSTRIES CORP.	899-5-R330/390	807520-331	2
U149 U162	IC, RAM, BIPOLAR, 64-BIT	01295	TEXAS INSTR, SEMICON DIV.	SN7489N	807601-446	2
U148 U169	R,,DIP 1K(R15)	4J937	BOURNS NETWORKS	4116R-002-102	807699-102	2
U167 U168	IC,TTL 74S86	01295	TEXAS INSTR, SEMICON DIV.	SN74S86N	807486-055	2
U165	IC, DECODER, BCD-TO-DE	18324	SIGNETICS CORP. MILITARY	N74LS42N	807642-016	1
U2 U59 U64 U104 U139 U144	IC,TTL 7427	18324	SIGNETICS CORP. MILITARY	N7427N	807439-646	7
U153						
U20 U62 U146 U151,U159	IC,TTL 7486	18324	SIGNETICS CORP. MILITARY	N7486N	807486-646	5
U23 U58 U84 U102 UJ142	IC,TTL 7408	18324	SIGNETICS CORP. MILITARY	N7408N	807408-646	5
U28 U41 U107 U134	IC,TTL 74116	01295	TEXAS INSTR, SEMICON DIV.	74116N/J	807012-646	4
U3 U 39 U51 U70 U86 U94	IC,TTL 7410	27014	NATIONAL SEMICONDUCTOR	DM7410N	807410-646	11
U120 U127 U141 U154 U158						
U32	IC,TTL #74123	01295	TEXAS INSTR, SEMICON DIV.	SN74123N	807622-647	1
U36 U131 U155	IC,TTL 9602	07263	FAIRCHILD IC'S & SEMICOND	9602PC	807690-646	3
U38 U52 U54 U103 U110	IC,TTL 7432	01295	TEXAS INSTR, SEMICON DIV.	SN7432N	807431-646	5
U49	IC,TTL 74S74	01295	TEXAS INSTR, SEMICON DIV.	SN74S74N/J	807474-055	1
U50 U53 U55 U68 U71 U108	IC,TTL 7400	01295	TEXAS INSTR, SEMICON DIV.	SN7400N	807400-646	16
U113 U152 U156 U157 U7 U9						
U31 U35 U37 U47						
U6 U12 U14 U15 U17 U25 U26	IC,TTL 7438	01295	TEXAS INSTR, SEMICON DIV.	SN7438N	807403-642	10
U27 U29 U128						
U60	IC,TTL 74163	18324	SIGNETICS CORP. MILITARY	N74163N	807663-246	1
U63	IC,TTL 74S00	01295	TEXAS INSTR, SEMICON DIV.	SN74S00N	807400-055	1
U65	IC,TTL 9401	07263	FAIRCHILD IC'S & SEMICOND	9401PC	807013-255	1
U66 U72 U117 U140 U11 U18	IC,TTL 7404	01295	TEXAS INSTR, SEMICON DIV.	SN7404N	807416-646	10
U30 U40 U42 U61						
U67 U75 U97 U100 U132 U147	IC,TTL 7402	01295	TEXAS INSTR, SEMICON DIV.	SN7402N	807402-646	14
U161 U166 0 U22 U24 U33 U46						
U56 U57						
U69 U73	IC,TTL 7411	01295	TEXAS INSTR, SEMICON DIV.	SN7411N	807411-646	2
U77 U145	IC,TTL 7437	01295	TEXAS INSTR, SEMICON DIV.	SN7437N	807400-642	2
U78 U160	IC,TTL 7425	01295	TEXAS INSTR, SEMICON DIV.	SN7425N	807502-646	2
U8 U143	IC,TTL 74S04	01295	TEXAS INSTR, SEMICON DIV.	SN74S04N	807416-055	2
U80 U81	IC, FLIP-FLOP, DUAL J-K	27014	NATIONAL SEMICONDUCTOR	DM7473N	807473-646	2
U89 U90	IC,TTL 74164	01295	TEXAS INSTR, SEMICON DIV.	SN74164N/J	807413-646	2
U91 U105 U119 U133	IC,TTL 74195	01295	TEXAS INSTR, SEMICON DIV.	SN74195N	807695-446	4
U92 U106	IC,TTL 74157	01295	TEXAS INSTR, SEMICON DIV.	SN74157N	807657-646	2
U99	IC,TTL 7406	01295	TEXAS INSTR, SEMICON DIV.	7406N/J	807011-646	1

TIME=09:14

RUN DATE=04/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 3

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200471-100

REV: C4 = CE

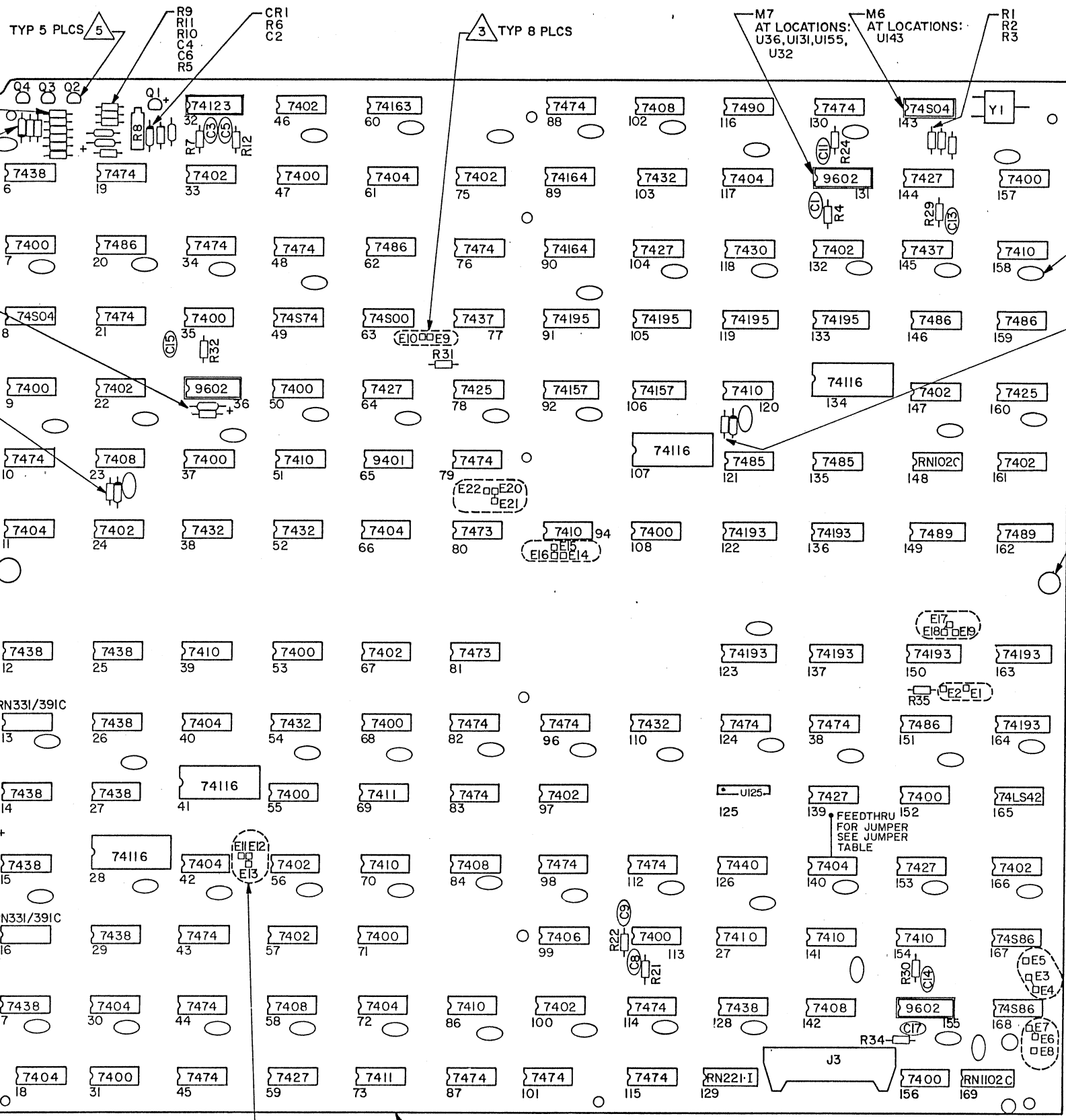
DESC: CARD ASSY,E&S,6200 FORMATTER (PC)

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
Y1	X,,MPC X10.0MHZ	23875	M-TRON INDUSTRIES INC	MP-1/3LD-10.0000MHZ	806013-010	1

85 ITEMS LISTED



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REVISIONS				
ZONE LTR	DESCRIPTION	DATE	APPROVED	
A0	RELEASED TO AO	8-3-84	GR	
A1	REV TABLE A	10-22-84	MB	
A2	CHANGED RESISTOR LABELING	11-13-84	BH	
B0	REV UPDATE W/NO DWG CHNG	12-28-84	BH	
B1	CORRECTED TABLE A	1-30-85	BH	
C0	REV UPDATE ONLY	4-19-85	BH	
C1	ADDED NOTE 7 & 8	8-19-86	MH	
C2	ADDED DELAY	10-15-86	BH	
C3	ADD U156 AS LOCAT. FOR M6	9-16-87	JLT	
C4	DELETE SOCKET DESIGNATORS	4-20-88	BH	

- NOTES:
- MARK ASSY NO., REV LEVEL AND S/N PER E&S PRODUCTION PROCESSES E-9.1. LOCATE APPROX AS SHOWN.
 - CD .01uf FOR C11 AND ALL CAPACITORS SHOWN WITHOUT REF DESIGNATIONS, 65 PLCS.
 - FOR JUMPER CONFIGURATION REFER TO TABLE A.
 - THIS ASSEMBLY REQUIRES MODIFICATION. MODIFY PER TRACE CUT AND JUMPER TABLES.
 - REVERSE Q1, Q2, Q3, Q4, & Q5. 180° POSITION WILL NOT MATCH SILKSCREEN.
 - FRONT = COMPONENT SIDE OF CARD.
BACK = SOLDER SIDE OF CARD.

SYSTEM CONFIGURATION	DASH NO.	E3 TO E4 ON PCB		E3 TO E5		E6 TO E7 ON PCB		E4 TO E5		E5 TO E6 ON PCB		E7 TO E8		E7 TO E9		E20 TO E21		E20 TO E22	
		CUT	ADD	CUT	ADD	CUT	ADD	CUT	ADD	CUT	ADD	CUT	ADD	CUT	ADD	CUT	ADD	CUT	ADD
TWO HEAD 2 DRIVE BYTE MODE	100																		

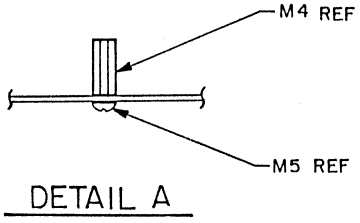
8. MAKE CUTS AS CLOSE AS POSSIBLE TO PAD IN "FROM" COLUMN ON TRACE CUT TABLE.

FROM	TO	SIDE
A143-12	J2-3	BACK
J2-3	A143-12	FRONT
A6-4	A1-4	FRONT
A6-5	A19-4	BACK
A156-8	A156-12	FRONT

FROM	TO	SIDE
J2-3	A143-12	FRONT
A24-13	A6-4	FRONT
A19-4	A1-4	FRONT
A156-8	A125-15	FRONT
A125-8	A125-9	FRONT
A125-11	FEEDTHRU NEAR A139-3 CONTINUITY TO A140-3	FRONT

REFERENCE DOCUMENTS:
 SCHEMATIC 200471-600
 PARTS LIST PL200471-100

COMPONENT SIDE



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓	CONTRACT NO.	EVANS & SUTHERLAND SALT LAKE CITY, UTAH 84108
	DRAWN SBROWN 3-12-84	
	CHECKED	CARD ASSEMBLY E&S 6200 FORMATTER (P.C.)
	MECH	
	ELEC	SIZE CODE IDENT NO D 53938 200471-100
	PROJ. ENG	
	APPROVED	REV C4
MATERIAL SEE PARTS LIST		SCALE NONE DO NOT SCALE DWG SHEET 1 OF 1

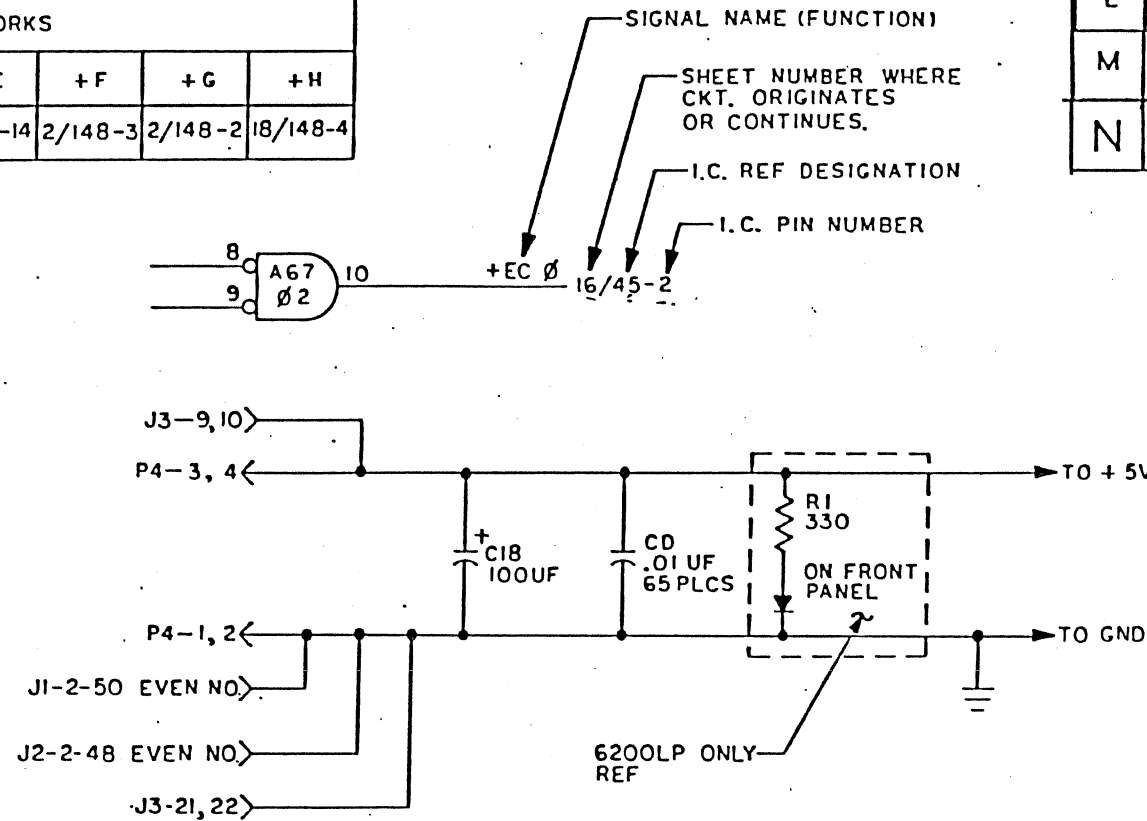


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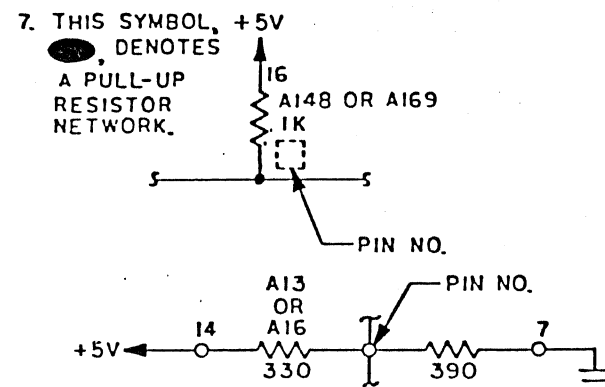
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A0	RELEASED TO AO	GF 8-3-84	<i>[Signature]</i>
	A1	REV UPDATE W/ NO DWG CHANGE	MB 10-22-84	<i>[Signature]</i>
	A2	REV UPDATE W/NO DWG CHNG	BH 11-13-84	<i>[Signature]</i>
	B0	REV UPDATE W/NO DWG CHNG	BH 12-28-84	<i>[Signature]</i>
CONTINUED ON SHEET 2				

RESISTOR NETWORKS							
+A	+B	+C	+D	+E	+F	+G	+H
9/148-1	4/169-15	14/169-4	10/148-15	7/169-14	2/148-3	2/148-2	18/148-4

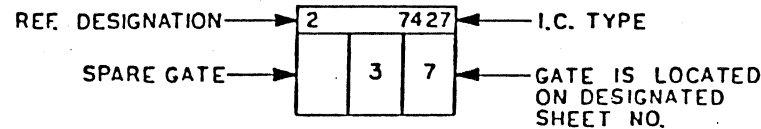
REF. DESIGNATION TABLE		
DESIG.	HIGHEST USED	NOT USED
A	169	4, 5, 74, 81, 84, 85, 89, 93, 95, 109, 111, 125.
C	18	
CR	5	
R	35	
Q	5	
Y	1	
J	3	
P	4	1, 2, 3



ISSUE	DESCRIPTION	DATE	APPROVAL
L	REVISED AND REDRAWN PER ECO 21188		
M	ECO 2179	1/1/85	
N	ECO 2264	6/7/85	Kan



7. THIS SYMBOL, DENOTES A PULL-UP RESISTOR NETWORK.



8. FOR MODULE MAP, SEE SHEET 24. GATES ARE IN ORDER OF OUTPUT PIN NUMBERS AND ARE DEPICTED FROM LEFT TO RIGHT, TOP TO BOTTOM ORDER.

6. THIS SYMBOL, DENOTES A PULL-UP/PULL-DOWN RESISTOR NETWORK.

5. DO NOT INSTALL AT ASSY. TEST TO SELECT VALUE.

4. FOR JUMPER CONFIGURATION, REFER TO TABLE 'A' ON SHEET 23.

3. ALL RESISTORS ARE IN OHMS.

2. SWITCHES 'C' AND 'D' NOT USED ON 6200LP.

1. DIODES 'C' AND 'D' NOT USED ON 6200LP.

NOTES: UNLESS OTHERWISE SPECIFIED.

DWN.
D.A. FINLEY
CHK.
RJA 4/1/82
APPO.

DRAWING TITLE
**FORMATTER ELECTRONICS
 6200**

ADVANCED ELECTRONICS DESIGN, INC.
 BUNNYVALE, CALIF. 94088

DRAWING NUMBER
C 105528-XX

REV
N

DRAWN S BROWN 3-12-84
 CHECKED PPR 5/31/84
 MECH.
 ELEC.
 PROJ. ENG. Craig Prudie
 APPROVED

EVANS & SUTHERLAND
 SALT LAKE CITY, UTAH, 84108

**E&S 6200 FORMATTER
 (P.C.)**

SIZE	CODE IDENT NO	REV
C	53938	200471-600 C4
SCALE	DO NOT SCALE	SHEET 1 OF 24

200471-600

4

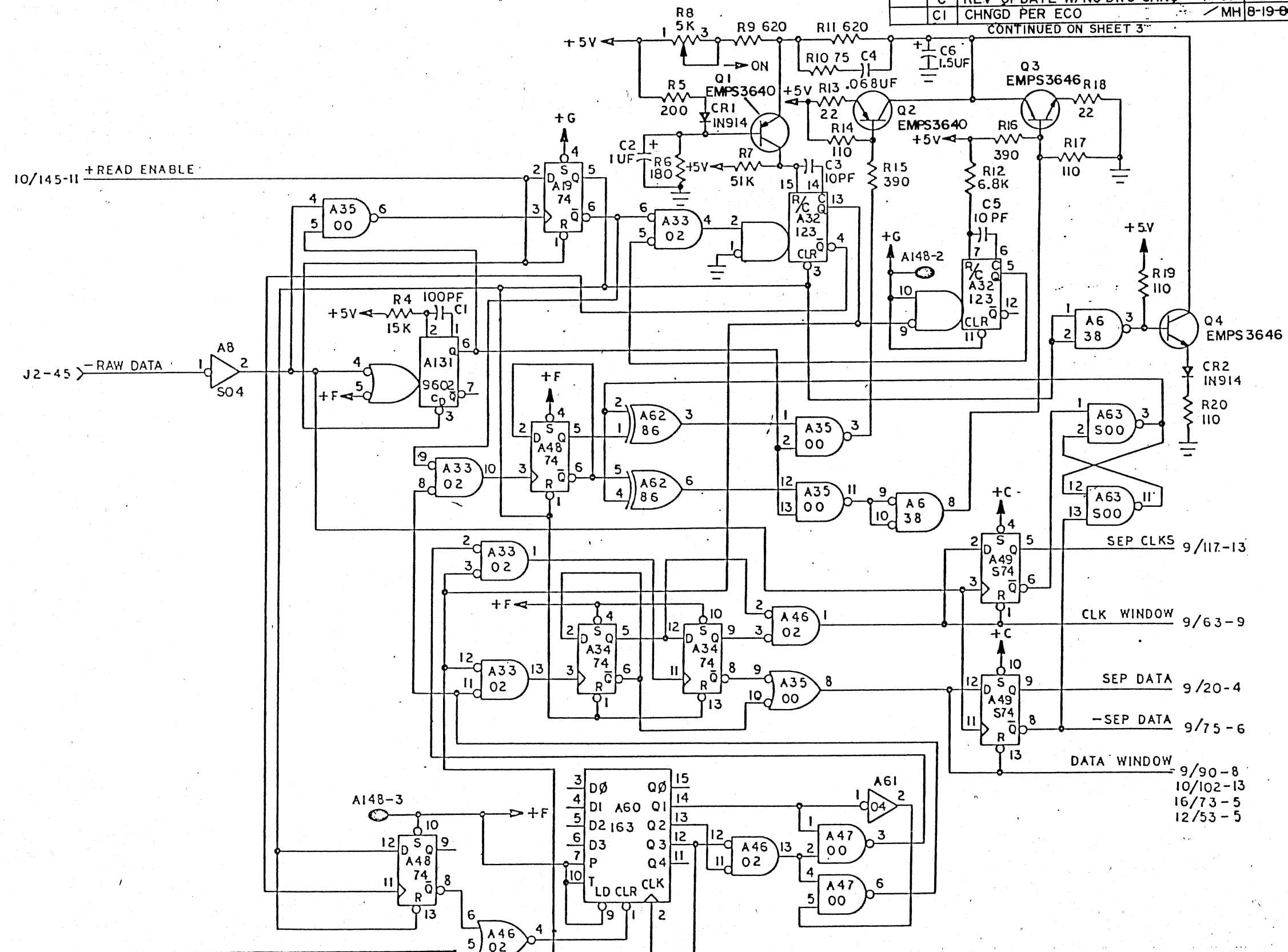
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2

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REVISIONS				
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	C	REV UPDATE W/NO DWG CHNG	4-24-85	<i>[Signature]</i>
	CI	CHNGD PER ECO	8-19-86	<i>[Signature]</i>

CONTINUED ON SHEET 3




ADVANCED ELECTRONICS DESIGN, INC.
 BUNNYVALE, CALIF. 94086

REV

105528-XX

SIZE	CODE IDENT NO	REV
C	53938 200471-600	C4
SCALE: NONE	DO NOT SCALE	SHEET 2 OF 24

200471-600

4

3

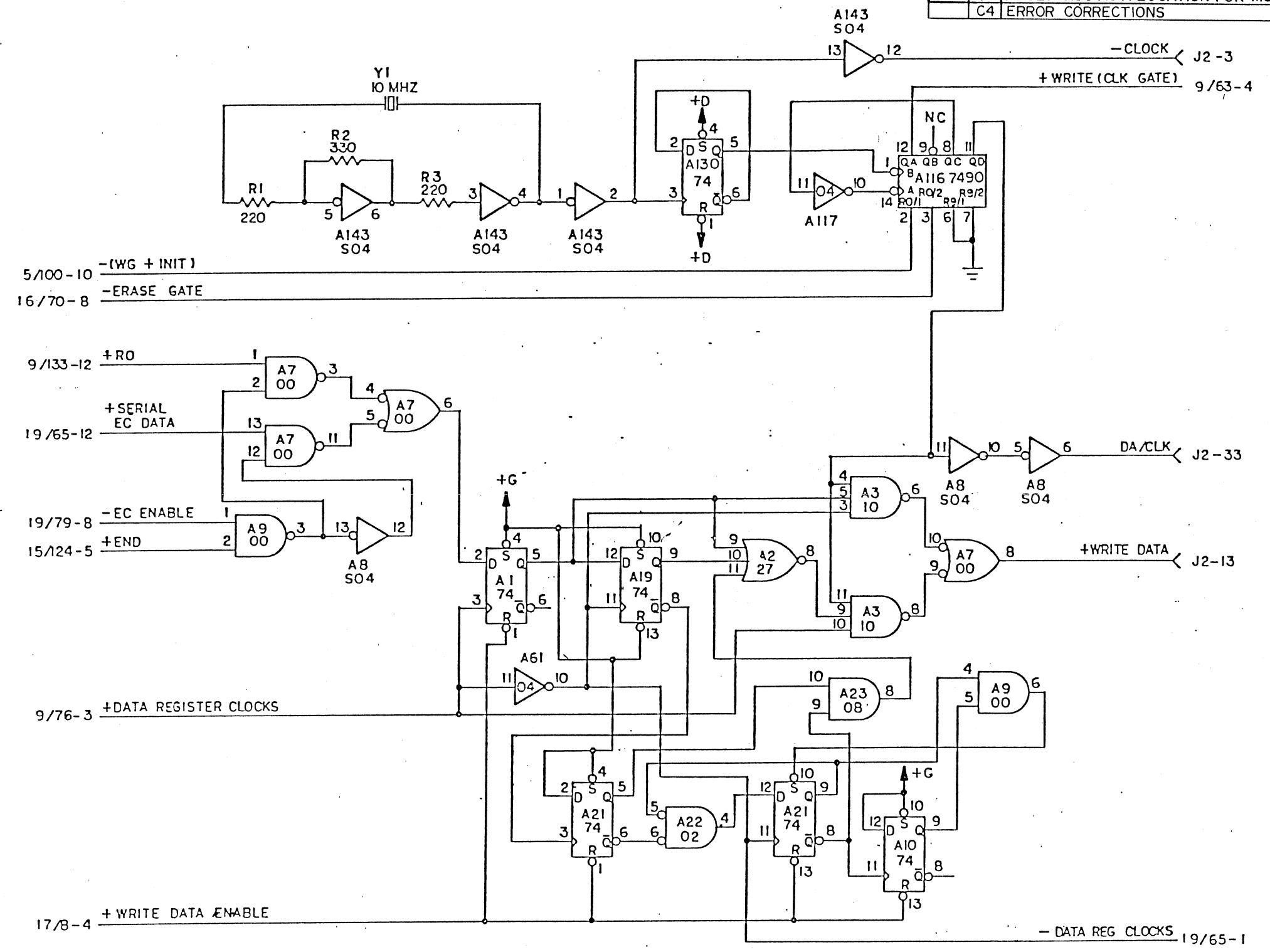
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	C2	ADDED DELAY	10-14-86	JR
	C3	ADDED UI56 AS A LOCATION FOR M6	9-16-87	RJ RT
	C4	ERROR CORRECTIONS	4-19-88	JR

