

**SYSTEM 432/600
HARDWARE REFERENCE MANUAL**

VOLUME 2

Order Number 172172-001

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REV.	REVISION HISTORY	DATE
-001	Original Issue	12/82



This volume, Volume 2 of the System 432/600 Hardware Reference Manual, contains all engineering schematics and drawings referenced in Volume 1. The two-volume set is the technical engineering reference for the System 432/600 family of products.

Volume 1 describes all interface specifications, timing, and protocols. It provides timing charts, state machine flow charts, detailed block diagrams, and a detailed functional description of each logic board in the set. It describes the iSBC 432/630 chassis, and all backplanes and card cages available. References are made throughout the descriptive text in Volume 1 to schematics and drawings in this volume.

Specific drawing page numbers may be located in the table of contents.

This manual contains one chapter only:

Chapter 1 Schematics and Drawings

All engineering schematics and mechanical drawings referenced in Volume 1 are contained in this chapter.

There are no illustrations or tables in this manual.

Additional related information is available from the following documents:

System 432/600 Hardware Reference Manual, Volume 1, Order Number:
172100

System 432/600 System Reference Manual, Order Number: 172098

System 432/600 Diagnostic Software User's Guide, Order Number:
172099

System 432/600 Installation and Maintenance Manual, Order Number:
172101

Intel MULTIBUS[®] Specification, Order Number: 501310

Introduction to the iAPX 432 Architecture, Order Number: 171821

iAPX 432 General Data Processor Architecture Reference Manual,
Order Number: 171860

iAPX 432 Interface Processor Architecture Reference Manual; Order Number: 171863

Intel Component Data Catalog, Order Number: 210298

Intel Systems Data Catalog, Order Number: 210299



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NOTE

Because all illustrations are engineering drawings, figure numbers and titles are not assigned to them. The title of each drawing serves as the illustration title.