D
C
B
A

D
C
B
A



	ADVANCED ELECTRONICS DESIGN, INC.	DRAWING NUMBER	REV
	BUNNYVALE, CALIF. 94085	105528-XX	N

SIZE	CODE IDENT. NO.	REV
C	53938 200471-600	C4
SCALE	DO NOT SCALE	SHEET 3 OF 24

4

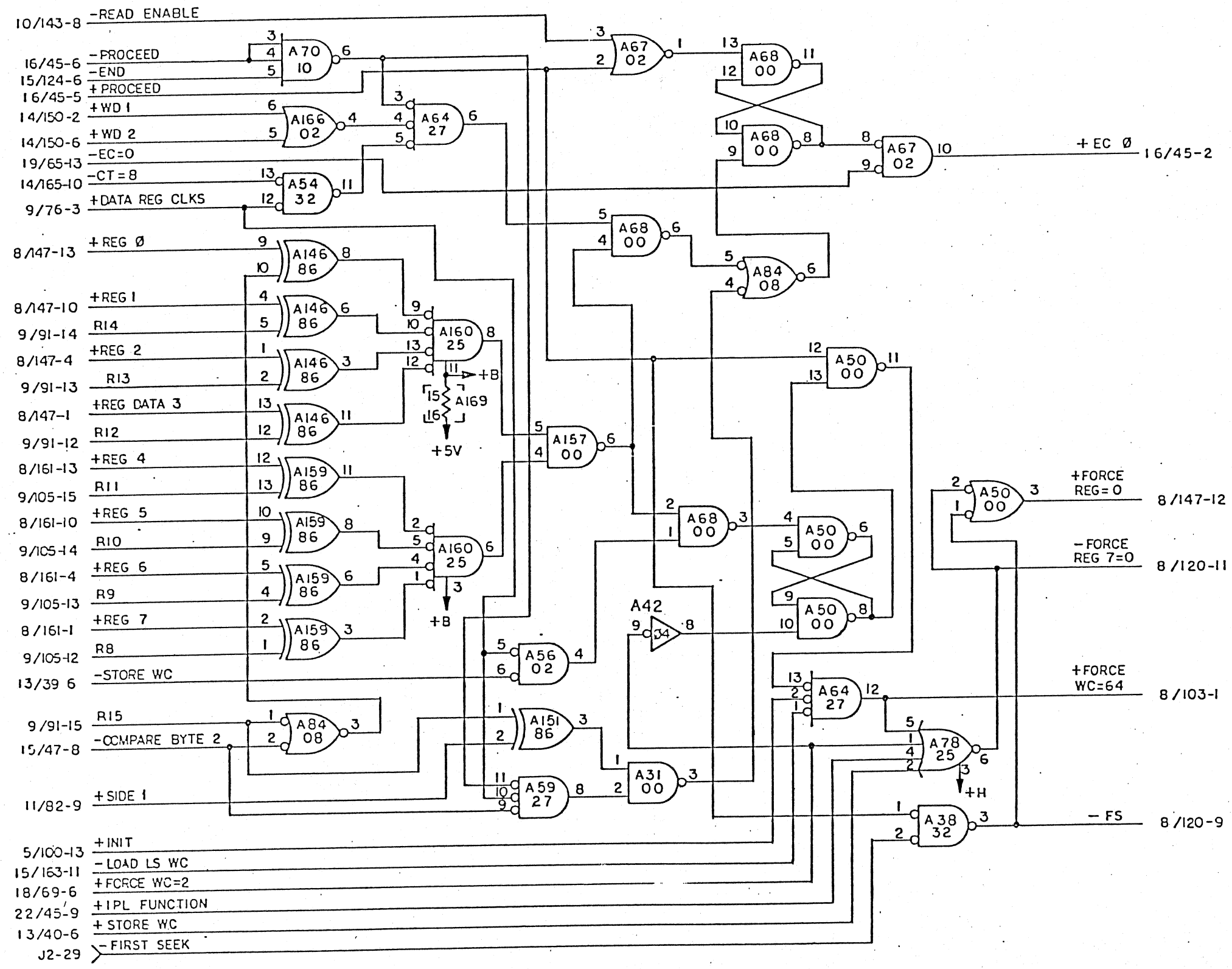
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2

1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D
C
B
A



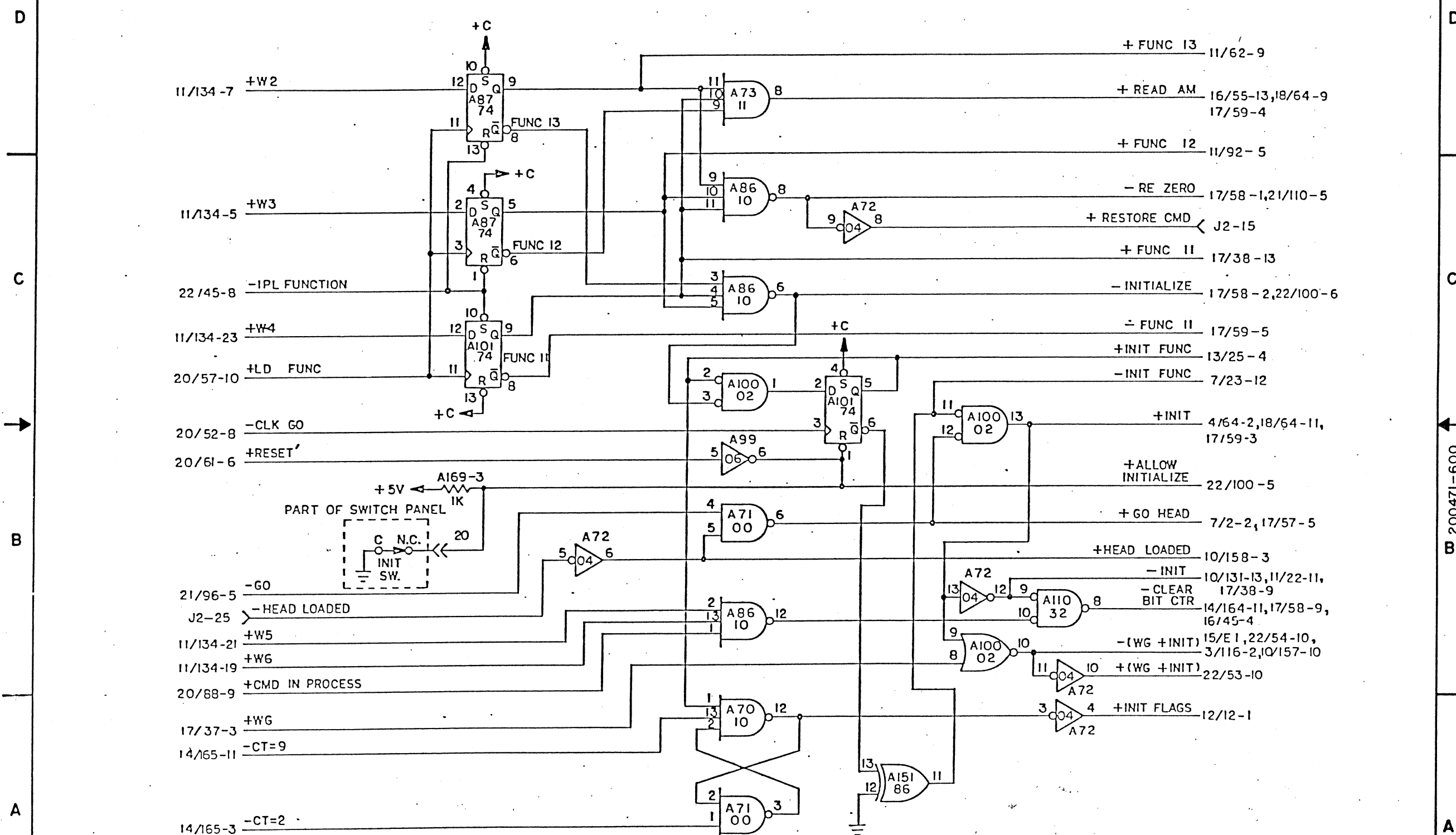
D
C
B
A

	ADVANCED ELECTRONICS DESIGN, INC.	DRAWING NUMBER	REV
	SUNNYVALE, CALIF. 94088	105528-XX	N

SIZE	CODE IDENT. NO.	REV
C	53938	C4
SCALE NONE	DO NOT SCALE	SHEET 4 OF 24

200471-600

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



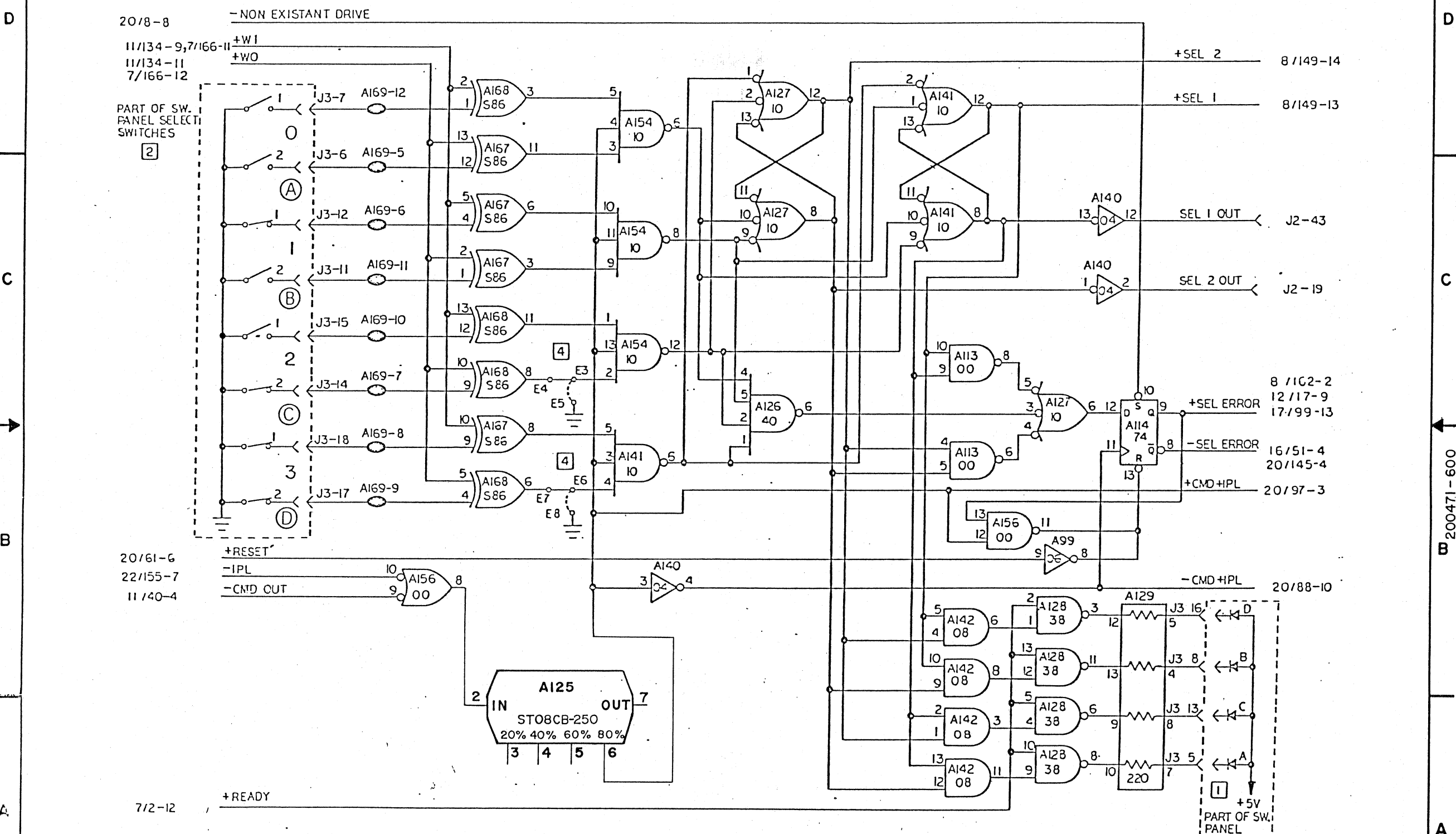
ADVANCED ELECTRONICS DESIGN, INC. BUNNYVALE, CALIF. 94088
 DRAWING NUMBER 105528-XX
 REV N

SIZE	CODE IDENT. NO.	REV
C	53938	C4
SCALE	DO NOT SCALE	SHEET 5 OF 24

200471-600

4 3 2 1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



ADVANCED ELECTRONIC DESIGN, INC. BUNNYVALE, CALIF. 94008
 DRAWING NUMBER 105528-XX
 REV N

SIZE	CODE IDENT. NO	REV
C	53938 200471-600	C4
SCALE: NONE	DO NOT SCALE	SHEET 6 OF 24

4

3

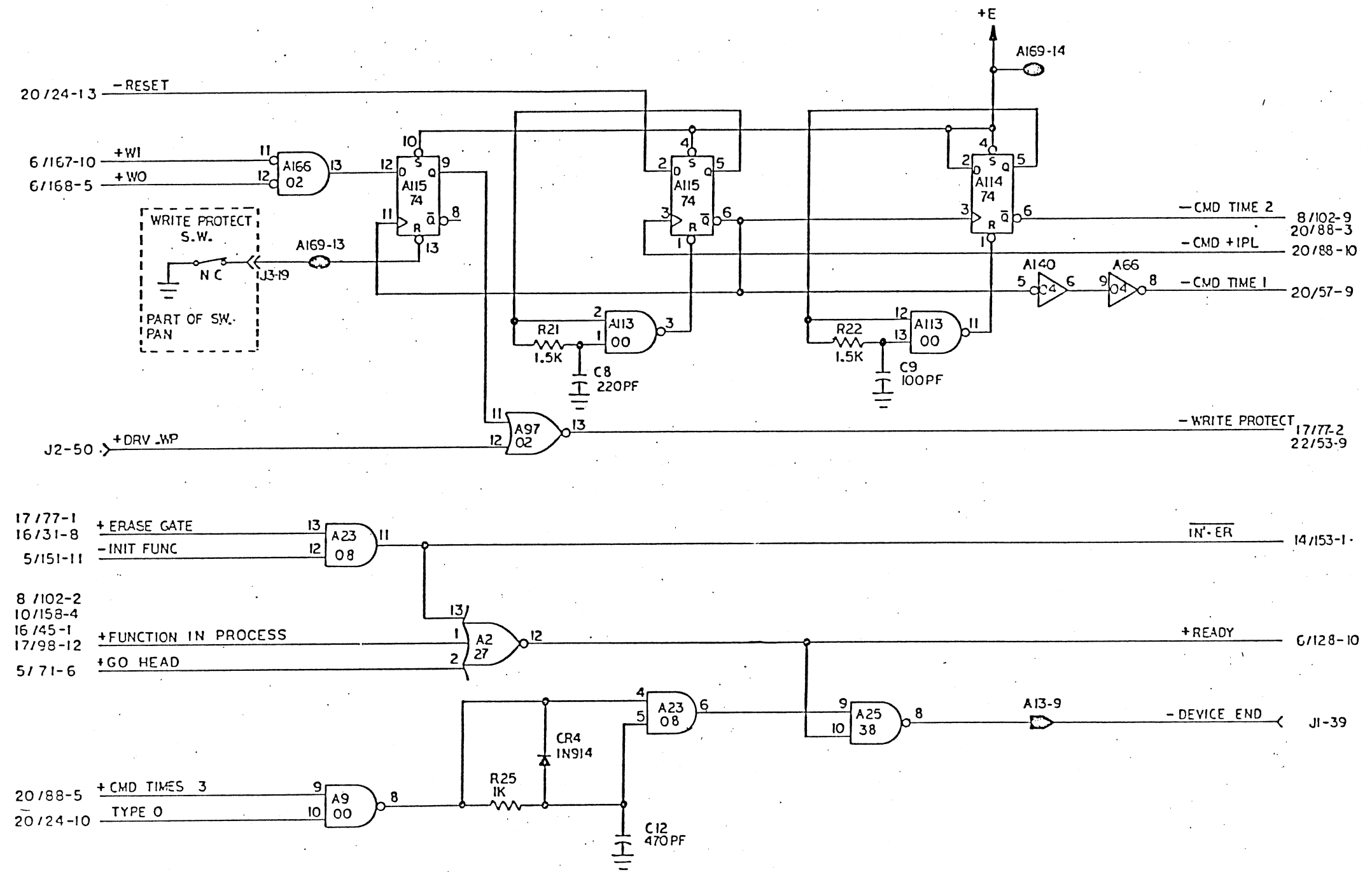
2

1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D
C
B
A

D
C
B
A



ADVANCED ELECTRONICS DESIGN, INC. BUNNYVALE, CALIF. 94088

C	DRAWING NUMBER	REV
	105528-XX	N

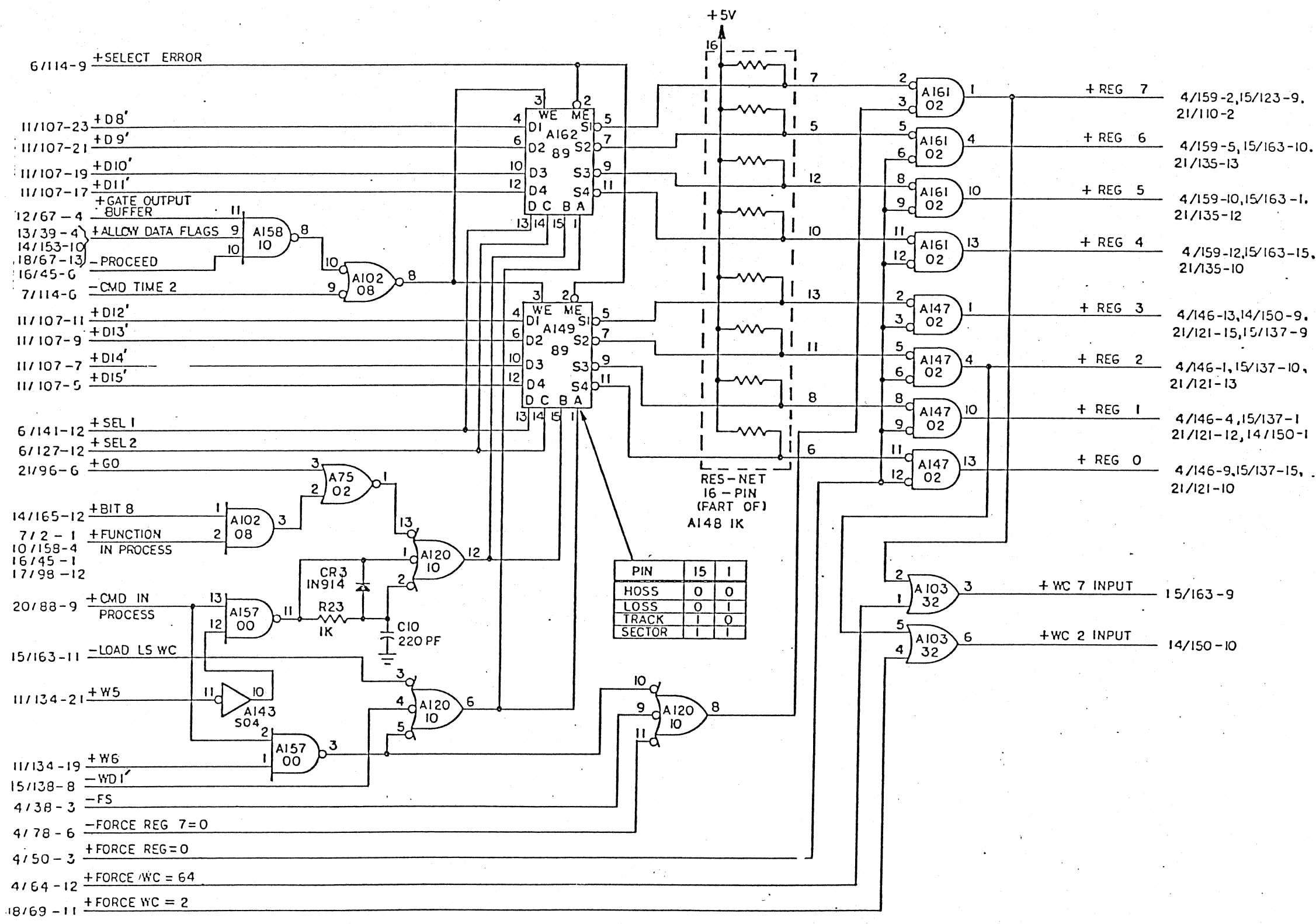
SIZE	CODE IDENT NO	REV
C	53938	200471-600
SCALE: NONE	DO NOT SCALE	SHEET 7 OF 24

200471-600

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D
C
B
A

D
C
B
A



4

3

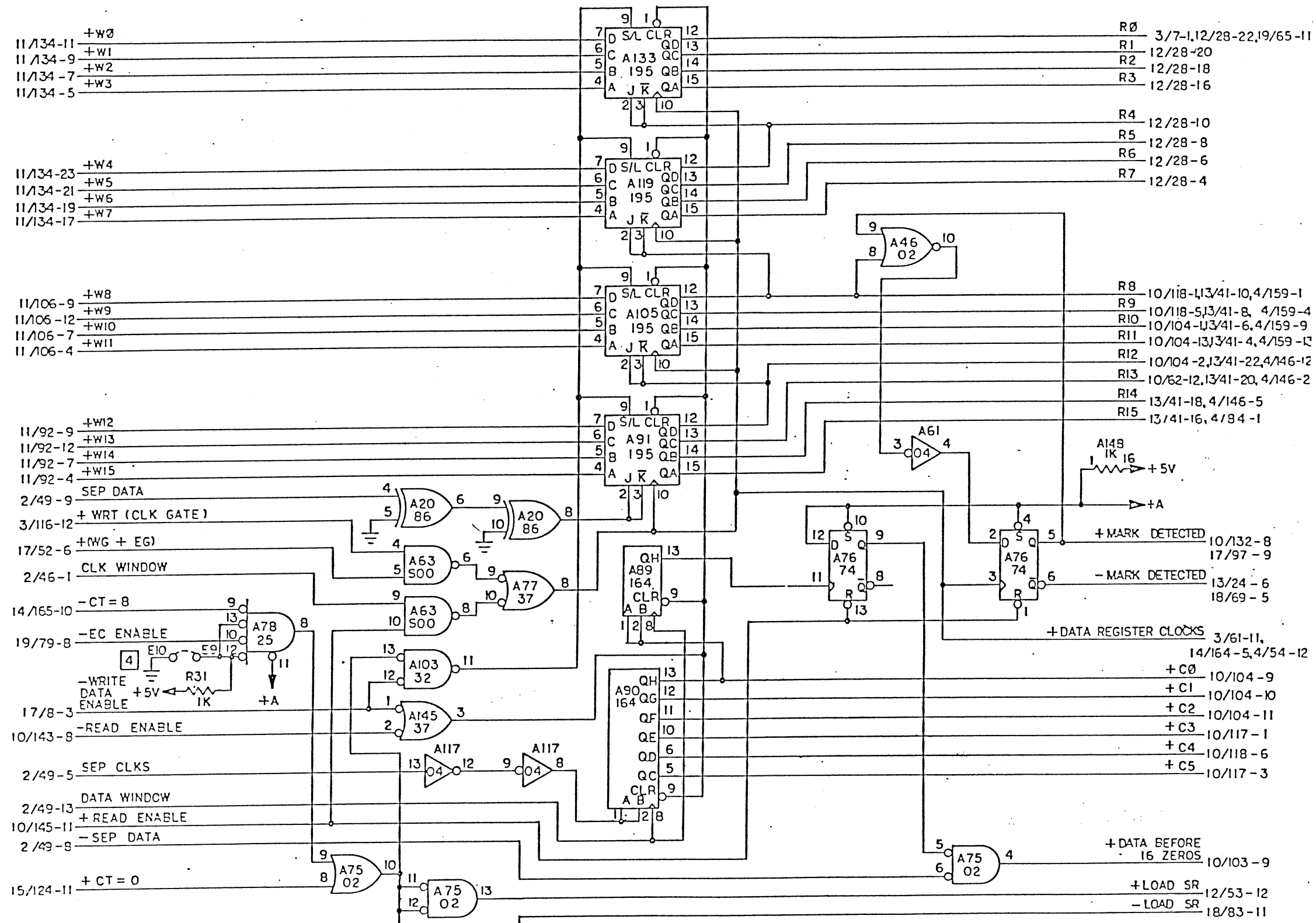
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1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D
C
B
A

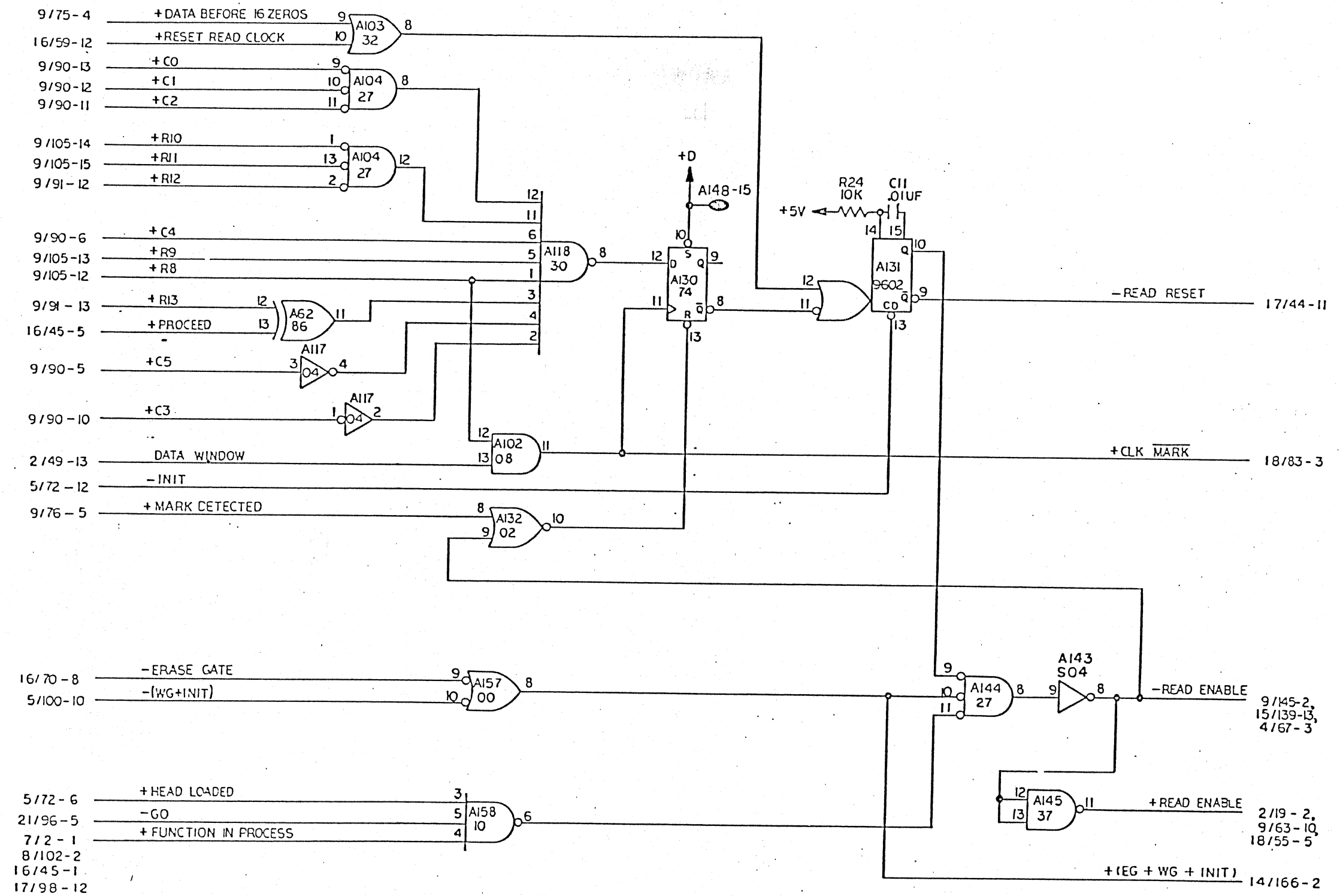
D
C
B
A





ADVANCED ELECTRONICS DESIGN, INC. SUNNYVALE, CALIF. 94088
 DRAWING NUMBER 105528-XX
 REV N

SIZE	CODE IDENT. NO	REV
C	53938	C4
200471-600		
SCALE: NONE	DO NOT SCALE	SHEET 9 OF 24

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



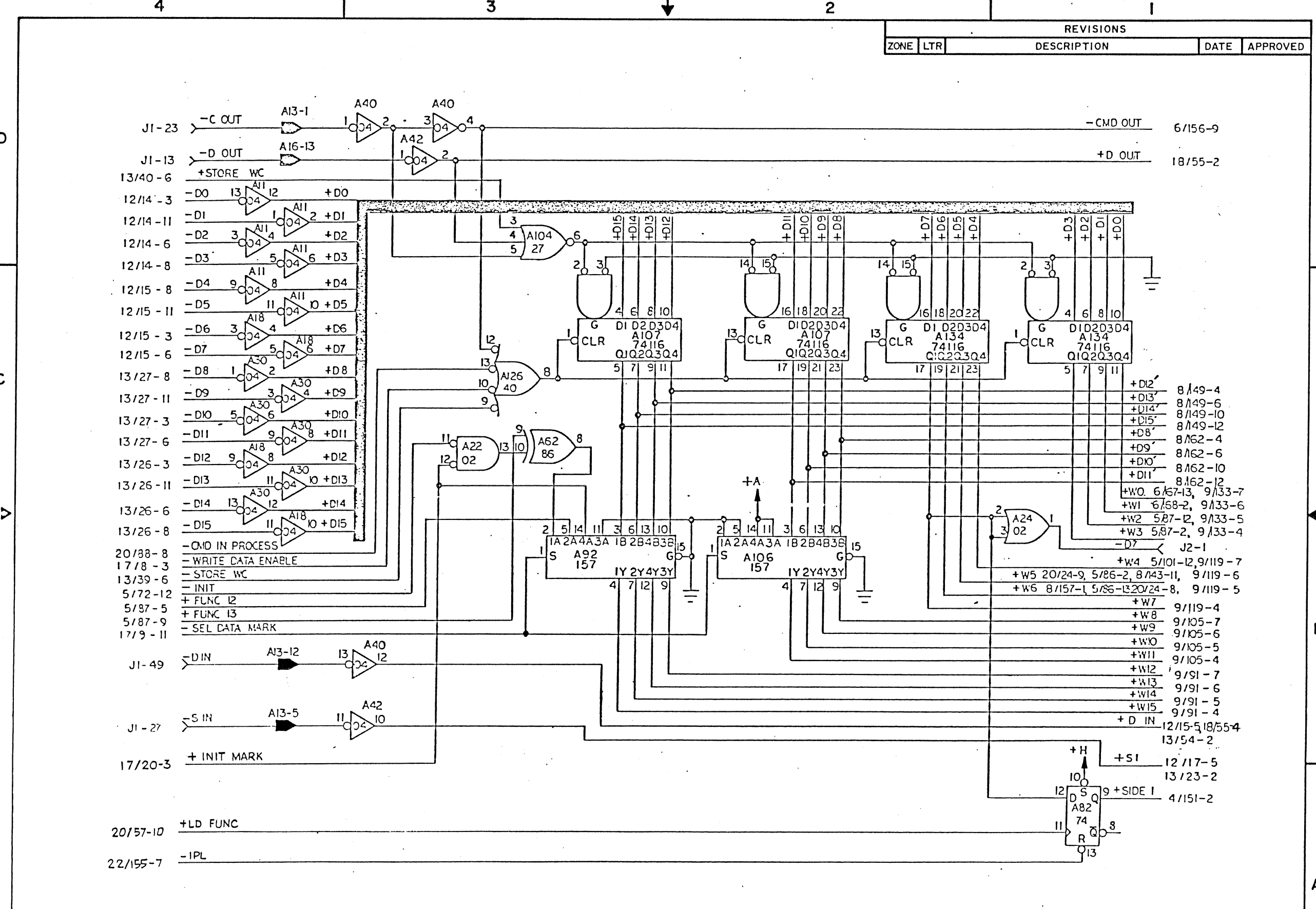

ADVANCED ELECTRONICS DESIGN, INC.
 BUNNYVALE, CALIF. 94088


DRAWING NUMBER
 105528-XX

REV
 N

SIZE	CODE IDENT. NO.	REV
C	53938	C4
200471-600		
SCALE: NONE	DO NOT SCALE	SHEET 10 OF 24

200471-600



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
			6/156-9	
			18/155-2	

J1-23 -C OUT A13-1 A40 A40
 J1-13 -D OUT A16-13 A42
 13/40-6 +STORE WC
 12/14-3 -D0 A11 +D0
 12/14-11 -D1 A11 +D1
 12/14-6 -D2 A11 +D2
 12/14-8 -D3 A11 +D3
 12/15-8 -D4 A11 +D4
 12/15-11 -D5 A11 +D5
 12/15-3 -D6 A18 +D6
 12/15-6 -D7 A18 +D7
 13/27-8 -D8 A30 +D8
 13/27-11 -D9 A30 +D9
 13/27-3 -D10 A30 +D10
 13/27-6 -D11 A30 +D11
 13/26-3 -D12 A18 +D12
 13/26-11 -D13 A30 +D13
 13/26-6 -D14 A18 +D14
 13/26-8 -D15 A18 +D15
 20/88-8 -CMD IN PROCESS
 17/8-3 -WRITE DATA ENABLE
 13/39-6 -STORE WC
 5/72-12 -INIT
 5/87-5 +FUNC 12
 5/87-9 +FUNC 13
 17/9-11 -SEL DATA MARK
 J1-49 +D IN A13-12 A40
 J1-27 +S IN A13-5 A42
 17/20-3 +INIT MARK
 20/57-10 +LD FUNC
 22/155-7 -IPL

DRAWING NUMBER 05528-XX
 REV N

SIZE	CODE IDENT. NO	REV
C	53938 200471-600	C4
SCALE: NONE	DO NOT SCALE	SHEET 11 OF 24

D
 C
 B 200471-600
 A

4

3

2

1

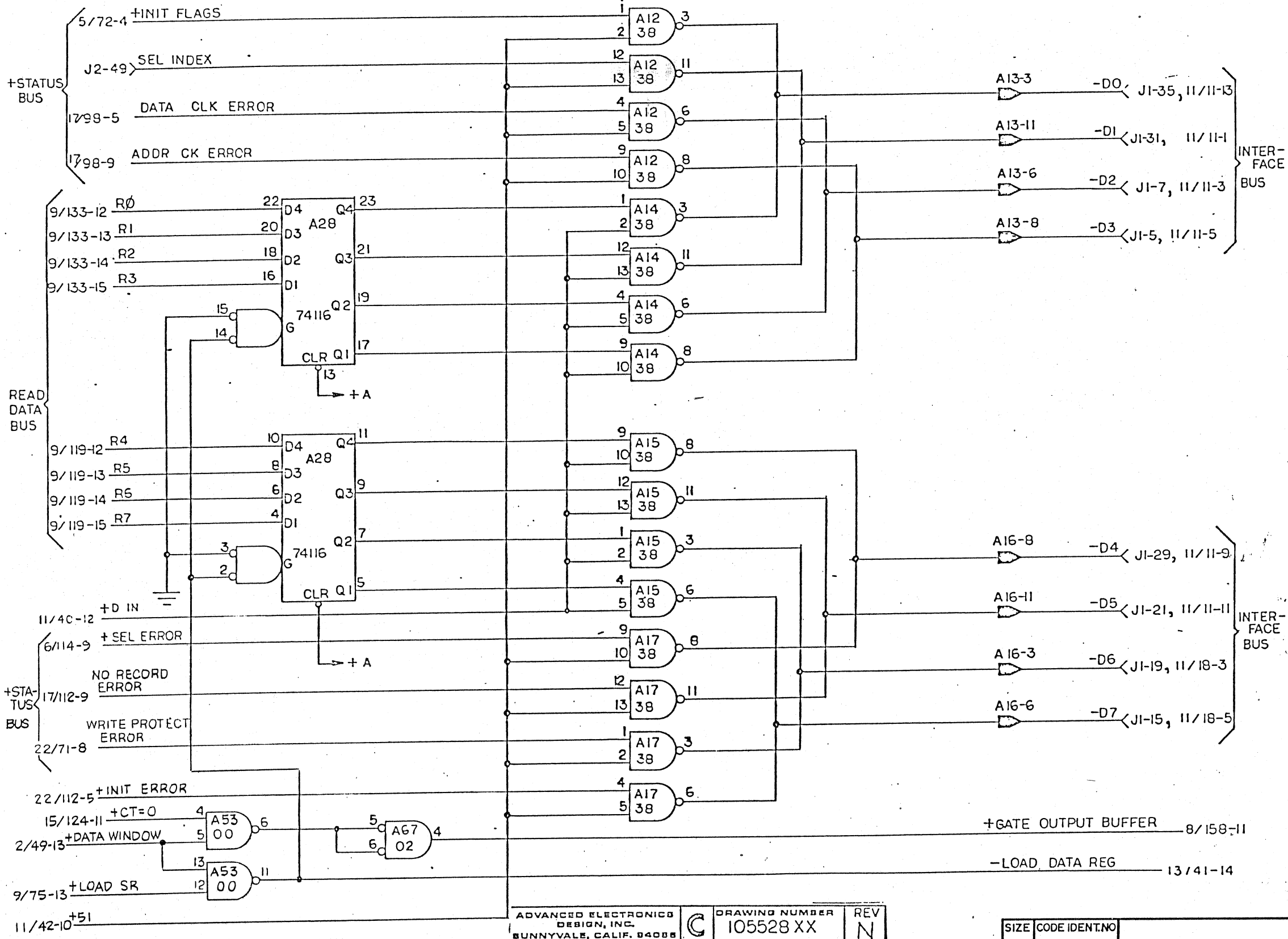
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D

C

D

C



B 200471-600

A

ADVANCED ELECTRONIC DESIGN, INC. BUNNYVALE, CALIF. 94008

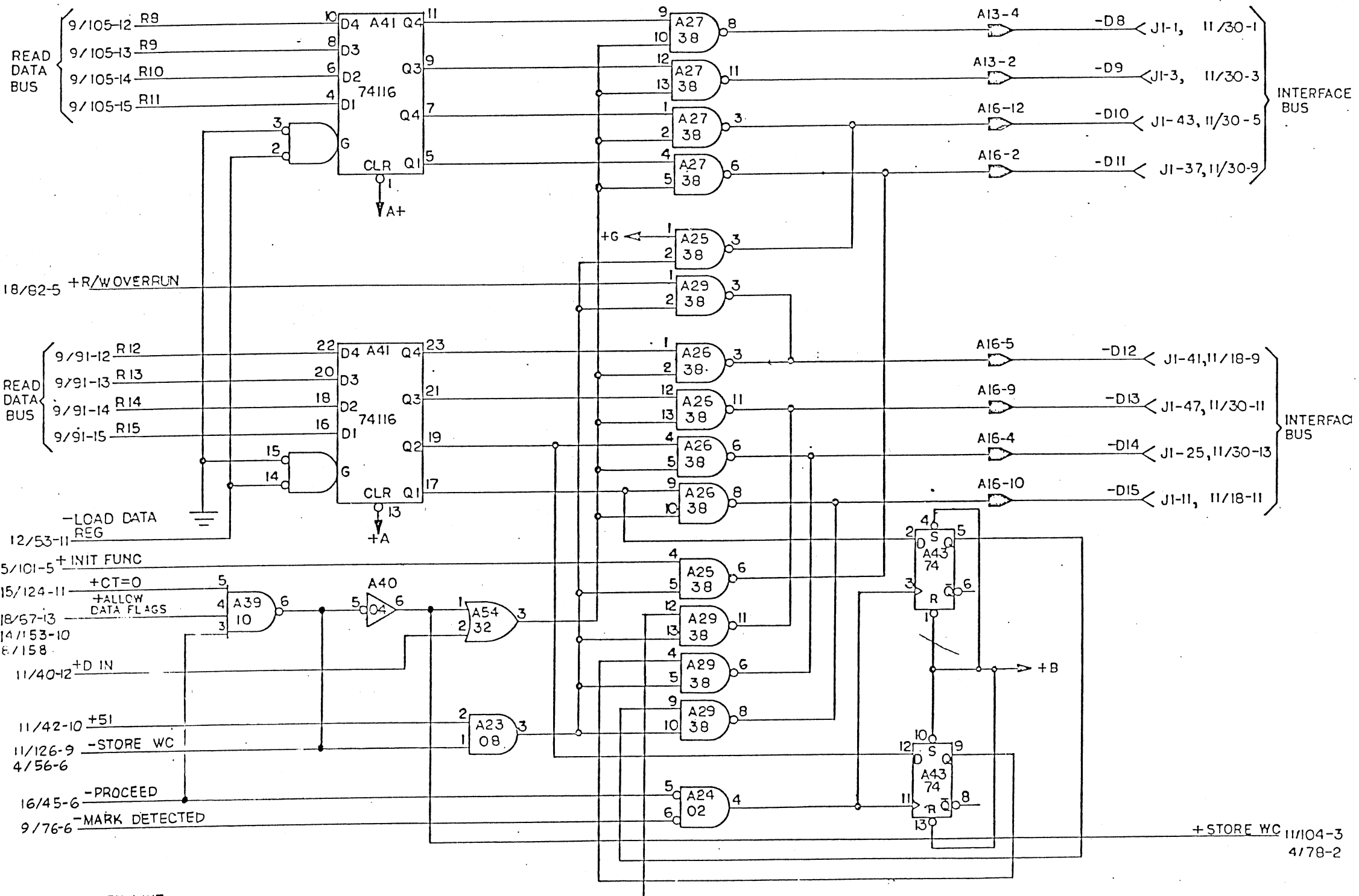
DRAWING NUMBER 105528 XX

REV N

SIZE	CODE IDENT. NO	REV
C	53938 200471-600	C4
SCALE: NONE	DO NOT SCALE	SHEET 12 OF 24

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D
C
B
A



J2-47 SEL ON LINE

ADVANCED ELECTRONIC DESIGN, INC.
BUNNYVALE, CALIF. 94088

DRAWING NUMBER
105528-XX

REV
N

SIZE C	CODE IDENT. NO. 53938	200471-600	REV C4
SCALE: NONE	DO NOT SCALE	SHEET 13 OF 24	

B 200471-600

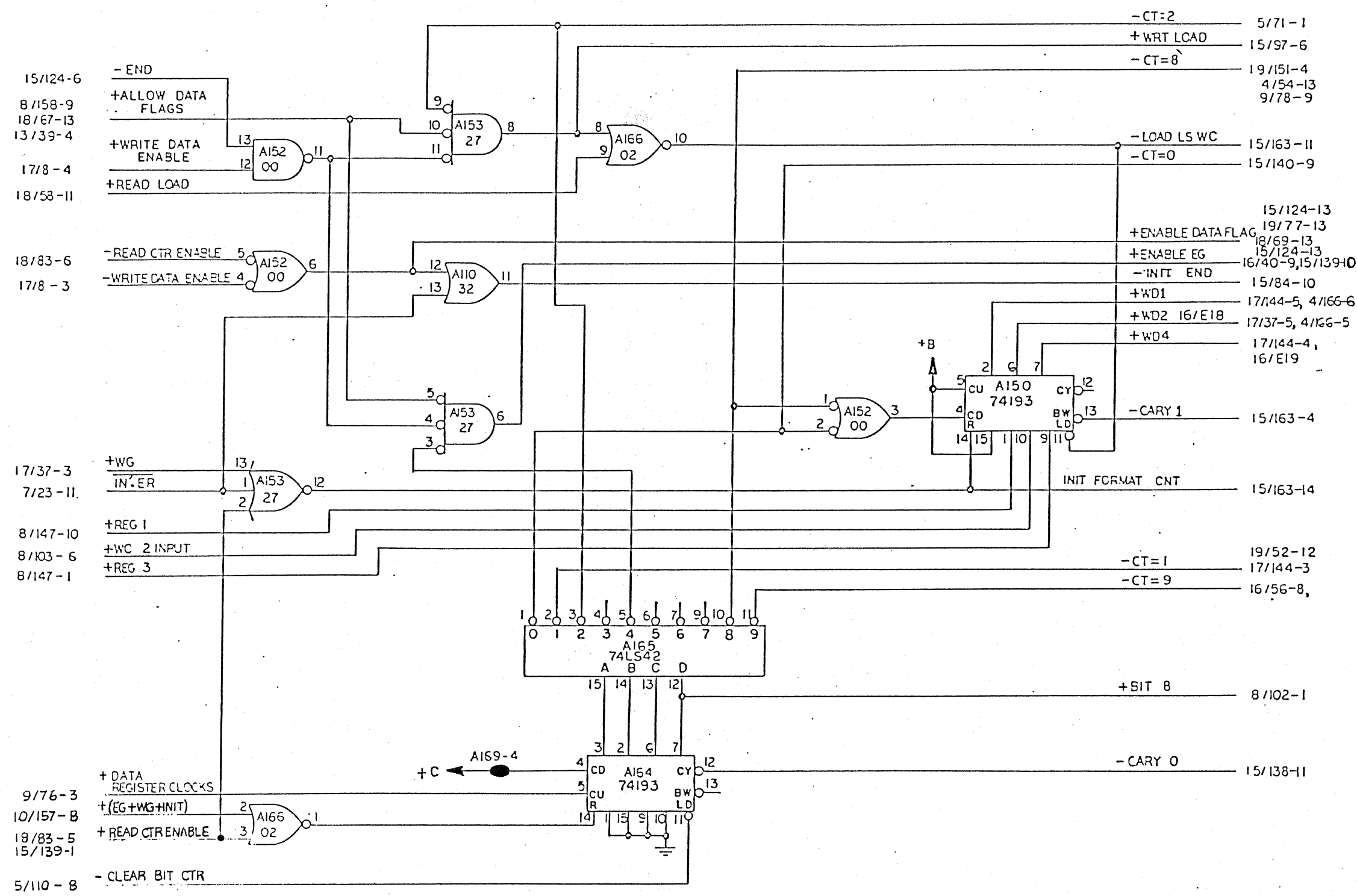
4

3

2

1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
		-CT=2	5/71-1	
		+WRT LCAD	15/97-6	
		-CT=8	19/151-4	
			4/54-13	
			9/78-9	



15/124-6
8/158-9
18/67-13
13/139-4
17/8-4
18/58-11
18/83-6
17/8-3
17/37-3
7/23-11
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9/76-3
10/157-8
18/83-5
15/139-1
5/110-8

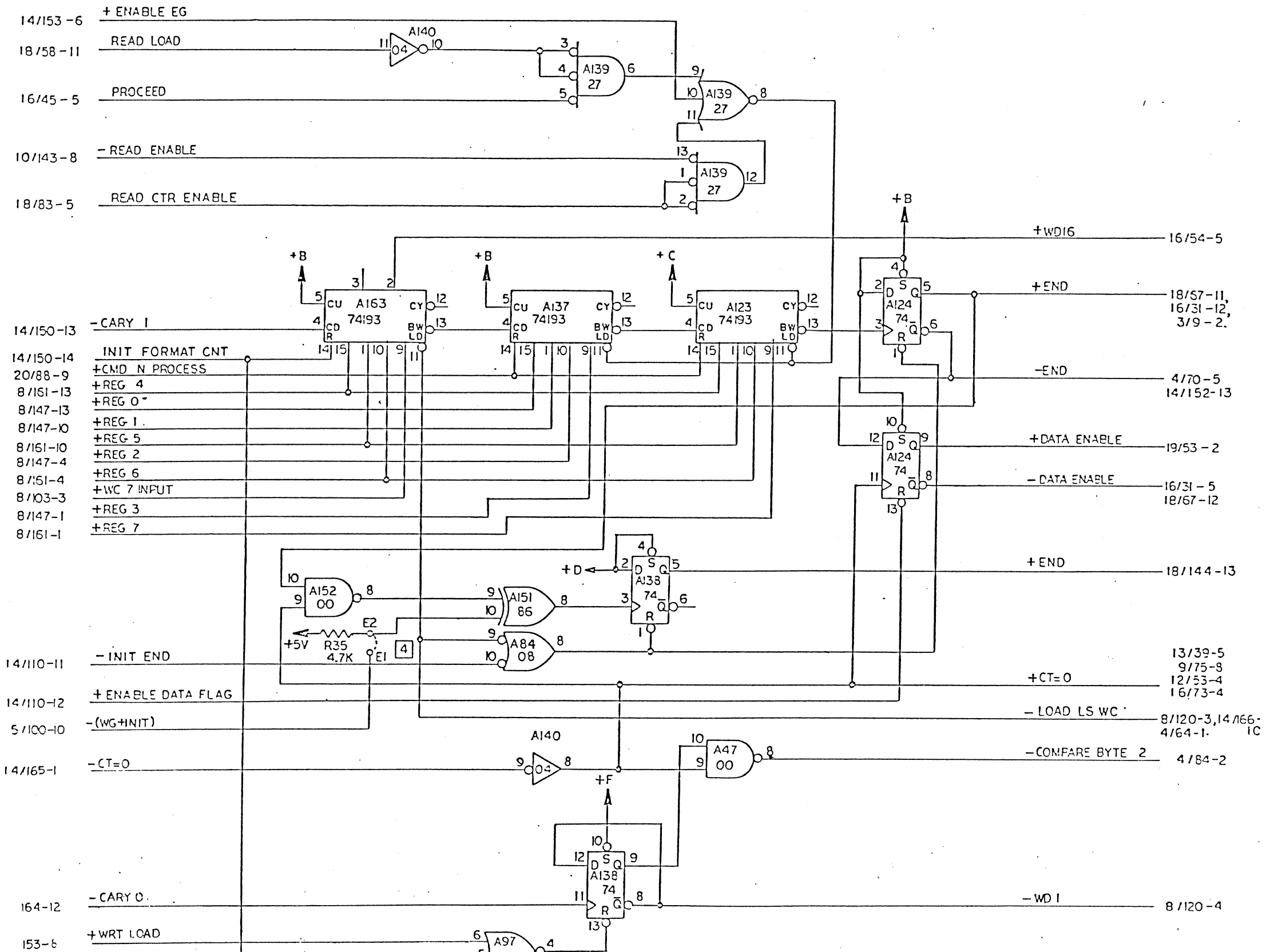
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+WRT LCAD
-CT=8
-LOAD LS WC
-CT=0
+ENABLE DATA FLAG
+ENABLE EG
-INIT END
+WD1
+WD2 16/E18
+WD4
-CARY 1
INIT FORMAT CNT
-CT=1
-CT=9
+BIT 8
-CARY 0

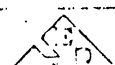
STRONICS INC. DRAWING NUMBER 105528-XX REV N

SIZE	CODE IDENT. NO	REV
C	53938	C4
200471-600		
SCALE-NONE	DO NOT SCALE	SHEET 14 OF 24

200471-600

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED




ADVANCED ELECTRONICS DESIGN, INC.
 BUNNYVALE, CALIF. 94098

DRAWING NUMBER 105528-XX
REV N

SIZE	CODE IDENT NO	REV
C	53938	C4
200471-600		
SCALE NONE	DO NOT SCALE	SHEET 15 OF 24

D

C

F

D

C

B

A

B 200471-600

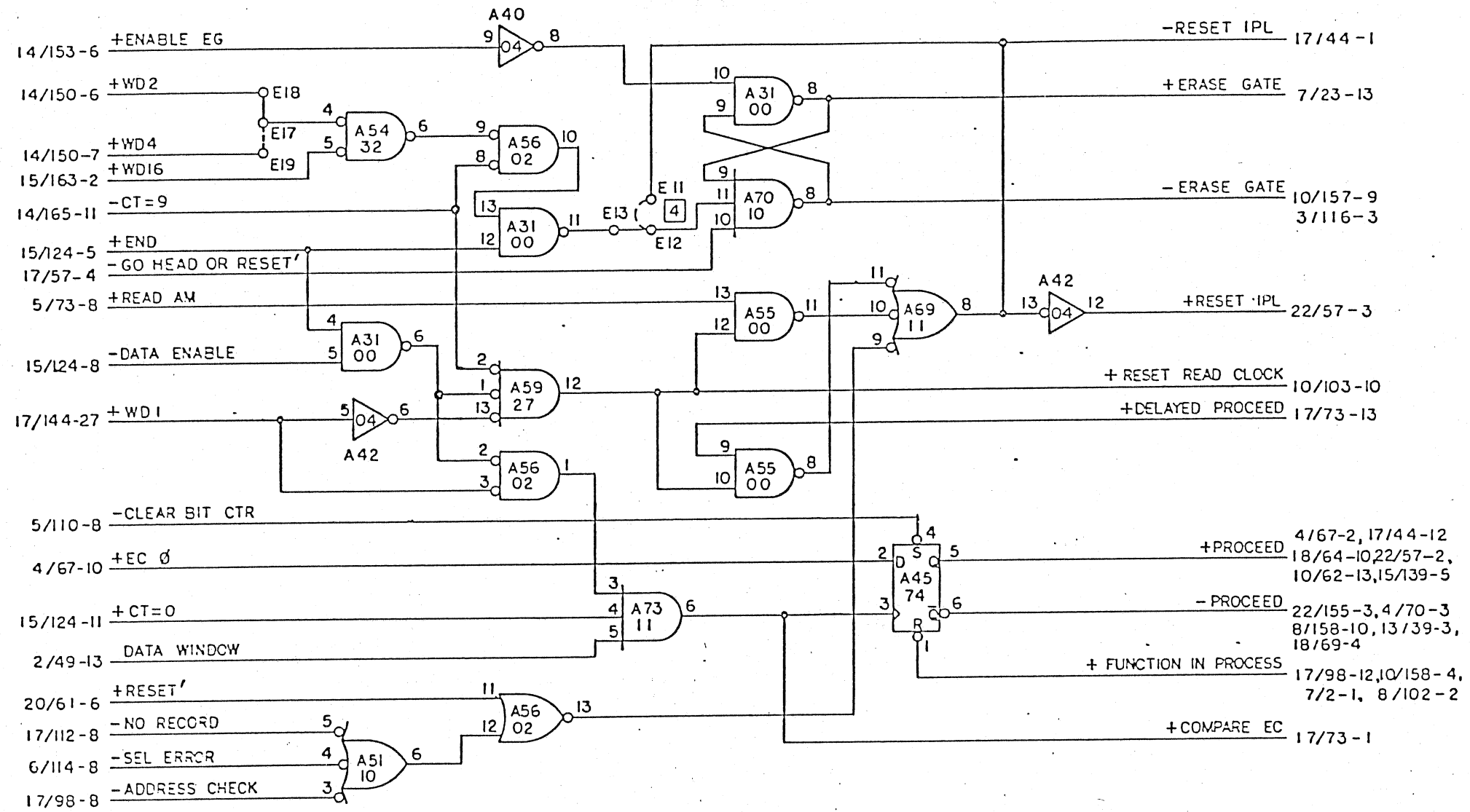
4

3

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1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



D

C

B 200471-600

A

DRAWING NUMBER | REV
 105528-XX | 4N

SIZE	CODE IDENT. NO	REV
C	53938	C4
SCALE: NONE	DO NOT SCALE	SHEET 16 OF 24

4

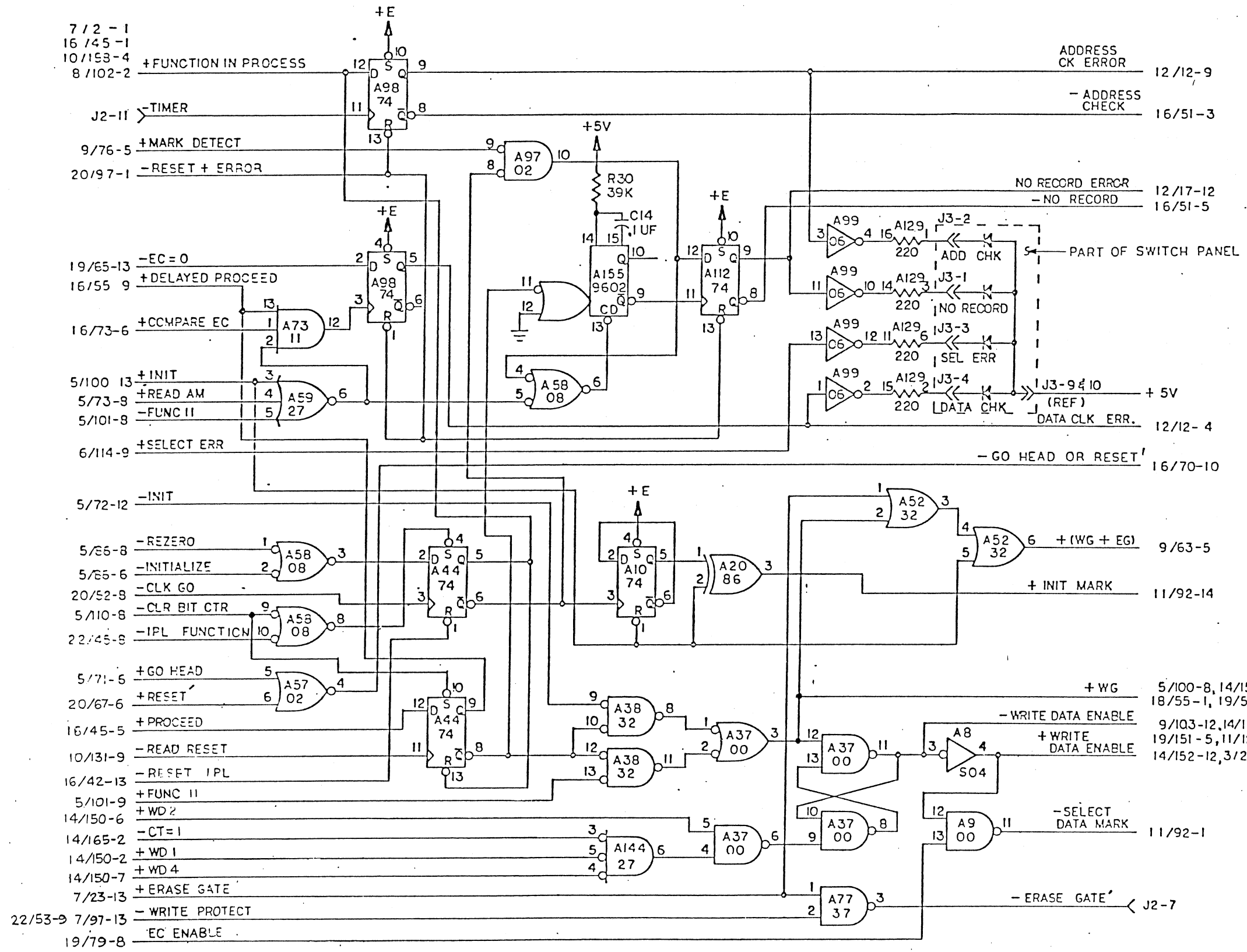
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2

1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
		ADDRESS CK ERROR	12/12-9	
		- ADDRESS CHECK	16/51-3	
		NO RECORD ERROR	12/17-12	
		- NO RECORD	16/51-5	
		DATA CLK ERR.	12/12-4	
		- GO HEAD OR RESET	16/70-10	
		+ WG	5/100-8, 14/153-13, 18/55-1, 19/53-1	
		- WRITE DATA ENABLE	9/103-12, 14/152-4, 19/151-5, 11/126-10	
		+ WRITE DATA ENABLE	14/152-12, 3/21-1	
		- SELECT DATA MARK	11/92-1	
		- ERASE GATE	J2-7	

D
C
B
A



- 7/2-1
- 16/45-1
- 10/153-4
- 8/102-2
- J2-11
- 9/76-5
- 20/97-1
- 19/65-13
- 16/55-9
- 16/73-6
- 5/100-13
- 5/73-8
- 5/101-8
- 6/114-9
- 5/72-12
- 5/66-8
- 5/65-6
- 20/52-8
- 5/110-8
- 22/45-8
- 5/71-5
- 20/67-6
- 16/45-5
- 10/131-9
- 16/42-13
- 5/101-9
- 14/150-6
- 14/165-2
- 14/150-2
- 14/150-7
- 7/23-13
- 22/53-9
- 7/97-13
- 19/79-8

- ADDRESS CK ERROR
- ADDRESS CHECK
- NO RECORD ERROR
- NO RECORD
- PART OF SWITCH PANEL
- NO RECORD
- SEL ERR
- DATA CLK ERR.
- GO HEAD OR RESET
- + (WG + EG)
- + INIT MARK
- + WG
- WRITE DATA ENABLE
- + WRITE DATA ENABLE
- SELECT DATA MARK
- ERASE GATE

DRAWING NUMBER 105528-XX RE N

SIZE	CODE IDENT. NO	REV
C	53938	C4
SCALE	DO NOT SCALE	SHEET 17 OF 24

B 200471-600

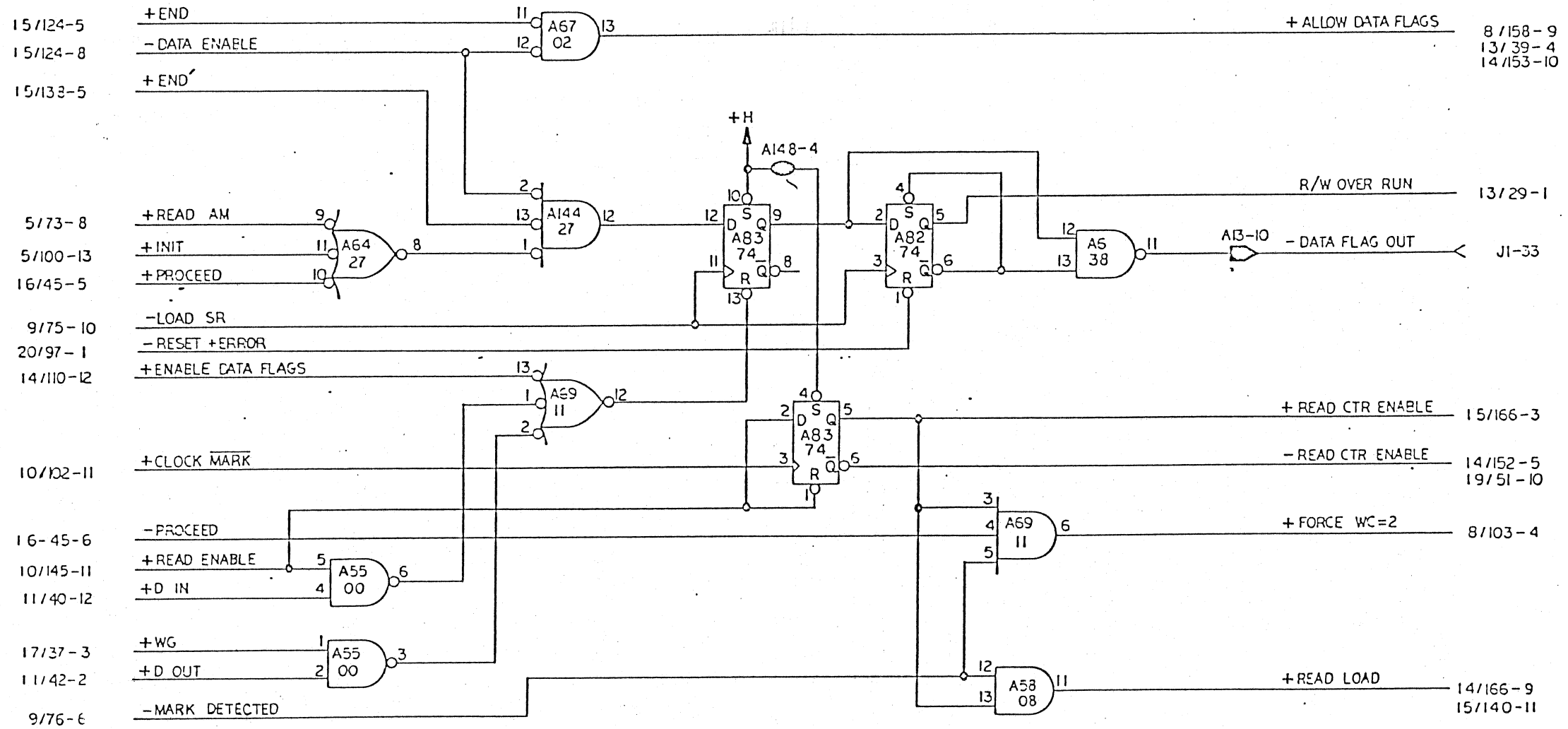
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



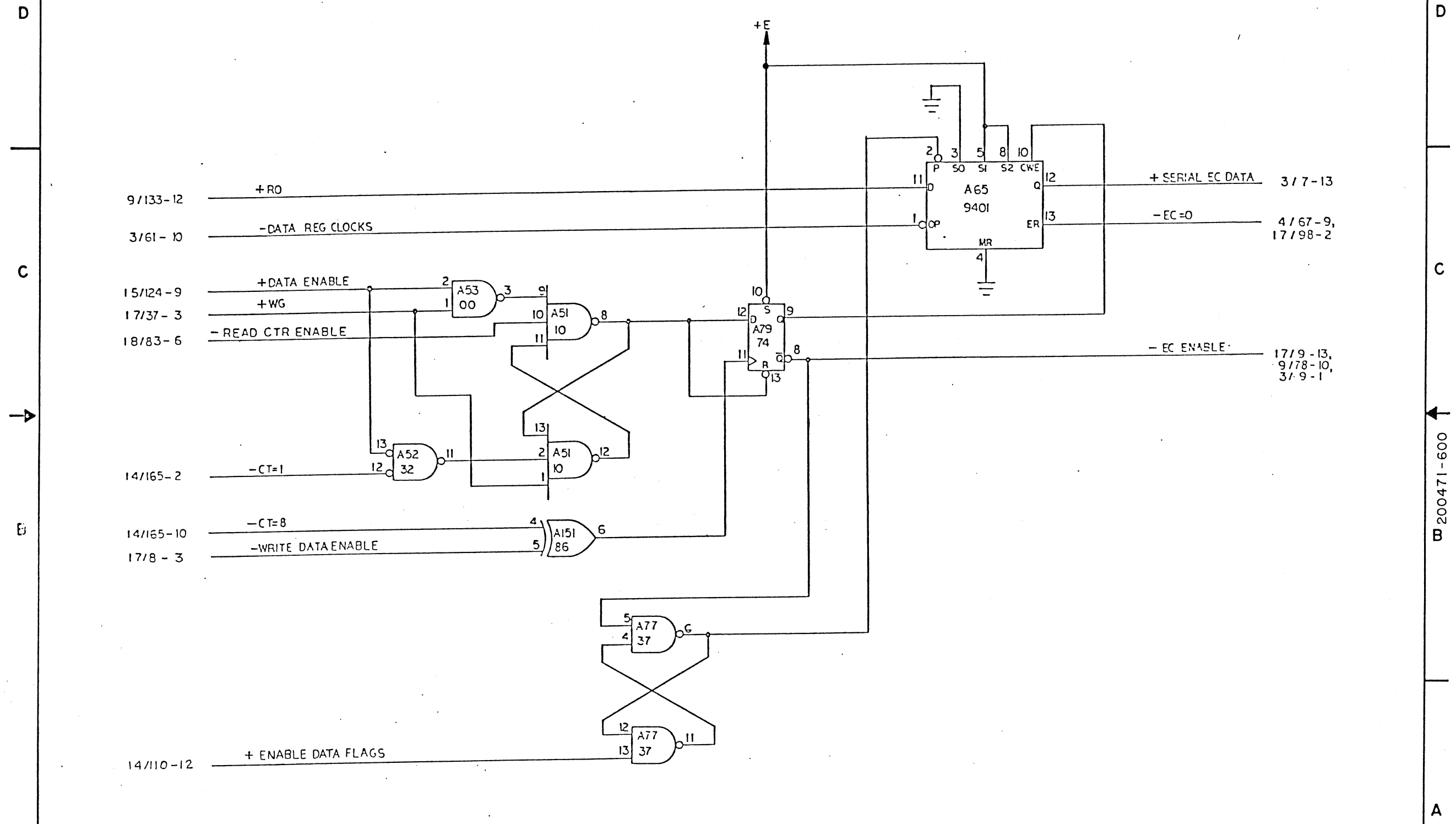
ADV ELECTRONICS INC. DRAWING NUMBER 105528-XX REV N
 12011 E. 94000

SIZE	CODE IDENT. NO	REV
C	53938	C4
200471-600		
SCALE: NONE	DO NOT SCALE	SHEET 18 OF 24

B 200471-600

A

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED




 NORD ELECTRONICS DESIGN, INC.
 VALLE, CALIF. 94000

DRAWING NUMBER
 105528-XX

REV
 N

SIZE	CODE IDENT. NO.	REV
C	53938	C4
200471-600		
SCALE: NONE	DO NOT SCALE	SHEET 19 OF 24

200471-600

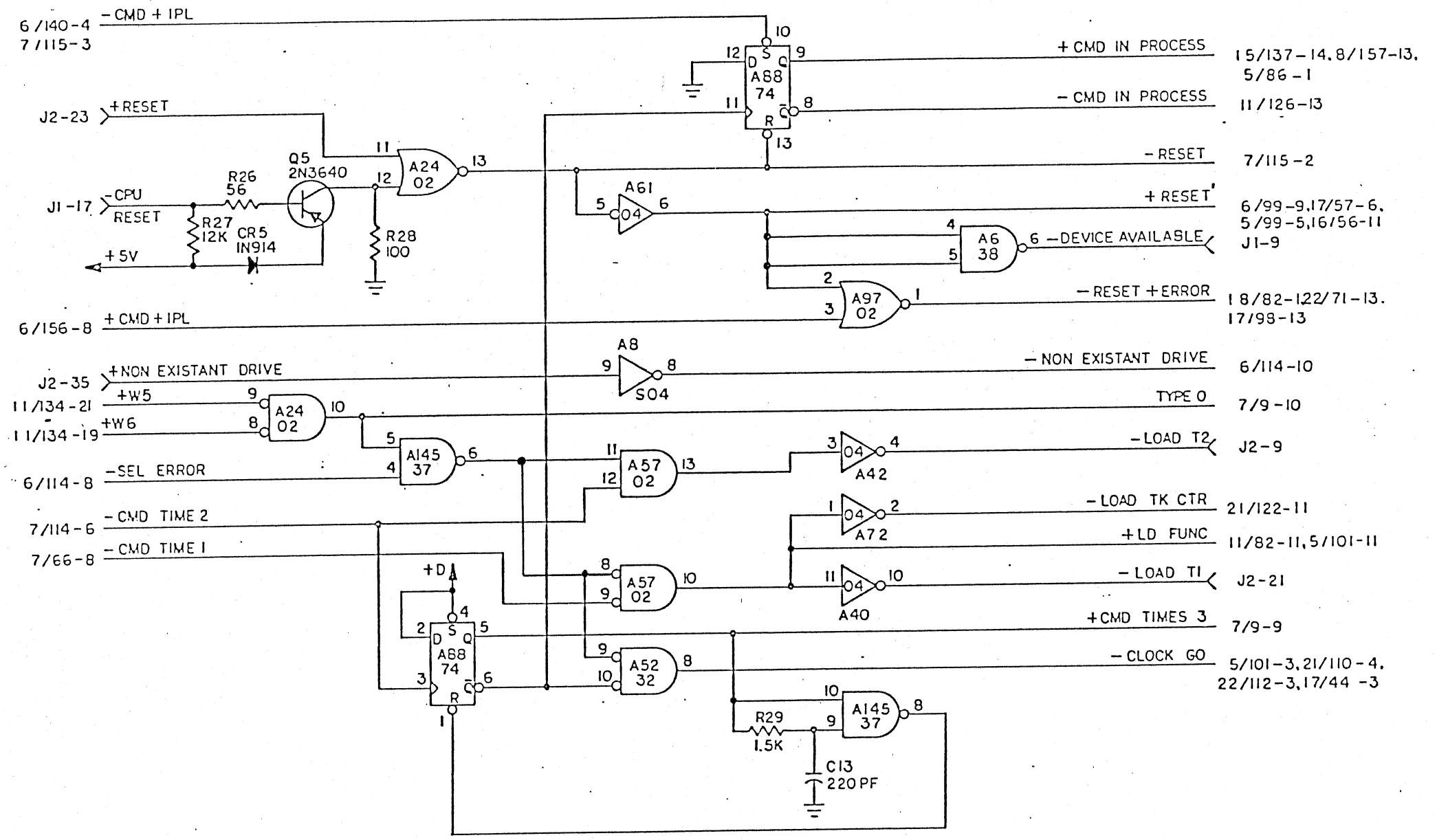
A

4 3 2 1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D
C
B
A

D
C
B
A



ELECTRONICS
DRAWING NUMBER
105528-XX
REV
N

SIZE C	CODE IDENT NO 53938	200471-600	REV C4
SCALE NONE	DO NOT SCALE	SHEET 20 OF 24	

200471-600

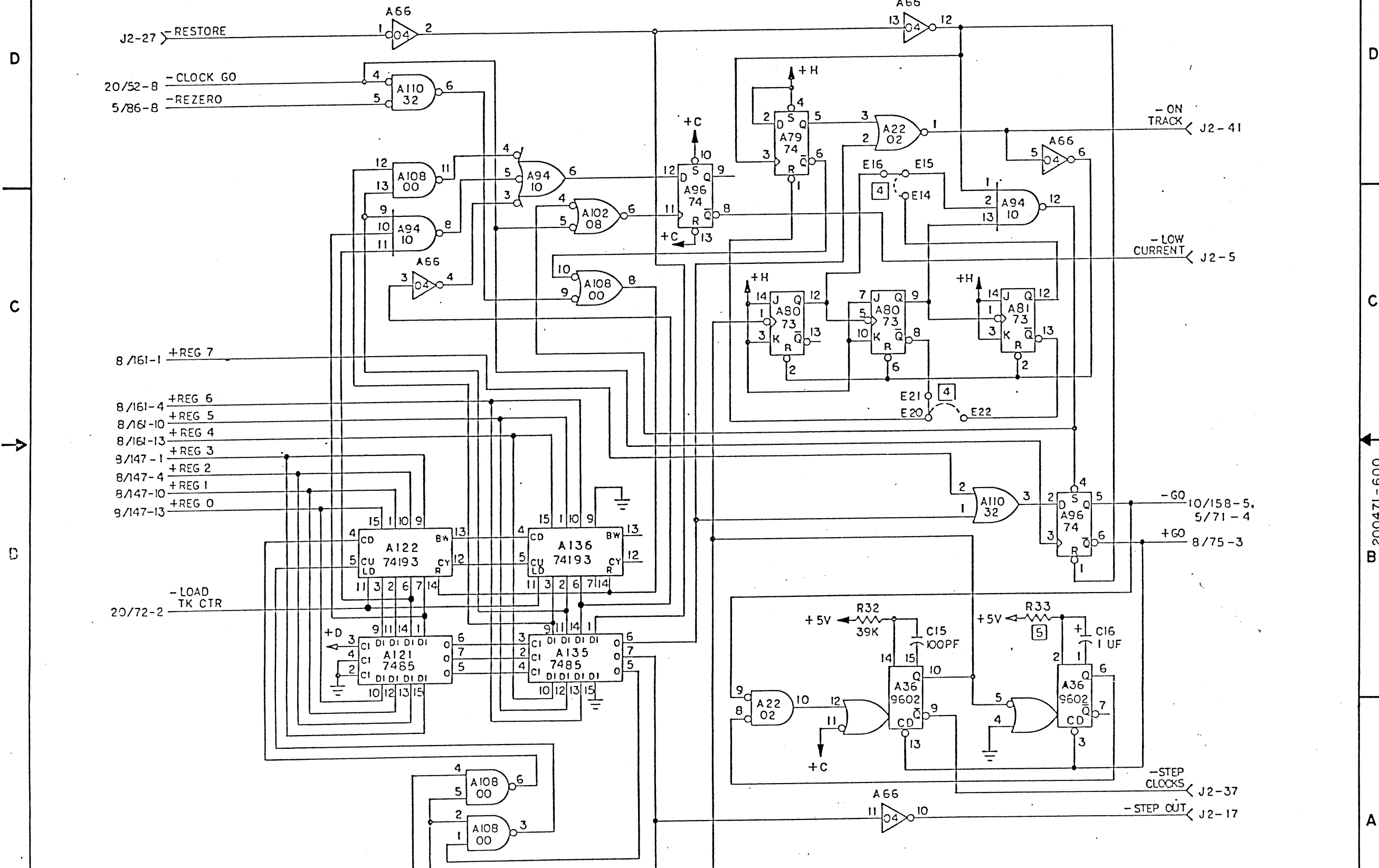
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



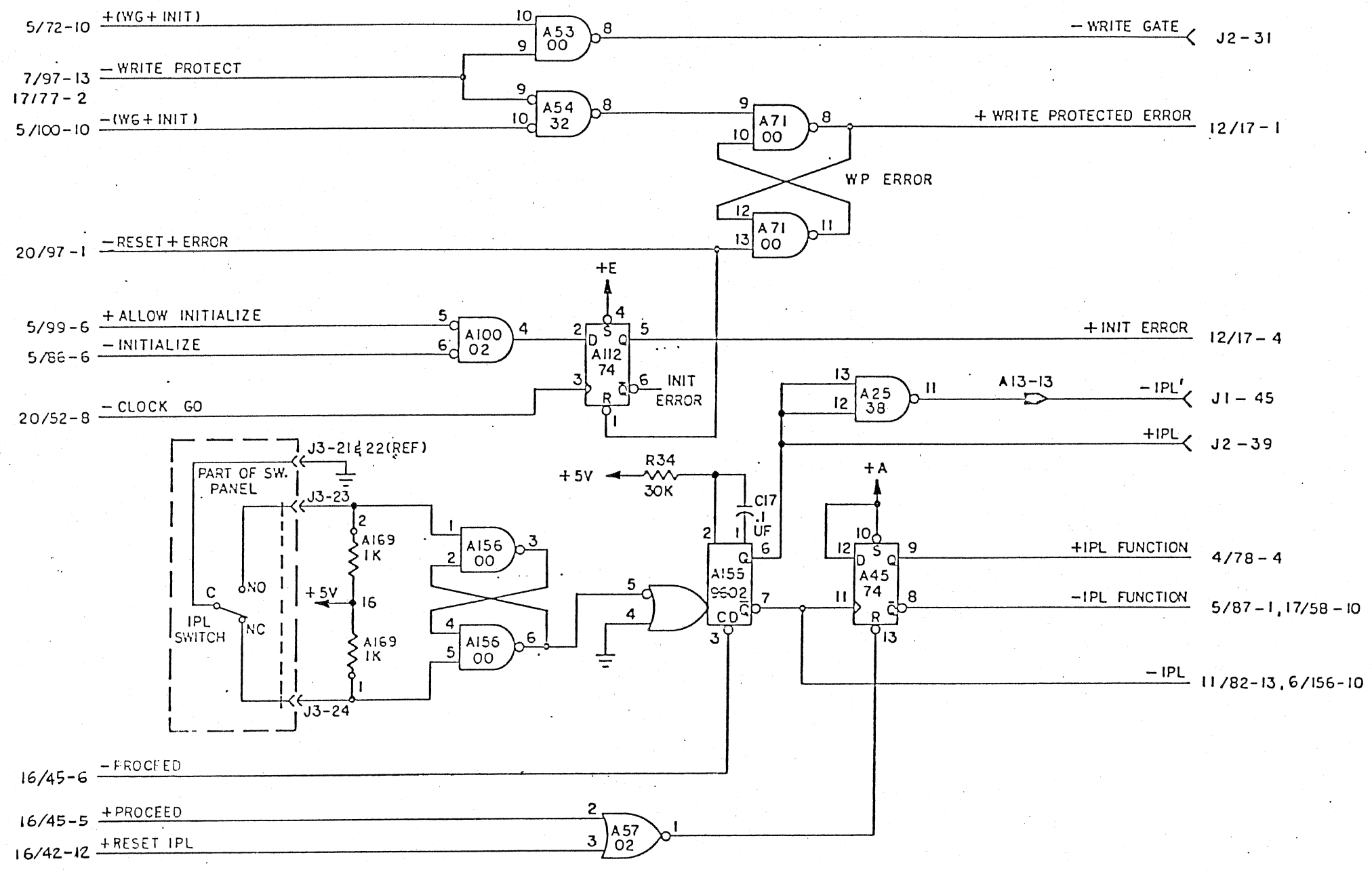
ADVANCED ELECTRONIC DESIGN, INC.
 BUNNYVALE, CALIF. 94086

DRAWING NUMBER
 105528-XX

REV
 N

SIZE	CODE IDENT. NO	REV
C	53938	C4
200471-600		
SCALE: NONE	DO NOT SCALE	SHEET 21 OF 24

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



ELECTRONIC DRAWING COMPANY
 DRAWING NUMBER 105528-XX
 REV N

SIZE	CODE IDENT. NO	REV
C	53938	C4
200471-600		
SCALE: NONE	DO NOT SCALE	SHEET 22 OF 24

200471-600

4

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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D

D

C

C

→

↑

TABLE A

SYSTEM CONFIGURATION	DASH NO.	E1 TO E2	E3 TO E4 ON PCB	E3 TO E5	E5 TO E7 ON PCB	E6 TO E8	E9 TO E10	E11 TO E12	E12 TO E13 ON PCB	E14 TO E15	E15 TO E16 ON PCB	E17 TO E18	E17 TO E19	E20 TO E21	E20 TO E22
PERTEC FD510 4 DRIVE	-01	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PERTEC FD510 4DRIVE BYTE MODE	-05	ADD	X	X	X	X	ADD	X	X	X	X	X	X	X	X
PERTEC FD510 2DRIVE	-09	X	CUT	ADD	CUT	ADD	X	X	X	X	X	X	X	X	X
SHUGART SABOO 2DRIVE	-11	X	CUT	ADD	CUT	ADD	X	ADD	CUT	X	X	X	X	X	X
TWO HEAD 2DRIVE	-12	X	CUT	ADD	CUT	ADD	X	X	X	ADD	CUT	CUT	ADD	CUT	ADD
PERTEC FD510 2DRIVE BYTE MODE	-13	ADD	CUT	ADD	CUT	ADD	ADD	X	X	X	X	X	X	X	X
SHUGART SABOO 2DRIVE BYTE MODE	-15	ADD	CUT	ADD	CUT	ADD	ADD	ADD	CUT	X	X	X	X	X	X
TWO HEAD 2DRIVE BYTE MODE	-16	ADD	CUT	ADD	CUT	ADD	ADD	X	X	ADD	CUT	CUT	ADD	CUT	ADD
SHUGART SABOO 2DRIVE W/24" CABLE	-17	X	CUT	ADD	CUT	ADD	X	ADD	CUT	X	X	X	X	X	X

B 200471-600

09	105525	6200LP	17	105525	6200LS
			16		6200LD
			15		6200LS
05		6200P	13		6200LP
			12		6200LD
			11	105525	6200LS
01	105525	6200P			
DASH NO.	NEXT ASSY.	USED ON	DASH NO.	NEXT ASSY.	USED ON

A

ELECTRONICS
 INC.
 CALIF. 90038

DRAWING NUMBER
 105528-XX

REV
 N

APPLICATION

SIZE	CODE IDENT. NO.	REV
C	53938	200471-600
SCALE-NONE	DO NOT SCALE	SHEET 23 OF 24

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200472-100

REV: A2 = AC

DESC: POWER SUPPLY ASSY, 6200 LD

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	PWR SPLY, 5V, 9A, OPEN-	54407	POWER-ONE DC PWR SUPPLIES	HN5-9/OVP-A	801865-105	1
002	PWR SPLY, 24V, 3.6A, OP	54407	POWER-ONE DC PWR SUPPLIES	HN24-3.6-A	801865-324	1
003	BRKT, PWR SPLY, 6200 LD	53938	EVANS & SUTHERLAND.	500484-001	500484-001	1
004	SCR, FLT-HD, PHIL, 6-32X	N/A	DISTRIBUTORS	6-32X1/4 (M-F-PH-SS)	802003-302	8
005	HW, SCR 6-32X3/8	N/A	DISTRIBUTORS	6-32X3/8 (M-P-PH-SS)	802003-103	8
006	STDF, 1/4RND, 6-32X1/2,	72653	GC ELECTRONICS DIV, HOUSEH	13-620-C	802107-004	8
007	HW, WSHR #6INTLOK	N/A	DISTRIBUTORS	SAE#6, LK INTL, SS	802005-006	8
008	HW, WIRE 14G, BLK	73612	CONSOLATED ELEC, W/C CORP	9405 (14AWG) BLACK	802507-000	102
009	HW, WIRE 18G, BLK	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG) BLACK	802509-000	48
010	CONN, PLUG, (3PIN), FEM-	27264	MOLEX INC.	03-09-2032 (1396-3P)	802324-003	1
011	CONN, PLUG, (6PIN), FEM-	27264	MOLEX INC.	03-09-2062 (1261-6P)	802324-006	1
012	TERM, CRMP, MAL, 20-14AW	27264	MOLEX INC.	02-09-2103 (1190-M)	802326-001	6
013	HW, TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	15
014	HW, WIRE 14G, WHT	53938	EVANS & SUTHERLAND	*CTL*802507-999	802507-999	102
015	HW, WIRE 20G-BARE	28105	DEARBORN WIRE & CABLE COR	920 (TIN/CU-20AWG)	802092-020	8
016	GROMMET, CATAPILLAR, NY	11897	PLASTIGLIDE MFG. CORP.	122-NN-2500	802047-002	8
017	GROMMET, CATAPILLAR, NY	53421	TYTON CORP.	FPC	802047-003	4
019	GND WIRE EXT ASY.	53938	EVANS & SUTHERLAND.	200490-100	200490-100	1
020	HW, HW-S 8-32X3/8	N/A	DISTRIBUTORS	8-32X3/8 (M-P-PH-SS)	802004-103	1
021	HW, WSHR #8SPLOK	N/A	DISTRIBUTORS	WSHR#8, LOCK/HELIC, SS	802300-008	1
022	HW, WSHR #8, FLAT	N/A	DISTRIBUTORS	SAE#8FLAT, SS, .040THK	802007-008	1
023	HW, NUT 8-32NUT	N/A	DISTRIBUTORS	NUT-HEX (8-32) SS	802014-008	1
018 AS REQ'D	HW, GLUE #495	61751	KRAZY GLUE INC.	TYPE 202 (BLUE-CAP)	802288-001	1

23 ITEMS LISTED



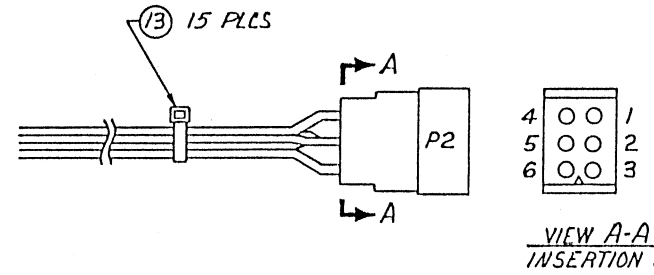
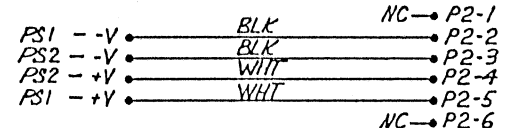
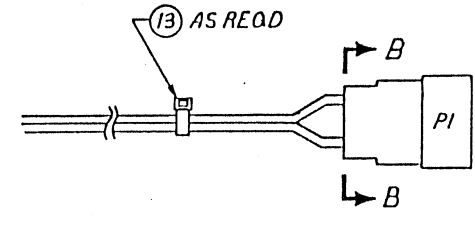
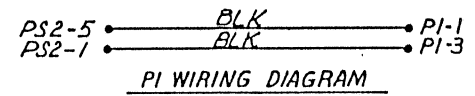
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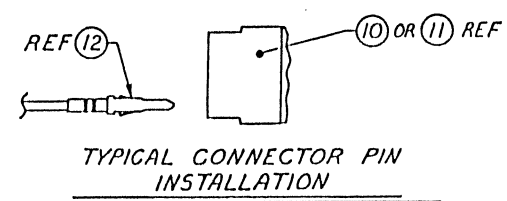
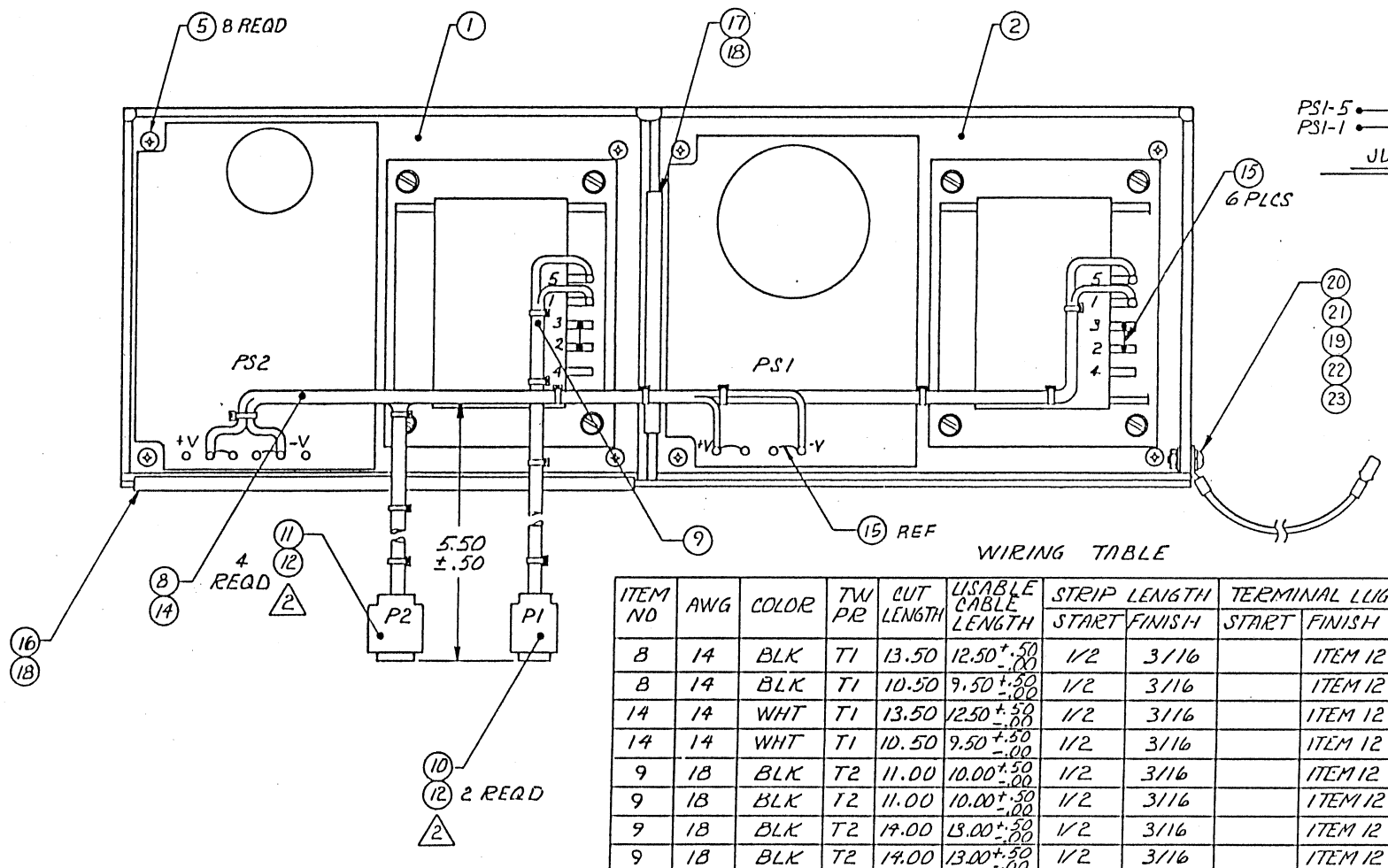
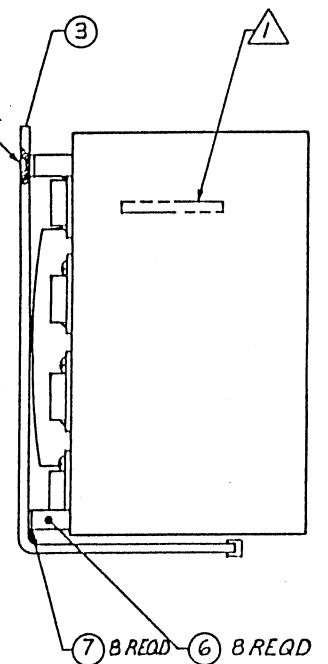
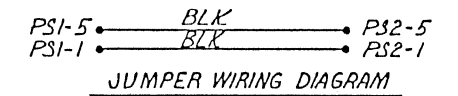
LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) (2)

NOTES:

1. MARK ASSY NO., REV LEVEL, AND S/N PER E&S PRODUCTION PROCESSES NO. E-9.1. LOCATE APPROX AS SHOWN.
2. MARK ALL CONNECTORS AS SHOWN PER E&S PRODUCTION PROCESSES NO. E-9.1.
3. NO LOCK OR FLAT WASHERS USED FOR MOUNTING PS1 & PS2.



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	P1			
A0		ADDED ITEMS 19-23	10-2-84	[Signature]
A1		CORRECTED WIRE MARKING	12-2-84	[Signature]
A2		CHANGED WIRE MARKING	1-9-85	[Signature]



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓	CONTRACT NO.	EVANS & SUTHERLAND BALT LAKE CITY, UTAH 84108 POWER SUPPLY ASSY, 6200 LD
	DRAWN <i>M.D. BALDWIN</i> 7-25-84	
	CHECKED <i>[Signature]</i> 8/2/84	
	APPROVED <i>[Signature]</i>	
MATERIAL SEE PARTS LIST	SIZE CODE IDENT NO D 53938	REV A2
FINISH	SCALE 1/11	DO NOT SCALE DWG
	SHEET 1 OF 1	

200472-100



TIME=11:18

RUN DATE=06/21/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200473-100

REV: A1 = AB

DESC: CABLE ASSY,D.C.POWER

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	CONN, PLUG, (4PIN), SQ, F	27264	MOLEX INC.	03-09-2049 (2163)	802324-404	1
002	TERM, CRMP, MAL, 20-14AW	27264	MOLEX INC.	02-09-2103 (1190-M)	802326-001	4
003	HW, WIRE 18G, BLK	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG) BLACK	802509-000	2
004	HW, WIRE 18G, RED	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG) RED	802509-222	2
005	HW, TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	4

5 ITEMS LISTED



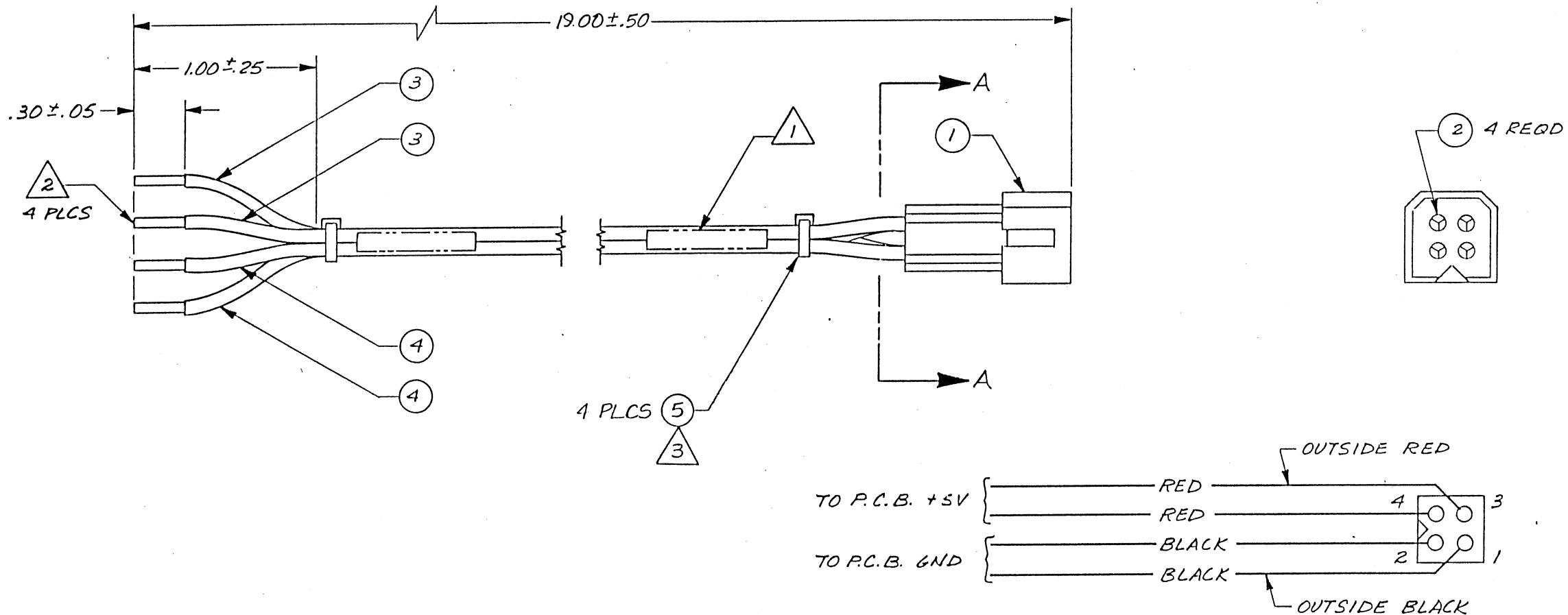
LIMITED RIGHTS LEGEND

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LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2ii

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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A0	RELEASED TO A0	7.25.84	[Signature]
	A1	ADDED CABLE TIE	4.24.85	[Signature]



NOTES:

- 1. MARK ASSY NO., REV LEVEL AND S/N PER E&S PRODUCTION PROCESSES E-9.1. LOCATE APPROX AS SHOWN.
- 2. STRIP WIRES AS SHOWN. DIP IN LIQUID FLUX AND TIN WIRES IN SOLDER POT.
- 3. PLACE CABLE TIES APPROX 4 INCHES APART.

VIEW A-A
 WIRE SCHEMATIC

PART EQ TO AED #107049-02 REV E

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± _____ .XXX ± _____ ANGLES ± _____ ✓ HOLES PER AND 10387	DRAWN L. WILLARDSON 3/4/84	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108	
	CHECKED [Signature] 3/20/84	CABLE ASSY, DC POWER	
MATERIAL _____	MECH. _____	SIZE C	CODE IDENT NO 53938
FINISH _____	ELEC. _____	200473-100	
	PROJ. ENG. [Signature]	SCALE NONE	DO NOT SCALE
	APPROVED _____	SHEET 1 OF 1	
		REV A1	

200473-100



TIME=11:18

RUN DATE=06/21/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200474-100

REV: A1 = AB

DESC: P.C.B.,AC DISTRIBUTION ASY.

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
002	PC,DEFL DLY PC	53938	EVANS & SUTHERLAND.	200474-500	200474-500	1

1 ITEMS LISTED

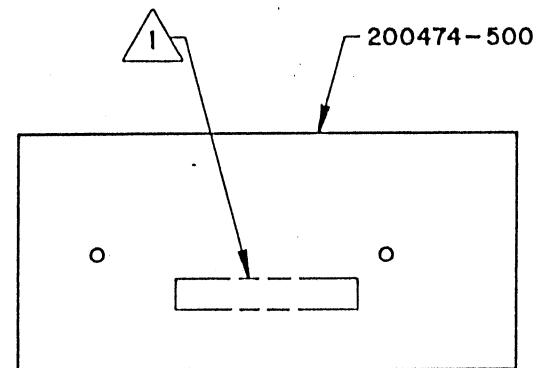


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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	AO	RELEASED TO AO	MB 10-2-84	<i>[Signature]</i> 10/6
	A1	PARTS LIST CHANGE ONLY	MB 10-11-84	<i>[Signature]</i> 10/16

LIMITED RIGHTS LEGEND
 Contract No. _____
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2ii

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CIRCUITRY SIDE

NOTES:



MARK ASSY NO., REV LEVEL AND S/N PER E&S PRODUCTION PROCESSES E-9.1.
 LOCATE APPROX AS SHOWN.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .xx ± — .xxx ± — ANGLES ± — ✓ HOLES PER AND 10387	DRAWN <i>M. Burkhardt</i> 1 Oct 84	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108			
	CHECKED <i>[Signature]</i> 10/11/84	CARD ASSEMBLY, A.C. DISTRIBUTION (PC)			
	MECH.				
	ELEC.				
PROJ. ENG. <i>[Signature]</i> 10/11/84	APPROVED	SIZE	CODE IDENT NO	REV	
MATERIAL		C	53938	200474-100	A1
FINISH		SCALE FULL	DO NOT SCALE	SHEET 1 OF 1	



TIME=16:00

RUN DATE=06/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200479-100

REV: A1 = AB

DESC: D.C. DISTRIBUTION, ASSY.

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	BRKT,D.C. DISTRIBUTIO	53938	EVANS & SUTHERLAND.	500482-001	500482-001	1
002	PRINTED WIRING BD,DC	53938	EVANS & SUTHERLAND.	200487-500	200487-500	1
003	CONN,RCPT,(6PIN),MAL-	27264	MOLEX INC.	03-09-1061 (1261-6R)	802323-006	3
004	CONN,RCPT,(4PIN),MAL	27264	MOLEX INC.	03-09-1040 (2163)	802323-204	3
005	TERM,FEM,PC-SOLDER-TA	27264	MOLEX INC.	02-09-1134 (1377-F)	802325-101	30
006	TERM,QDISC,MAL,16-14A	06383	PANDUIT CORP	DNF14-250FIM	802238-016	1
007	WIRE,14AWG(19/27;41/3	73612	CONSOLATED ELEC, W/C CORP	9405 (14AWG)GREEN	802507-555	2
008	HW,TERM TP,1/16BD	88245	WINCHESTER ELEC USECO DIV	1282B-1(.090,TURRET)	802329-001	1

8 ITEMS LISTED

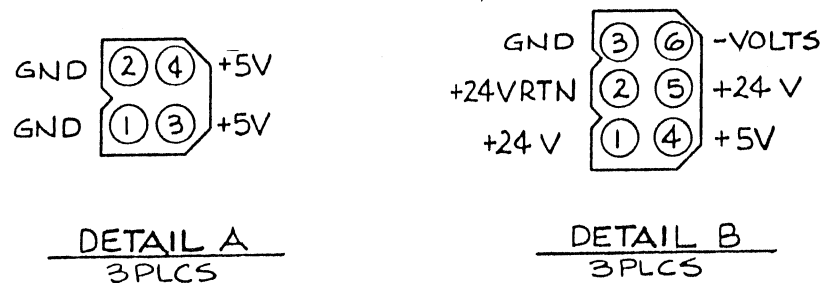
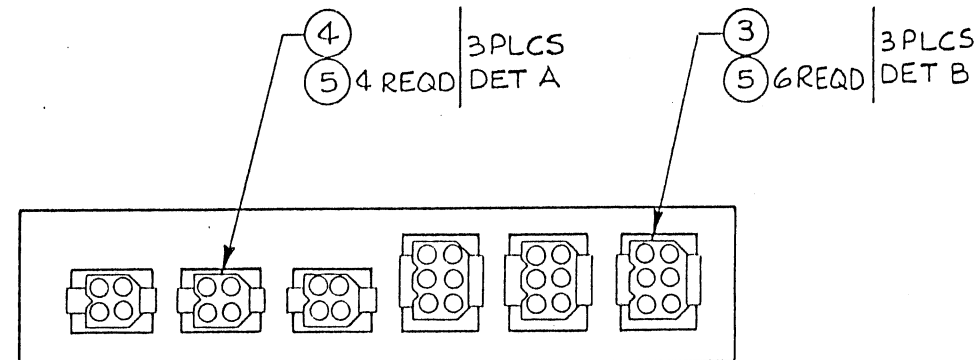
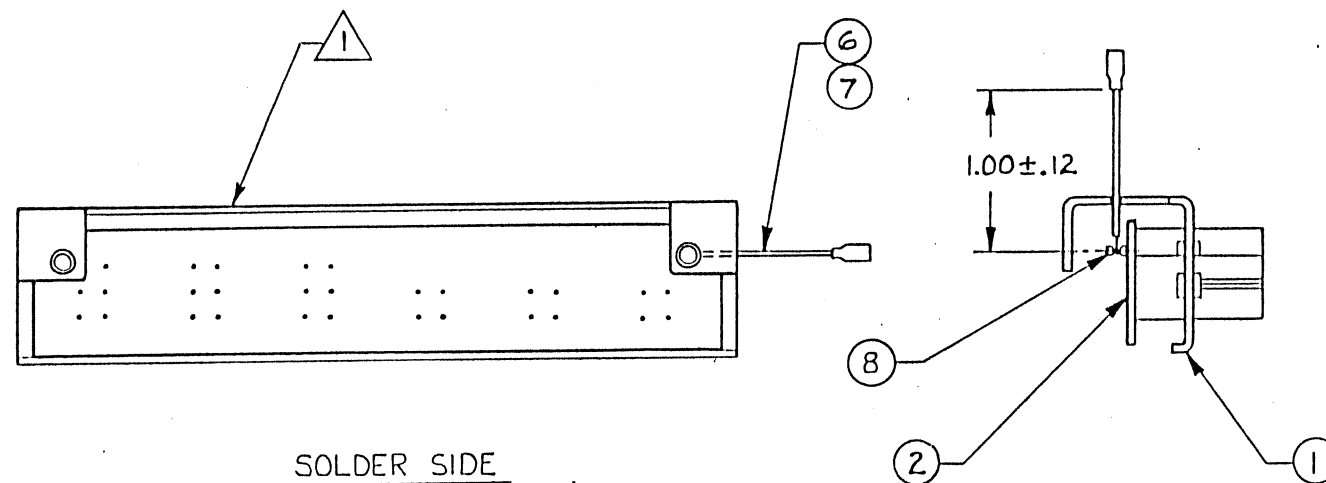


LIMITED RIGHTS LEGEND

CONTRACT NO.
 CONTRACTOR: EVANS & SUTHERLAND COMPUTER CORP. EXPLANATION
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	AO	RELEASED TO AO	9-10-84	<i>RBH</i>
	A1	SLDR SIDE WAS COMP SIDE, ADD ITEM 8 & G.T.	11-13-84	<i>Frank NLS</i>



LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2ii

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NOTES:

1. MARK ASSY NO., REV LEVEL AND S/N IN .09 TO .25 CHARACTERS IN CONTRASTING COLOR USING OPAQUE INDUSTRIAL PERMANENT INK. LOCATE APPROX AS SHOWN.
2. THIS ASSY (E&S 200479-100) IS IDENTICAL TO A.E.D. INC. ASSY 108076-02, REV C.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓ HOLES PER AND 10387	DRAWN S. BROWN 3-27-84	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108	
	CHECKED <i>RP</i> 3/28/84	D.C. DISTRIBUTION ASSY.	
MATERIAL SEE PARTS LIST	MECH.	SIZE C	CODE IDENT NO 53938
FINISH	ELEC.	200479-100	REV A1
	PROJ. ENG. <i>Craig Douke</i>	SCALE NONE	DO NOT SCALE
	APPROVED	SHEET 1	OF 1

200479-100



TIME=16:00

RUN DATE=06/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200480-100

REV: A0 = AA

DESC: GROUND CABLE,ASY

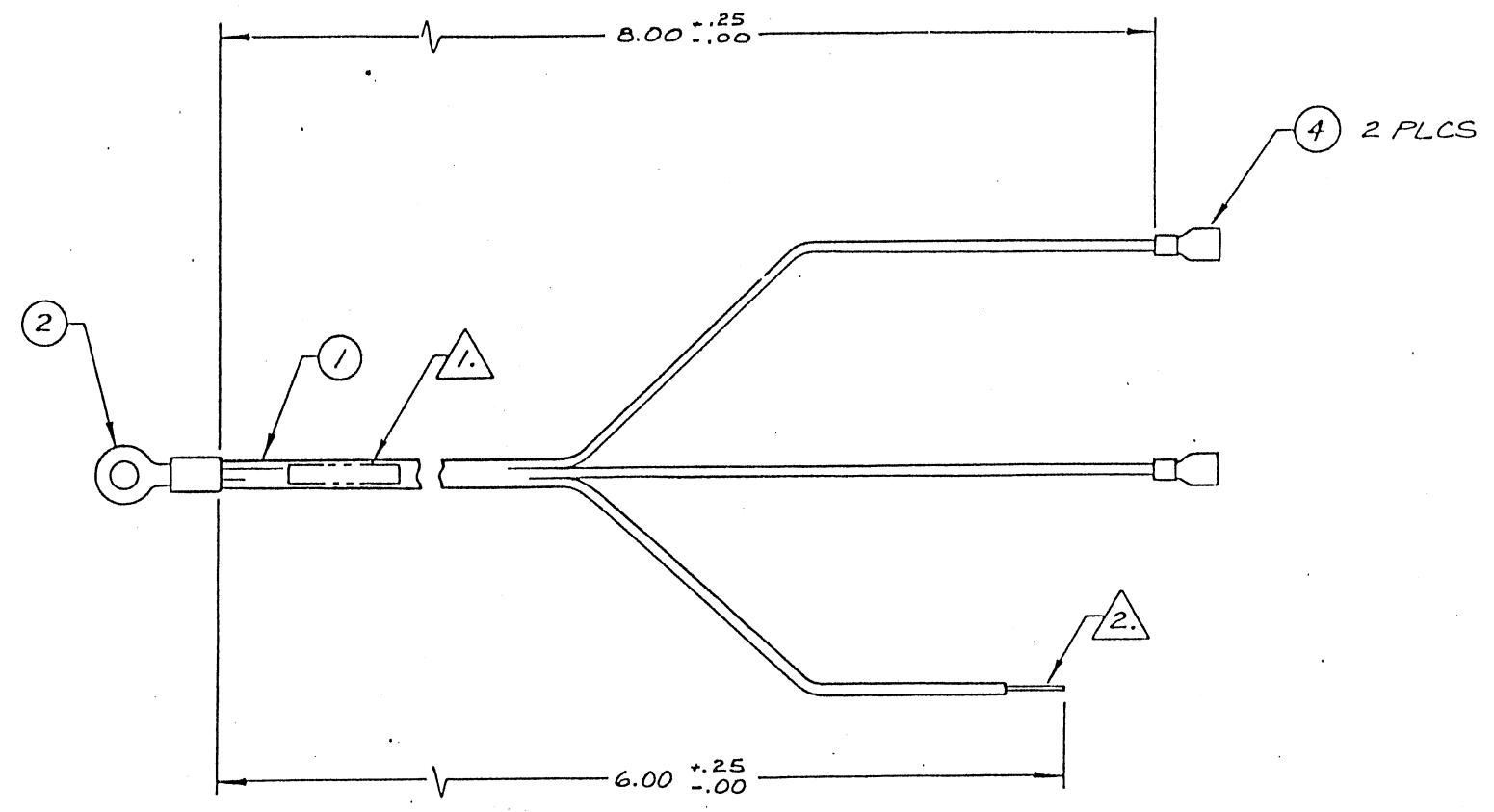
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	WIRE,16AWG(19/29;26/3	73612	CONSOLATED ELEC, W/C CORP	9404 (16AWG)GREEN	802508-555	24
002	TERM,RING,NO.1/4 STUD	83330	DIALIGHT CORP.	C-830-14	802133-014	1
004	TERM,QDISC,FML,16-14A	27264	MOLEX INC.	BB-2206T	802235-001	2

3 ITEMS LISTED



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
AO		RELEASED TO AO	RDS 9/20/84	[Signature]

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NOTES:

- 1. MARK ASSY NO., REV LEVEL AND S/N PER E&S PRODUCTION PROCESSES E-9.1. LOCATE APPROX. AS SHOWN.
- 2. STRIP WIRE TO LENGTH AND TIN END.

WIRING TABLE

ITEM NO.	AWG	COLOR	CUT LENGTH	USABLE CABLE LENGTH	STRIP LENGTH START	STRIP LENGTH FINISH	TERMINAL LUG START	TERMINAL LUG FINISH	SIGNAL NAME
1	16	GRN	9.00	8.00 ±.25	3/8	1/4	ITEM 2	ITEM 4	GND
1	16	GRN	9.00	8.00 ±.25	3/8	1/4	ITEM 2	ITEM 4	GND
1	16	GRN	7.00	6.00 ±.25	3/8	1/2	ITEM 2	-	GND

LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0056
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ABPR 7-104.9 (a) (b) 2ii

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓ HOLES PER AND 10387	DRAWN D. STOTT 9/20/84	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108		
	CHECKED [Signature] 10/2/84			
	MATERIAL SEE PARTS LIST	MECH.	GROUND CABLE, ASSY.	
FINISH	ELEC.			
	PROJ. ENG. [Signature]	SIZE C	CODE IDENT NO 53938	REV AD
	APPROVED [Signature]	200480-100		
		SCALE: NONE	DO NOT SCALE	SHEET 1 OF 1



MAINTENANCE PARTS LIST

ASSEMBLY: PL 200481-100

REV: A2 = AC

DESC: PANEL ASY,FRONT

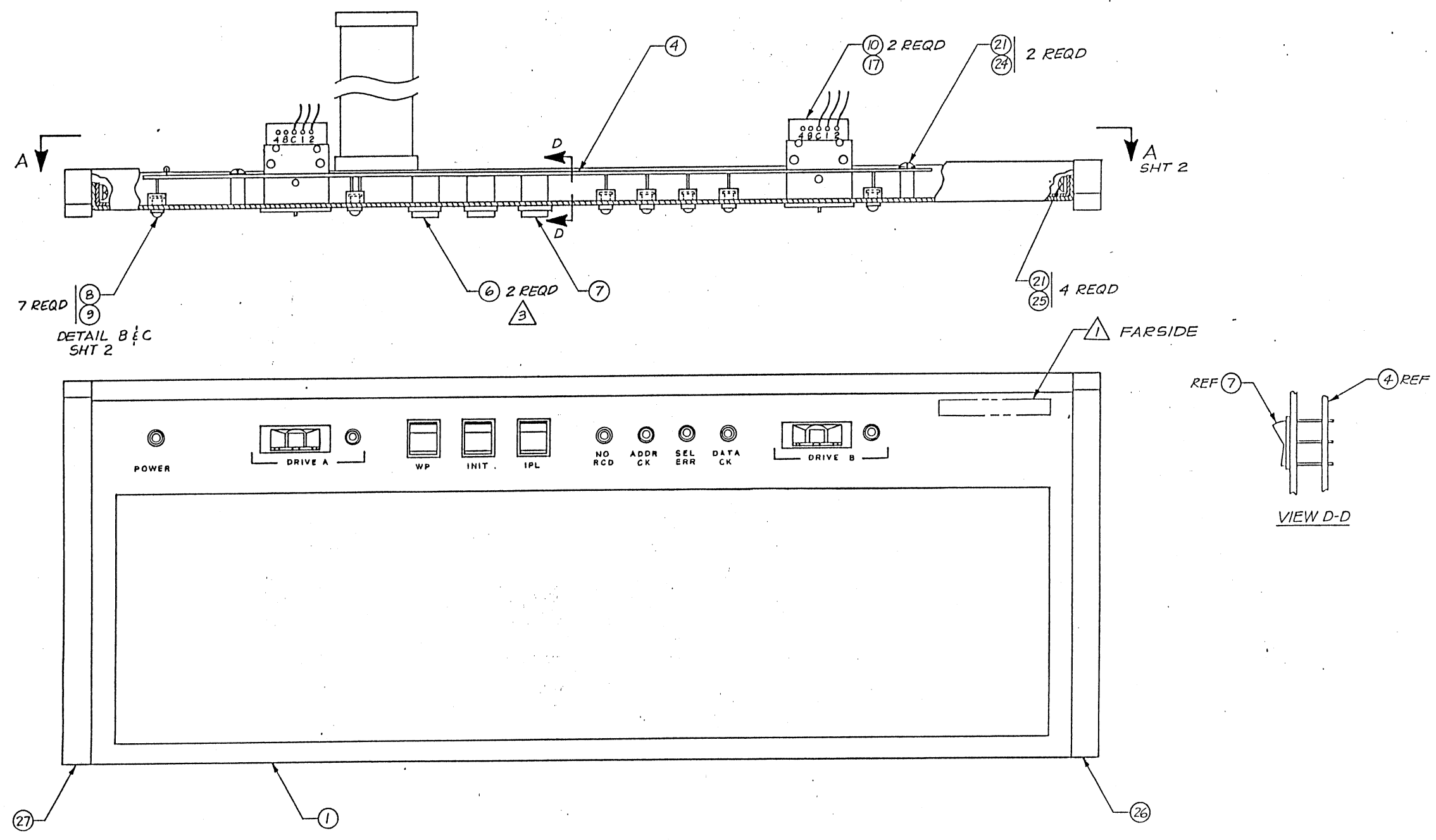
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	FRONT PNL,6200 LD W/S	53938	EVANS & SUTHERLAND.	500477-500	500477-500	1
002	BRKT, SIDE, FOR FILLER	53938	EVANS & SUTHERLAND.	500468-001	500468-001	1
003	BRKT, SIDE, FOR FILLER	53938	EVANS & SUTHERLAND.	500468-002	500468-002	1
004	PRINTED WIRING BD, FRO	53938	EVANS & SUTHERLAND.	200488-500	200488-500	1
005	PNL, FILLER, HALF HEIGH	53938	EVANS & SUTHERLAND.	500469-001	500469-001	1
006	SW, SPDT, ROCKER, BLK, O	09353	C AND K COMPONENTS	7101J51ZQE2-2	801246-202	2
007	SW, SPDT, ROCKER, RED, O	09353	C AND K COMPONENTS	7108-J51-Z-Q-E-3-2	801246-203	1
008	CR, LED 50824655	01295	TEXAS INSTR, SEMICON DIV.	5082-4655	814655-001	7
009	GROMMET, PNL-MTG, LED I	71744	GENERAL INST CORP, LAMPS	CMP-52	802397-101	7
010	SW, THUMBWHEEL, BCD, 1	05693	CHERRY/TEXTRON INC.	T71-13MA W/HORZ #'S	801153-001	2
012	CN, RIB 26SCKT	53387	MINN. MINING & MFG.EP DIV	3399-6026 (2X13)	801614-026	1
013	CONN, PC-FL/CA, 26PIN(S	53387	MINN. MINING & MFG.EP DIV	3434-0000T (26PIN)	801280-026	1
014	R, ,AXL 330 1/4W	50139	ALLEN-BRADLEY CO. ELECTRO	RC07GF331J	803201-331	1
016	CBL, FLAT, 26-COND, 28AW	16428	COOPER BELDEN ELEC WIRE	9L28026	802163-026	11
017	WIRE, 24AWG(19/36), 150	71124	BRAND-REX CO	XM241019-WHT(UL-1429	802066-999	6
021	HW, SCR 6-32X1/4	N/A	DISTRIBUTORS	6-32X1/4 (M-P-PH-SS)	802003-102	6
022	HW, WSHR #4INTLOK	N/A	DISTRIBUTORS	SAE#4, LK INTL, SS	802005-004	4
023	HW, NUT 4-40NUT	N/A	DISTRIBUTORS	NUT-HEX(4-40)SS	802014-004	4
024	HW, WSHR #6, NYLN	83330	DIALIGHT CORP.	2670 (#6WSHR, NY, .062)	802348-006	2
025	HW, WSHR #6INTLOK	N/A	DISTRIBUTORS	SAE#6, LK INTL, SS	802005-006	4
026	TRIM BAR, RT SIDE	53938	EVANS & SUTHERLAND.	500476-003	500476-003	1
027	TRIM BAR, LFT SIDE	53938	EVANS & SUTHERLAND.	500476-004	500476-004	1

22 ITEMS LISTED

1111

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
A0		RELEASED TO A0	9-10-84	RBH
A1		ADDED VIEWS	2-7-85	RBH
A2		ADD BRACKETS & FILLER	6-5-85	RBH

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 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2(i)

POWER DRIVE A WP INIT IPL NO RCD ADDR CK SEL ERR DATA CK DRIVE B

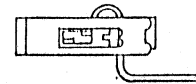
NOTES:

- 1. MARK ASSY NO., REV LEVEL AND S/N IN .09 TO .25 CHARACTERS IN CONTRASTING COLOR USING OPAQUE INDUSTRIAL PERMANENT INK. LOCATE APPROX AS SHOWN.
- 2. PRIOR TO SOLDERING, ORIENT THE LEAD ON THE FLAT SIDE OF THE LED (CATHODE, ITEM 8) INTO THE SQUARE PAD OF THE PWB (ITEM 4).
- 3. ITEM 6 VERTICAL ORIENTATION MAY BE EITHER DIRECTION.

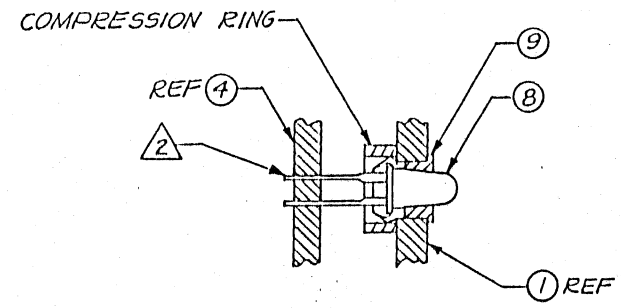
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓	CONTRACT NO.	EVANS & SUTHERLAND SALT LAKE CITY, UTAH 84108	
	DRAWN B. HOLT 6-18-84	PANEL ASSY, FRONT	
	CHECKED P. P. P. 6/21/84	SIZE	CODE IDENT NO
	MECH	D	53938
	ELEC	SCALE	DO NOT SCALE DWG
	PROJ. ENG. C. HUNTER 7/17/84	SHEET	1 OF 2
	APPROVED	REV	A2
MATERIAL SEE PARTS LIST			
FINISH			

200481-100

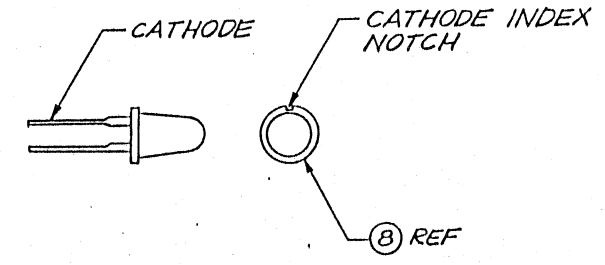
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



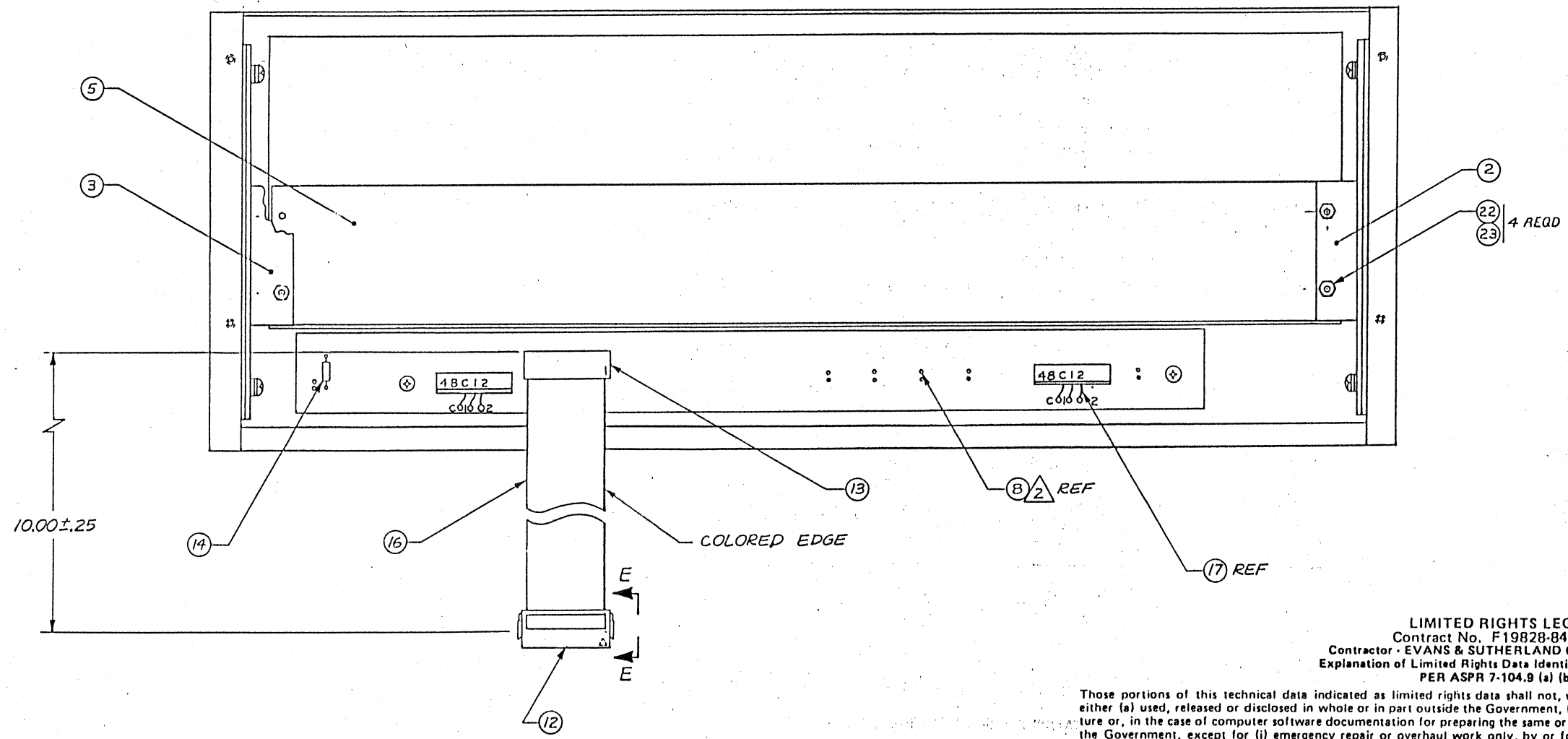
VIEW E-E
ROTATED 90° CW



DETAIL B
TYPICAL DIODE INSTALLATION
SCALE: NONE



DETAIL C
SCALE: NONE



VIEW A-A

LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2ii

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SIZE	CODE	IDENT NO	REV
D	53938	200481-100	A2
SCALE	1/1	DO NOT SCALE DWG	SHEET 2 OF 2

200481-100

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200482-100

REV: A1 = AB

DESC: A.C. DISTRIBUTION ASSEMBLY

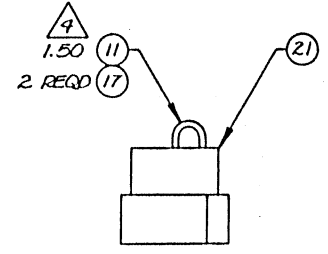
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	BASE PLATE, A.C. DISTR	53938	EVANS & SUTHERLAND.	500478-001	500478-001	1
002	COVER, A.C. DISTRIBUTI	53938	EVANS & SUTHERLAND.	500479-001	500479-001	1
003	CBL, PWR, 3COND, 18AWG (1	53909	CAROL CABLE CO. INC.	C1435 (18AWG) SJ	802089-018	8
004	GND CBL, ASY	53938	EVANS & SUTHERLAND.	200480-100	200480-100	1
005	P.C.B., AC DISTRIBUTIO	53938	EVANS & SUTHERLAND.	200474-100	200474-100	1
006	BUSHING, STRAIGHT-THR	28520	HEYCO MOLDED PRODUCTS	1200	802102-102	1
007	GROMMET, RBR 5/16 ID-7	83330	DIALIGHT CORP.	2174	802397-001	1
008	SW, SPST, PADDLE, .25-QD	63006	ARCOELECTRIC CORP.	C1800H (GC ELE=35-180	801247-001	1
009	FUSE-HOLDER, PNL-MNT, (75915	LITTELFUSE TRACOR INC.	342004	801083-342	1
010	FUSE, 5A, SLO-BLO, 250V,	75915	LITTELFUSE TRACOR INC.	313.005 (GLASS)	802296-050	1
011	HW, WIRE 18G, BLK	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG) BLACK	802509-000	2
012	HW, SCR 6-32X1/4	N/A	DISTRIBUTORS	6-32X1/4 (M-P-PH-SS)	802003-102	4
013	HW, WSHR #6INTLOK	N/A	DISTRIBUTORS	SAE#6, LK INTL, SS	802005-006	6
014	HW, NUT 10-32NUT	N/A	DISTRIBUTORS	NUT-HEX (10-32) SS	802014-010	2
015	HW, WSHR #10INTLK	N/A	DISTRIBUTORS	SAE#10, LK INTL, SS	802005-010	3
016	FLTR, RFI, PWR-LINE, 5A,	05245	CORCOM INC	5VK3	804902-005	1
017	TERM, CRMP, MAL, 20-14AW	27264	MOLEX INC.	02-09-2103 (1190-M)	802326-001	2
018	TERM, RING, NO.10 STUD,	98410	ETC-MOLEX INC.	A-821-10T	802131-010	1
020	HW, SCR 6-32X1/2	N/A	DISTRIBUTORS	6-32X1/2 (M-P-PH-SS)	802003-104	2
021	CONN, PLUG, (3PIN), FEM-	27264	MOLEX INC.	03-09-2032 (1396-3P)	802324-003	1
022	TERM, FEM, PC-SOLDER-TA	27264	MOLEX INC.	02-09-1134 (1377-F)	802325-101	18
023	CONN, RCPT, (3PIN), MAL-	27264	MOLEX INC.	03-09-1031 (1396-3R)	802323-003	6
024	HW, WSHR #10, FLAT	N/A	DISTRIBUTORS	AN960C10L, #10FLAT, SS	802007-010	1
025	TERM, QDISC, FML, 22-18A	75037	MINN. MINING & MFG.	MNG18-250DFI	802235-022	2
027	SPCR, 1/4RND, ID=.140X3	18310	CONCORD ELECTRONICS CORP	750-1104 (#6-SCR)	802219-102	2
028	HW, TBNG 1/4TBNG	92194	ALPHA WIRE CORP.	FIT-221M-1/4"	802033-250	4
029	HW, TBNG 1/8TBNG	92194	ALPHA WIRE CORP.	FIT-221M-1/8"	802033-125	4

27 ITEMS LISTED

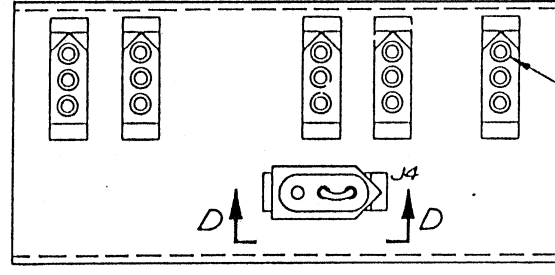


REVISIONS			
ZONE	LTR	DESCRIPTION	DATE
	AO	RELEASED TO AO	9-10-84
	AI	DEL ITEM 19, ADD NOTE 5	2-1-85

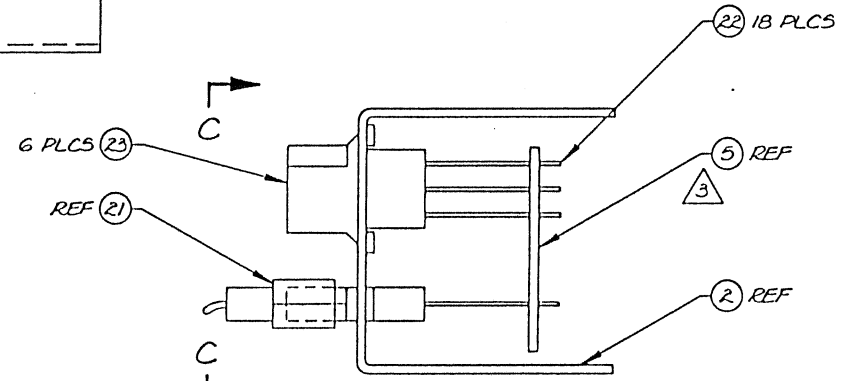
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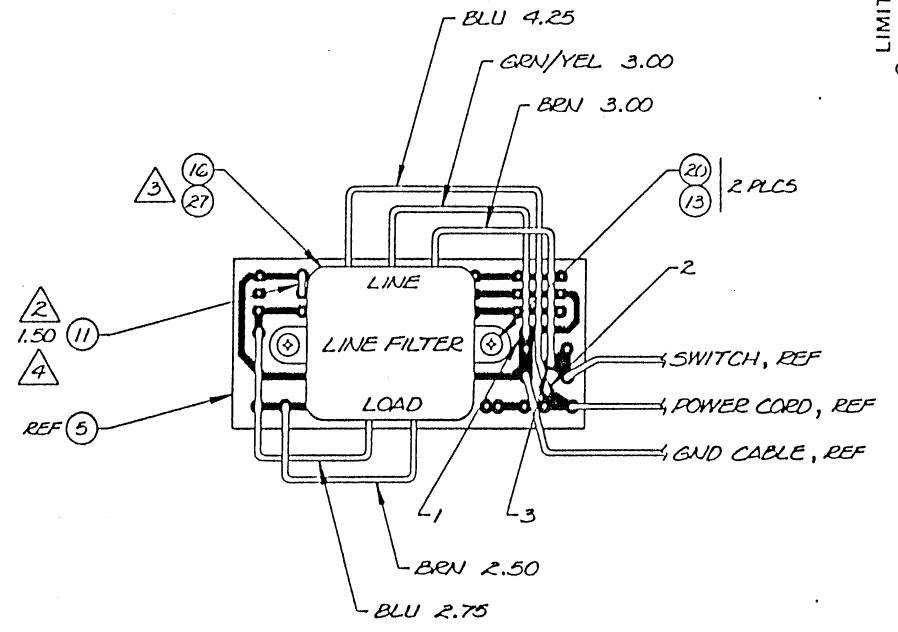
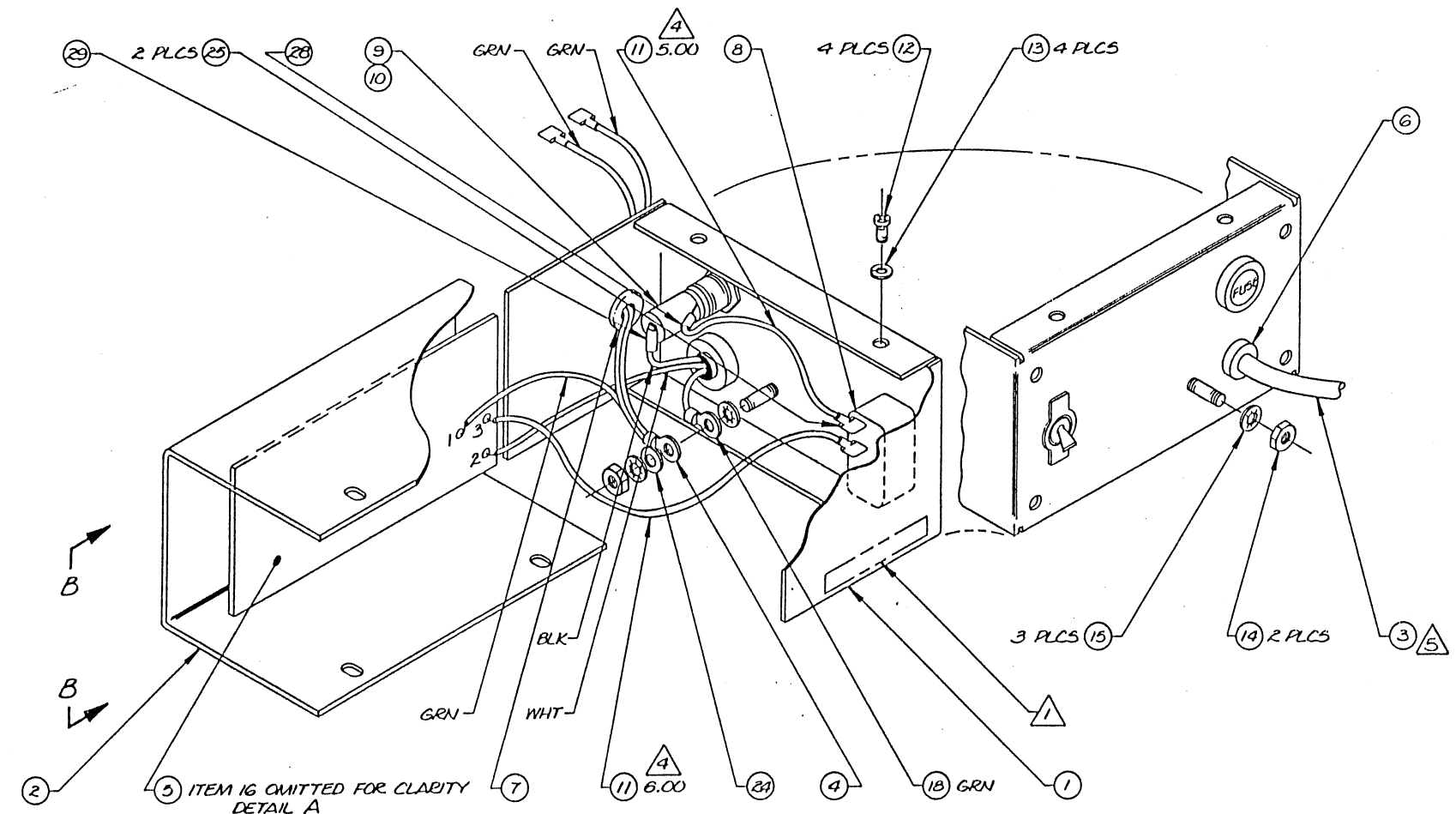
VIEW D-D



VIEW C-C



VIEW B-B



DETAIL A

NOTES:

- 1. MARK ASSY NO., REV LEVEL AND S/N PER E+S PRODUCTION PROCESSES E-3.1. LOCATE APPROX AS SHOWN.
- 2. ADD JUMPER FROM J2-1 TO J2-2.
- 3. INSTALL LINE FILTER (ITEM 16) WITH SPACER (ITEM 27) BETWEEN FILTER AND PC BOARD PER DETAIL "A" AFTER PC BOARD (ITEM 5) AND CONNECTORS (ITEM 23) HAVE BEEN PRESSED INTO COVER (ITEM 2).

- 4. WIRE LENGTHS SHOWN ARE APPROXIMATE CUT LENGTHS BEFORE TERMINATION.
- 5. CUT LENGTH OF ITEM 3 IS 8 FT.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓	CONTRACT NO.	EVANS & SUTHERLAND BALTIMORE, MARYLAND 21208
	DRAWN	
	CHECKED	
	APPROVED	
MATERIAL SEE PARTS LIST	SIZE D	CODE IDENT NO. 53938
FINISH	SCALE: NONE DO NOT SCALE DWG SHEET 1 OF 1	

EVANS & SUTHERLAND BALTIMORE, MARYLAND 21208	
A.C. DISTRIBUTION ASSEMBLY	
SIZE D	CODE IDENT NO. 53938
REV A1	PROJECT NO. 200482-100
SCALE: NONE DO NOT SCALE DWG SHEET 1 OF 1	

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 Contract No. F19828-84-C-0055
 Contractor: EVANS & SUTHERLAND COMPUTER CORP.
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 PER ASPR 7-104.9 (a) (b) (2)

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TIME=16:00

RUN DATE=06/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200483-100

REV: A1 = AB

DESC: REAR PANEL ASSY. 6200 LS/LD

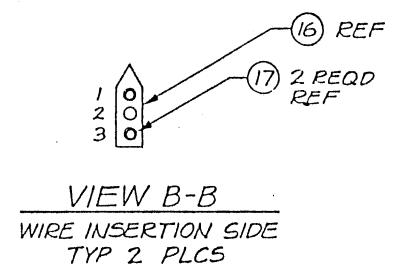
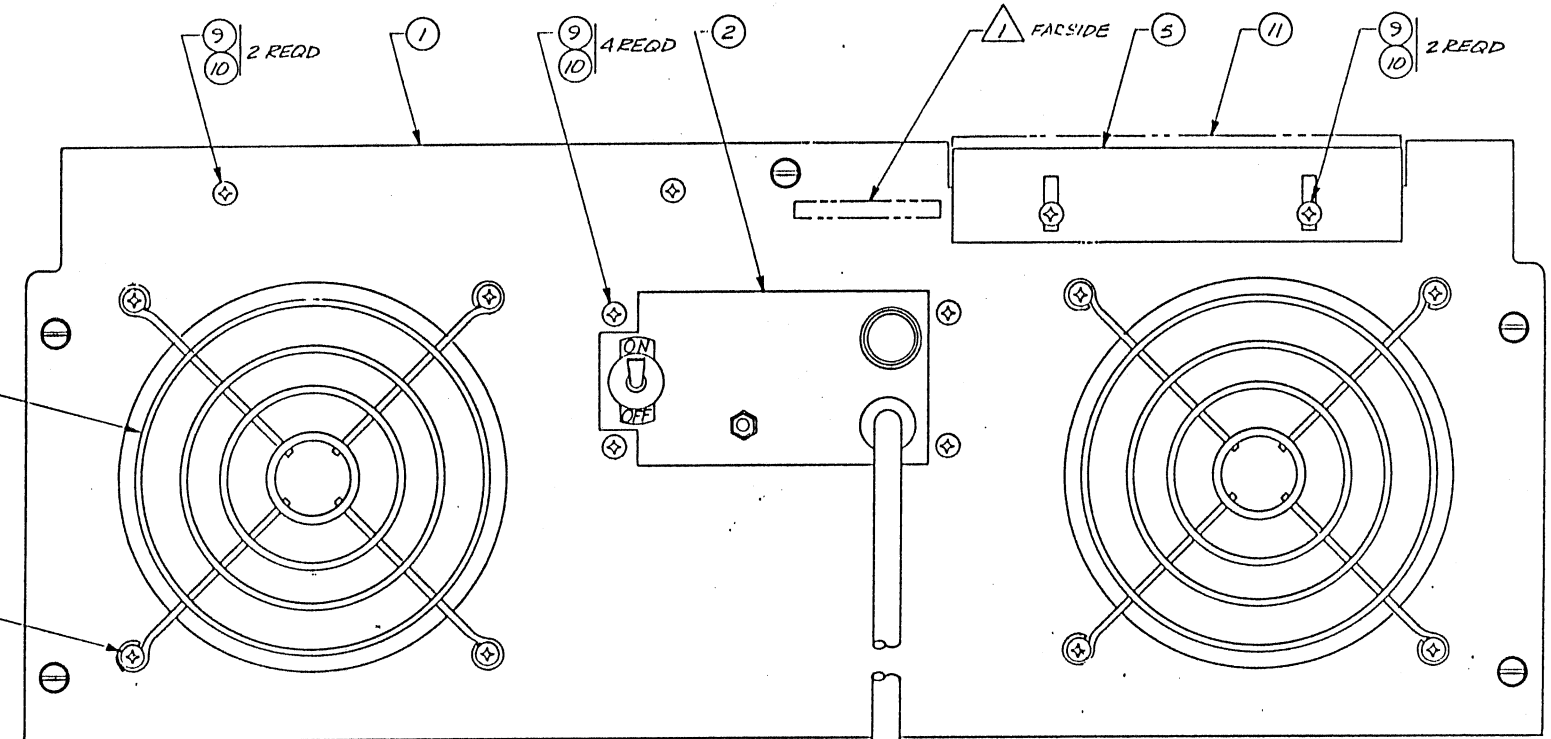
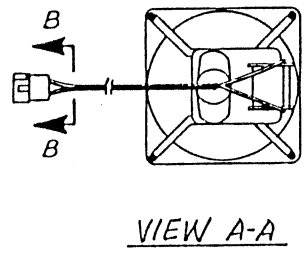
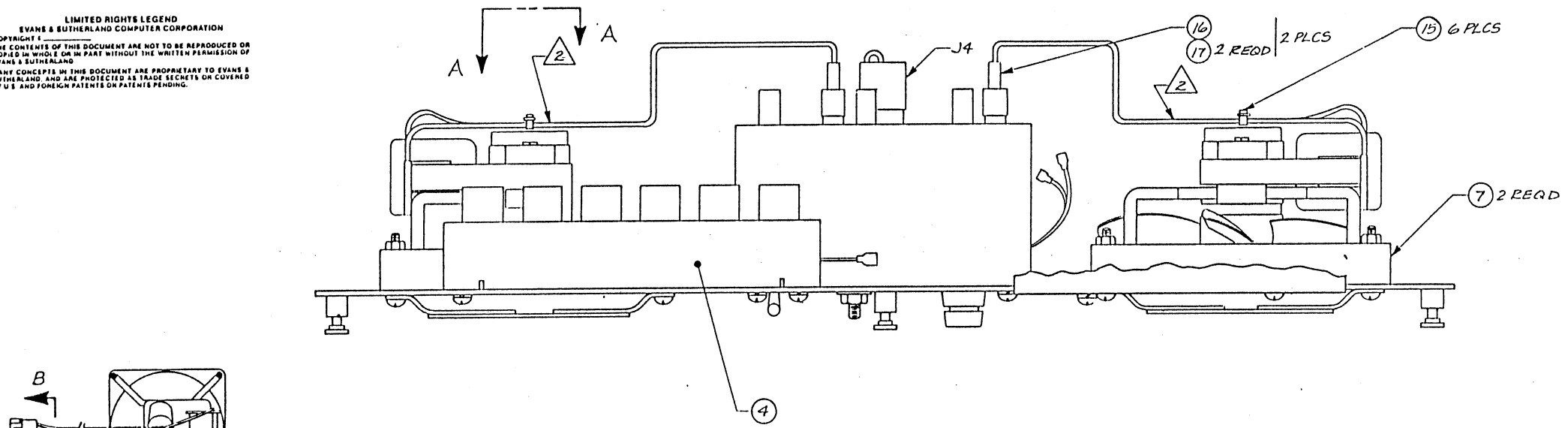
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	PNL, REAR	53938	EVANS & SUTHERLAND.	500480-001	500480-001	1
002	A.C. DISTRIBUTION ASY	53938	EVANS & SUTHERLAND.	200482-100	200482-100	1
004	D.C. DISTRIBUTION, ASY	53938	EVANS & SUTHERLAND.	200479-100	200479-100	1
005	CBL CLAMP, REAR	53938	EVANS & SUTHERLAND.	500481-001	500481-001	1
006	FAN, FINGER-GUARD, 4PO	60856	ETRI INC	9601-43	801835-007	2
007	FAN, AX, 75CFM, 220V, 60	65259	BOMAX DIV. OF R M R CORP.	903-2335	801088-301	2
008	HW, SCR 632X1.12	N/A	DISTRIBUTORS	6-32X1-1/8 (M-P-PH-SS)	802003-109	8
009	HW, SCR 6-32X1/4	N/A	DISTRIBUTORS	6-32X1/4 (M-P-PH-SS)	802003-102	8
010	HW, WSHR #6INTLOK	N/A	DISTRIBUTORS	SAE#6, LK INTL, SS	802005-006	8
011	TAPE, VINYL-FOAM, SNGL-	52152	MINN. MINING & MFG.	4504, W=0.5IN (.25THK)	802153-004	5
013	NUT, HEX, KEPS, 6-32, .31	N/A	DISTRIBUTORS	NUT-KEPS (6-32)	802306-006	8
015	HW, TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	6
016	CONN, PLUG, (3PIN), FEM-	27264	MOLEX INC.	03-09-2032 (1396-3P)	802324-003	2
017	HW, TERM 02-09-2218	27264	MOLEX INC.	02-09-2118 (1390-M)	802326-002	4

14 ITEMS LISTED



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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A0	RELEASED TO A0	12/10/84	J. J. W.
	A1	ADDED VIEW B-B	2-7-85	R. S. G.



NOTES:

- 1. MARK ASSY NO., REV. LEVEL AND SIN IN .09 TO .25 CHARACTERS IN CONTRASTING COLOR USING OPAQUE INDUSTRIAL PERMANENT INK. LOCATE APPROX AS SHOWN.
- 2. CUT FAN CABLE TO 10.00 BEFORE INSTALLING CONNECTOR.

LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2ii

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± .XXX ± ANGLES ± ✓	CONTRACT NO.	EVANS & SUTHERLAND BALT LAKE CITY, UTAH 84108		
	DRAWN <i>J. J. W.</i> 12-10-84	REAR PANEL ASSY, 6200 LS/LD		
MATERIAL	CHECKED <i>J. J. W.</i> 12-10-84	SIZE	CODE IDENT NO	REV
FINISH	ELEC	D	53938	200483-100 A1
	MECH	SCALE NONE		DO NOT SCALE DWG
	APPROVED <i>J. J. W.</i>	SHEET 1 OF 1		

200483-100



TIME=16:00

RUN DATE=06/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200489-100

REV: A1 = AB

DESC: DRIVE ADAPTER BD ASSY

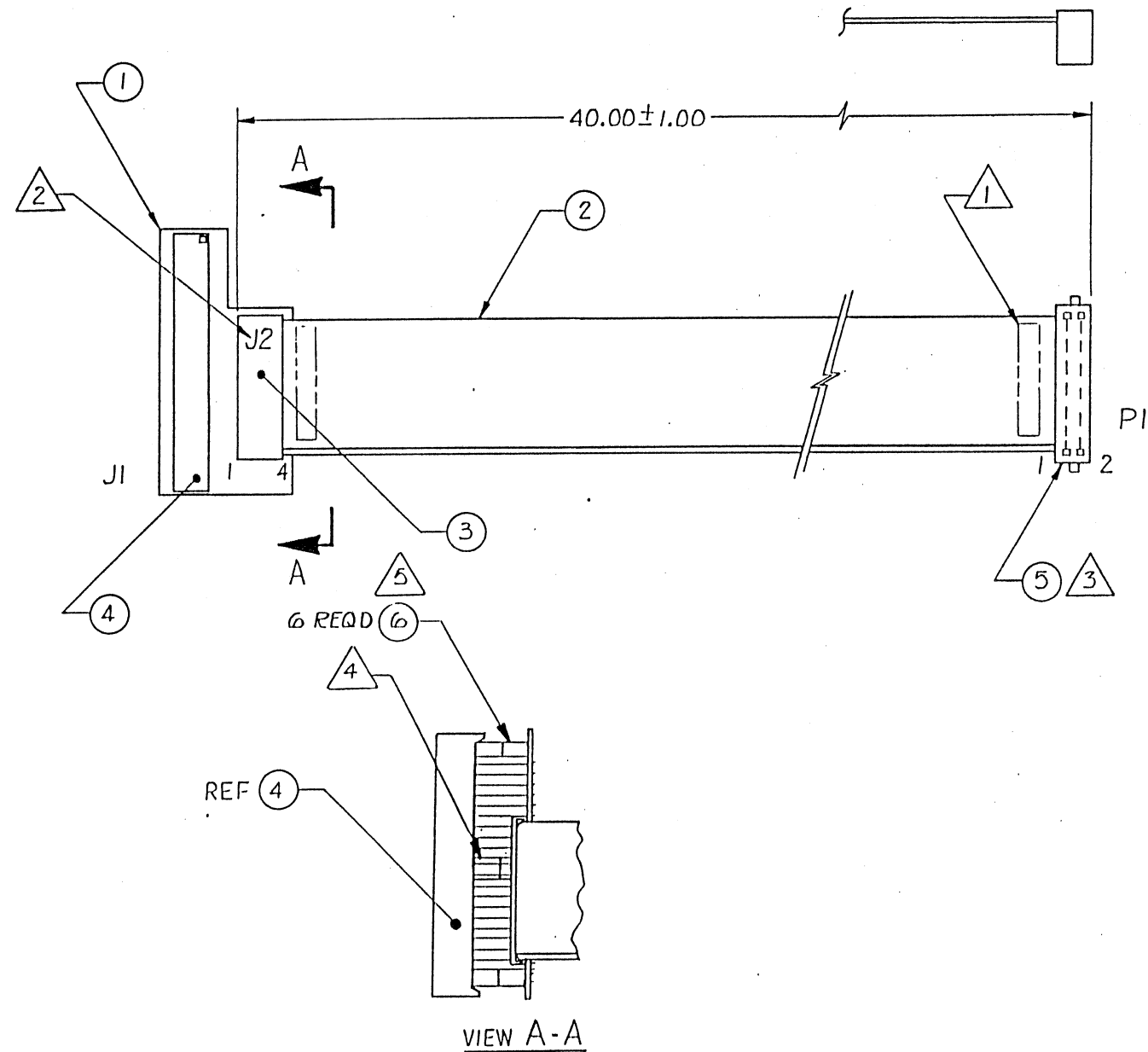
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	QUME COMPATBL DRIVE, A	53938	EVANS & SUTHERLAND.	200489-500	200489-500	1
002	CBL, FLAT, 26-COND, 28AW	16428	COOPER BELDEN ELEC WIRE	9L28026	802163-026	40
003	CONN, PC-FL/CA, 26PIN (S	53387	MINN. MINING & MFG.EP DIV	3434-0000T (26PIN)	801280-026	1
004	CONN, CRD-EDGE, 50POS, P	31781	EDAC INC	342-050-540-2-01	801149-150	1
005	CN, RIB 26SCKT	53387	MINN. MINING & MFG.EP DIV	3399-6026 (2X13)	801614-026	1
006	SPCR, 1/4RND, ID=.140X1	55566	RAF ELECTRONICS HARDWARE	1124-6-PH-0	802219-002	6

6 ITEMS LISTED



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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
AO		RELEASED & REDRAWN	10-3-84	[Signature]
AI		ADDED SPACERS	8-14-86	[Signature]



J1		J2
18	HEAD LOAD	7
33	RTN	8
20	INDEX	15
17	RTN	16
34	DIRECTION SELECT	1
35	RTN	2
36	STEP	3
37	RTN	4
38	WRITE DATA	9
39	RTN	10
40	WRITE GATE	11
41	RTN	12
42	TRACK 00	5
29	RTN	6
46	READ DATA	17
45	RTN	18
13	DRIVE GND	23
11	RTN	24
25	GND	
26	DRIVE SEL 1	
44	WRITE PROTECT	25
43	RTN	26
14	HEAD SELECT	21
19	RTN	14
2	LOW CURRENT	19
16	RTN	20

NOTES:

- 1. MARK ASSY. NO., REV. LEVEL AND S/N PER E & S PRODUCTION PROCESSES NO. E-9.1 LOCATE APPROX. AS SHOWN.
- 2. MARK ALL CONNECTORS AS SHOWN PER E & S PRODUCTION PROCESSES NO. E-9.1.
- 3. DO NOT INSTALL STRAIN RELIEF ON PI CONNECTOR.
- 4. INSTALL SPACERS OVER 2 PINS NEAR THE CENTER ON THE FAR (B) ROW OF PINS.
- 5. INSTALL SPACERS OVER 2 PINS AT EACH END ON THE NEAR (A) ROW OF PINS.

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 TOLERANCES ON
 .XX ± _____
 .XXX ± _____
 ANGLES ± _____
 ✓
 HOLES PER AND 10387
 MATERIAL
 SEE PARTS LIST
 FINISH

DRAWN *ENG TOM* 10-2-84
 CHECKED *PP* 10/5/84
 MECH.
 ELEC.
 PROJ. ENG. *C. P. H.* 10/6/84
 APPROVED

EVANS & SUTHERLAND
 SALT LAKE CITY, UTAH, 84108

DRIVE
ADPTR. BD. ASSY.

SIZE	CODE IDENT NO	REV
C	53938	AI
200489-100		
SCALE NONE	DO NOT SCALE	SHEET 1 OF 1



TIME=10:28

RUN DATE=09/12/88

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200490-100

REV: A0

DESC: GROUND WIRE EXTENSION ASSY.

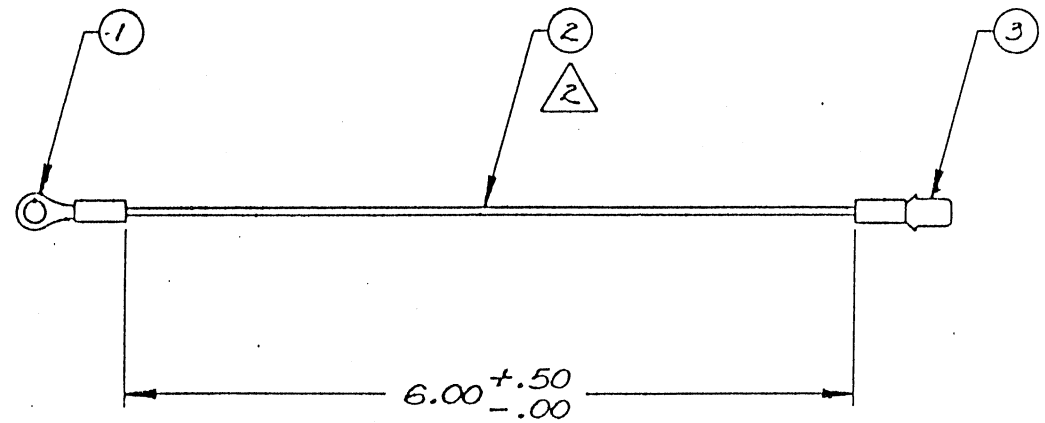
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	TERM,RING,NO.8 STUD,1	83330	DIALIGHT CORP.	B523-08	802132-008	1
002	WIRE,14AWG(19/27;41/3	73612	CONSOLATED ELEC, W/C CORP	9405 (14AWG)GREEN	802507-555	1
003	TERM,QDISC,MAL,16-14A	06383	PANDUIT CORP	DNF14-250FIM	802238-016	1

3 ITEMS LISTED



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	AO	RELEASED TO AO	BH 9-11-89	[Signature]

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 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2II

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NOTES:

1. TAG INDIVIDUALLY WITH ASSY NO. AND REV LEVEL.
2. WIRE CUT LENGTH IS 7.00. STRIP LENGTH FOR BOTH CONNECTORS IS .25.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± — .XXX ± — ANGLES ± — ✓ HOLES PER AND 10307	DRAWN <i>[Signature]</i> 3 AUG 1984	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108	
	CHECKED <i>[Signature]</i> 8-7-84		
MATERIAL SEE PARTS LIST	MECH.	GROUND WIRE EXTENSION ASSY	
FINISH	ELEC.		
	PROJ. ENG. <i>[Signature]</i> 8/16/84	SIZE	CODE IDENT NO
	APPROVED	C	53938
			200490-100
			REV AO
		SCALE FULL	DO NOT SCALE SHEET 1 OF 1

200490-100



TIME=09:14

RUN DATE=04/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 200491-100

REV: A3 = AD

DESC: CABLE ASSY,+5V,+24V

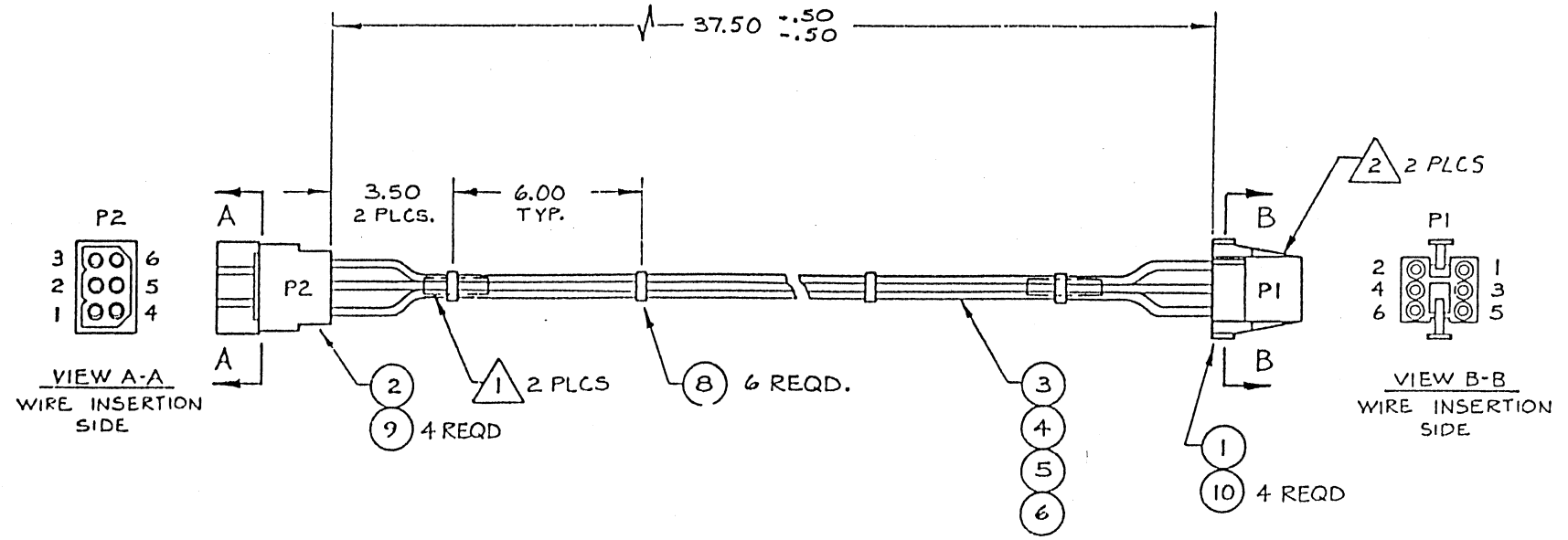
ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	CONN,SKT-HOUSING,6-PO	00779	AMP INC.	1-480270-0 (6-POS)	801087-016	1
002	CONN,PLUG,(6PIN),FEM-	27264	MOLEX INC.	03-09-2062 (1261-6P)	802324-006	1
003	HW,WIRE 18G,VIO	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG)VIOLET	802509-777	37
004	HW,WIRE 18G,WHT	92194	ALPHA WIRE CORP.	3055	802509-999	37
005	HW,WIRE 18G,BLK	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG)BLACK	802509-000	37
006	HW,WIRE 18G,RED	73612	CONSOLATED ELEC, W/C CORP	9403 (18AWG)RED	802509-222	37
008	HW,TIE TY-23M	59730	THOMAS AND BETTS CORP.	TY-23M	802061-003	6
009	TERM,CRMP,MAL,20-14AW	27264	MOLEX INC.	02-09-2103 (1190-M)	802326-001	4
010	CONT,CRMP,SOC,20-14AW	00779	AMP INC.	60619-1(SOCKET)	801087-001	4

9 ITEMS LISTED



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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A0	RELEASED TO A0	DS 9-26-84	[Signature]
	A1	PARTS LIST CHANGE ONLY	DS 10-10-84	[Signature]
	A2	PARTS LIST CHANGE	EH 10-30-85	[Signature]
	A3	CHNG CABLE LENGTHS	TAB 5-27-89	[Signature]



ITEM NO.	AWG	COLOR	TERMINAL LUG		COMPONENT		SIGNAL NAME
			START	FINISH	START	FINISH	
3	18	VIO	ITEM 9	ITEM 10	P2-1	PI-1	+24 VDC
1	18	WHT	ITEM 9	ITEM 10	P2-2	PI-2	+24 VRTN
5	18	BLK	ITEM 9	ITEM 10	P2-3	PI-6	GND
6	18	RED	ITEM 9	ITEM 10	P2-4	PI-5	+5 VDC

- 1. MARK ASSY NO., REV LEVEL AND S/N PER E & S PRODUCTION PROCESSES NO. E-9.1. LOCATE APPROX AS SHOWN.
- 2. MARK ALL CONNECTORS AS SHOWN PER E & S PRODUCTION PROCESSES NO. E-9.1.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .XX ± .50 .XXX ± — ANGLES ± — ✓ HOLES PER AND 10367	DRAWN D. STOTT 9-26-84	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108		
	CHECKED [Signature] 10/8/84			
	MECH.	CABLE ASSY. +5V, 24V		
	ELEC.			
MATERIAL SEE PARTS LIST	PROJ. ENG. [Signature] 10/11/84	SIZE C	CODE IDENT NO 53938	REV A3
FINISH	APPROVED [Signature]	SCALE NONE	DO NOT SCALE	SHEET 1 OF 1



TIME=16:17

RUN DATE=06/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 204067-001

REV: NC = AA

DESC: CABLE ASSY, BACKPANEL JUMPER, 50 CONDUCTOR FLAT RIBBON

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	CN,RIB 50SCKT	53387	MINN. MINING & MFG.EP DIV	3425-6050 (2X25)	801614-050	2
003	CBL-MKR,BLANK,1X3,WRI	85480	BRADY W.H. CO	PWC-PK-3	802335-003	1
004	HW,LABL MARKING	53938	EVANS & SUTHERLAND	PER MFG PROCEDURE	802311-002	1
002 1@2.5 IN	HW,CBL 50FLTCBL	16428	COOPER BELDEN ELEC WIRE	9L28050	802163-050	1

4 ITEMS LISTED



LIMITED RIGHTS LEGEND

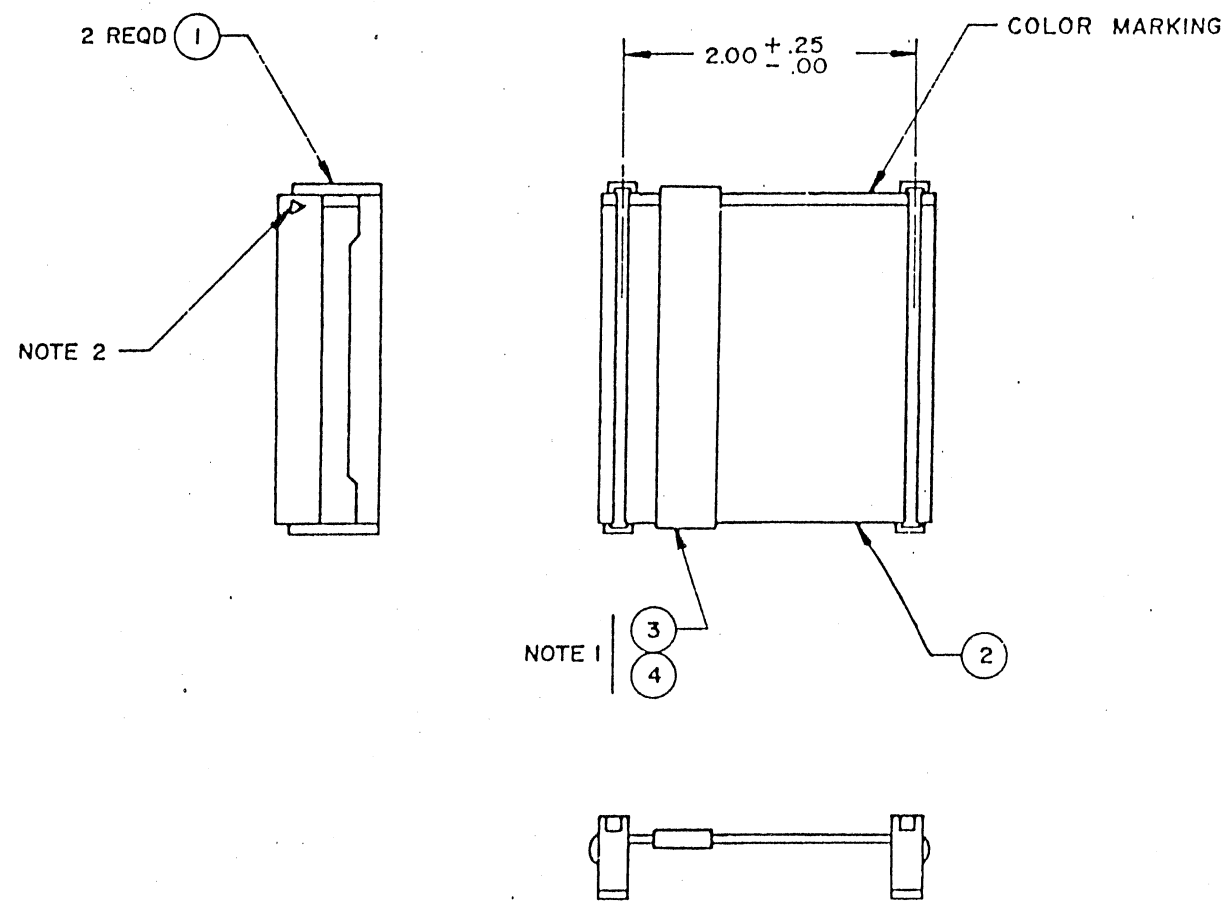
CONTRACT NO. F19628-84-C-0055
 CONTRACTOR: EVANS & SUTHERLAND COMPUTER CORP. EXPLANATION
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 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
 Explanation of Limited Rights Data Identification Method Used
 PER ASPR 7-104.9 (a) (b) 2ii

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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



- NOTES:
- MARK PART NO., SERIAL NO. & REV LEVEL ON ITEM 4.
 - Δ INDICATES PIN I.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .xx ± .25 .xxx ± — ANGLES ± — ✓	DRAWN <i>K. JORDAN 4-16-81</i>	EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108	
	CHECKED <i>Pat E. K. 4-28-81</i>	CABLE ASSY, BACKPANEL JUMPER, 50 CONDUCTOR FLAT RIBBON	
MATERIAL SEE PART LIST	MECH. <i>[Signature]</i>	SIZE	CODE IDENT NO
FINISH	ELEC. <i>[Signature]</i>	C	53938
	PROJ. ENG. <i>[Signature]</i>	204067-001	
	APPROVED	REV	NC
		SCALE NONE	DO NOT SCALE SHEET 1 OF 1

D
C
B
A

D
C
B
A

B 204067-001



TIME=16:17

RUN DATE=06/25/90

EVANS + SUTHERLAND

RPT ID=242 PAGE 1

MAINTENANCE PARTS LIST

ASSEMBLY: PL 801900-002 REV: A2 = AC DESC: *OBS*,USE 200832-100 AS REPLACEMENT,*SCD* CABLE ASSY,FLAT RI

ITEM/REFERENCE DESIGNATORS	SHORT DESCRIPTION	CAGE CODE	MANUFACTURER NAME	MFG PART NUMBER	E/S PART NUMBER	QTY/ ASSY
001	CN,RIB 50SCKT	53387	MINN. MINING & MFG.EP DIV	3425-6050 (2X25)	801614-050	1
004	HW,LABL MARKING	53938	EVANS & SUTHERLAND	PER MFG PROCEDURE	802311-002	1
005	TAPE,POLY LAMINATION,	79130	NASHUA CORP. IND TAPE DIV	333	802331-001	1
006	CBL-MKR,BLANK,1X3,WRI	85480	BRADY W.H. CO	PWC-PK-3	802335-003	2
007	CBL-MKR,BLANK,1X6,WRI	85480	BRADY W.H. CO	PWC-PK-6	802335-006	1
008	HW,JCKT 161-2001		SPECTRA STRIP AN ELTRA CO	843-161-2001-0150	802062-015	10
003 1 @ 6FT.	HW,CBL 50FLTCBL	16428	COOPER BELDEN ELEC WIRE	9L28050	802163-050	7
002 P1 P2	CN,RIB 40SCKT	22526	DU PONT E I NEMOURS (CONN)	71600-340	801614-240	2

8 ITEMS LISTED

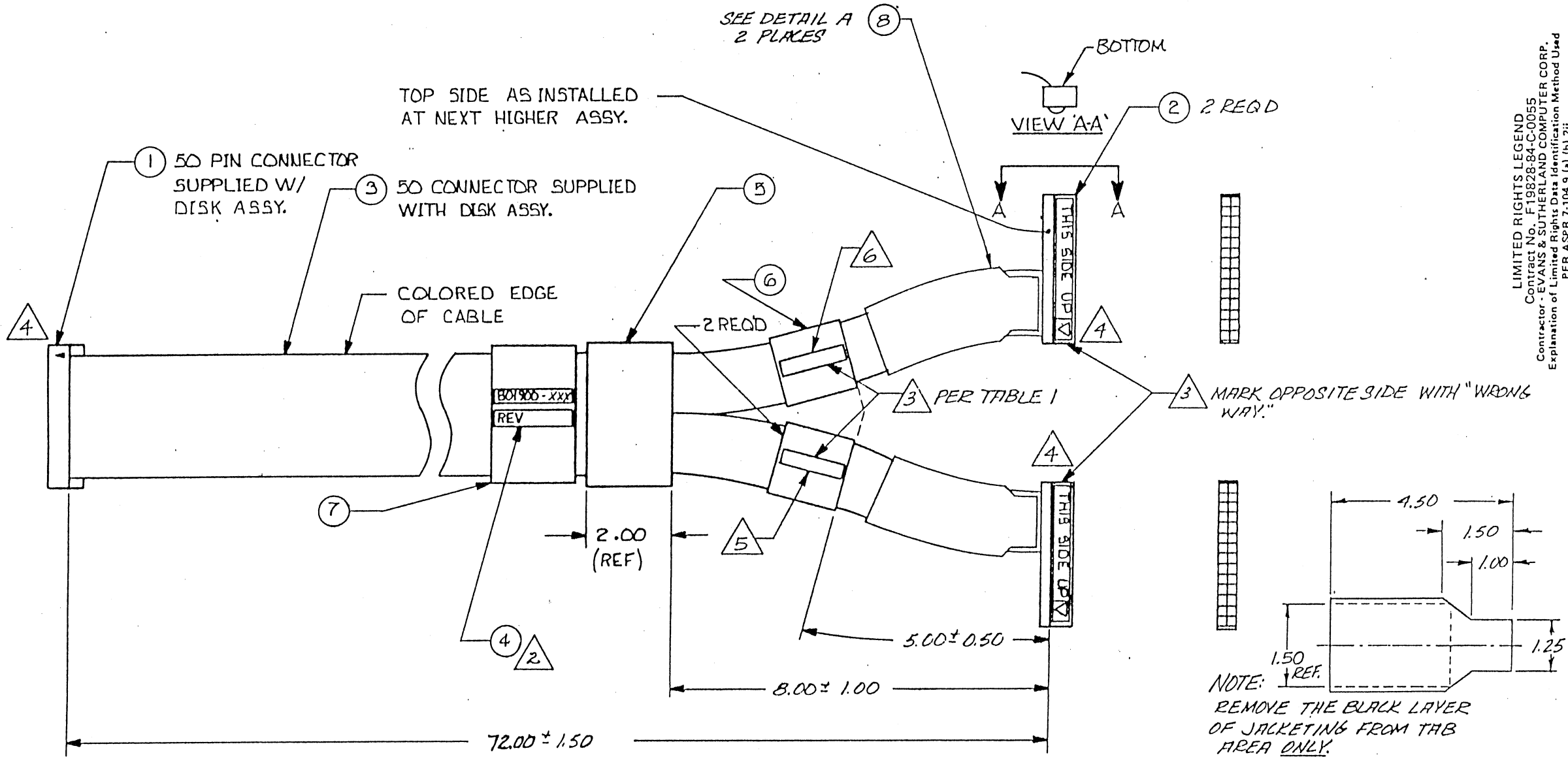


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TABLE I		
DASH NO.	△ LABEL	△ LABEL
-001	A1A1J1	A1A1J2
-002	A33J1	A33J2

REV. LEVEL FOR DASH NO.		REVISIONS				
-002	-001	ZONE	LTR	DESCRIPTION	DATE	APPROVED
RC2				MINOR DWG CHNG	GR 10-2-81	R. Spore
	A1			ADDED CABLE MARKER	C6 7 NOV 78	"
	A2			CHNG CABLE NO 801909-001 TO 801900-001	AUG 8, 1979	"
A1	A3			MADE TAB DWG	LLW 8-25-83	R. Spore
A2	A4			ADDED NOTES, CHMSD COND	RBH 6-20-84	R. Spore



NOTES:

- 1. MODIFICATIONS TO RED CABLE ASSY 106243-01 SUPPLIED WITH DISK ASSY 108090-01.
A. CUT OFF OR REMOVE EXISTING 50 PIN CONNECTOR.
B. SPLIT 50 CONDUCTOR RIBBON CABLE; ADD 2 NEW CONNECTORS PER DWG.
- 2. MARK ASSY NO., REV LEVEL AND S/N PER E&S PRODUCTION PROCESSES R9.1. LOCATE APPROX. AS SHOWN.
- 3. MARK ALL CONNECTORS AS SHOWN PER E&S PRODUCTION PROCESSES R9.1.

NOTES CONT'D ON SHT 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON .xx ± .10 .xxx ± — ANGLES ± — ✓	DRAWN <i>[Signature]</i> NOV. 5 '79
	CHECKED <i>[Signature]</i> JAN 3 80
	MECH.
	ELEC. <i>[Signature]</i> 7 JAN 80
	PROJ. ENG. <i>[Signature]</i> 7 JAN 80
	APPROVED <i>[Signature]</i> 1-9-80
MATERIAL	
FINISH	

EVANS & SUTHERLAND SALT LAKE CITY, UTAH, 84108	
CABLE ASSY, FLAT RIBBON, FLOPPY DISK	
SIZE	CODE IDENT NO
C	53938 801900-TAB
SCALE NONE	DO NOT SCALE
SHEET 1	OF 2

LIMITED RIGHTS LEGEND
Contract No. F19828-84-C-0055
Contractor - EVANS & SUTHERLAND COMPUTER CORP.
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4

3

2

1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

D

D

C

C

B

801900-TAB

A

A

NOTES CONTD:

- 4. TRIM CONDUCTORS TO BE EVEN WITH OR SLIGHTLY RECESSED IN CONDUCTORS.
- 5. REFER TO TABLE I.
- 6. REFER TO TABLE I.

LIMITED RIGHTS LEGEND
 Contract No. F19828-84-C-0055
 Contractor - EVANS & SUTHERLAND COMPUTER CORP.
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SIZE	CODE IDENT. NO.	REV
C	53938	SEE
	801900-TAB	REV
		BLOCK
SCALE: NONE	DO NOT SCALE	SHEET 2 OF 2

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_____ Number _____

Magnetic Tape

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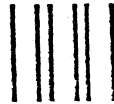
Disk

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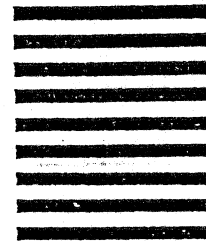


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