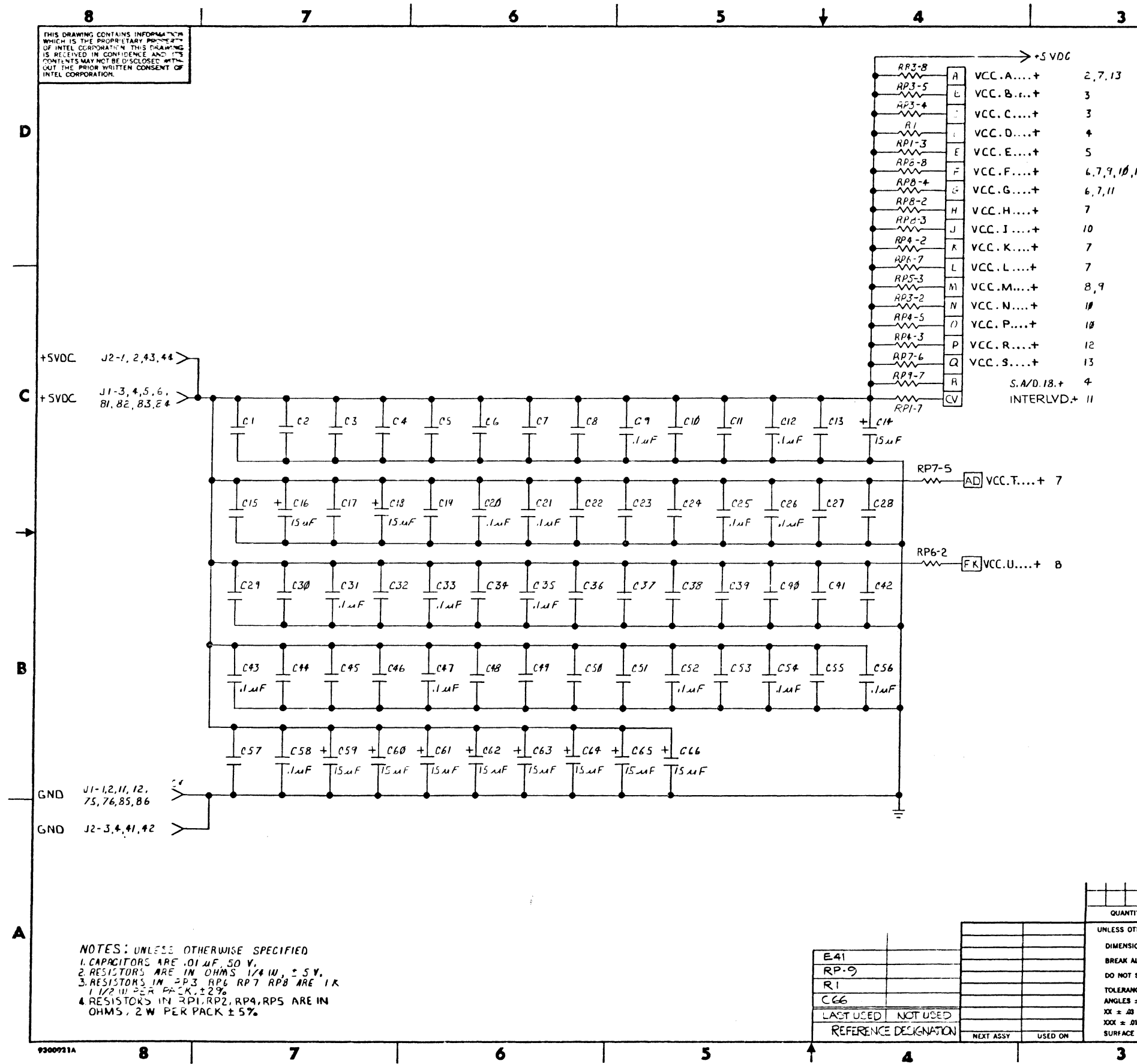


INTRODUCTION

Volume 2, Chapter 1 of the System 432/600 Hardware Reference Manual, contains all engineering schematics and mechanical drawings referenced in Volume 1. The schematics and drawings are placed in this volume in the order in which they are referenced in Volume 1. Specific schematic or drawing page numbers may be found in the table of contents.

All schematics and drawings are current when the manual is printed. However, minor changes may have been made on some sheets between the printing of this manual and the shipment of your product.

Intel ships current schematics with each product. If you are using this manual with a specific product, the number and revision level of the schematics shipped with that product should be compared with those in your manual, and the most current schematics inserted in this copy of the manual.

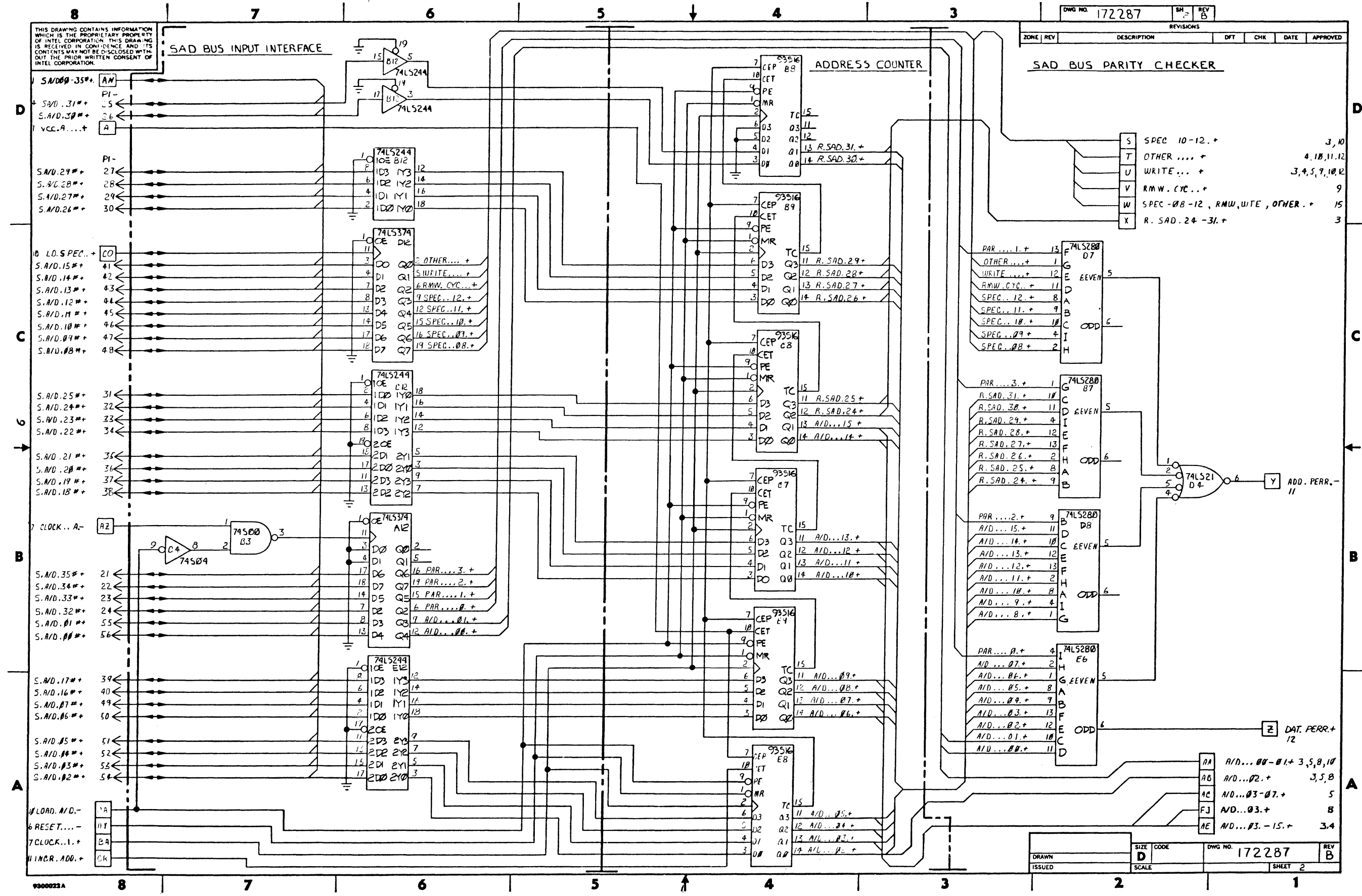


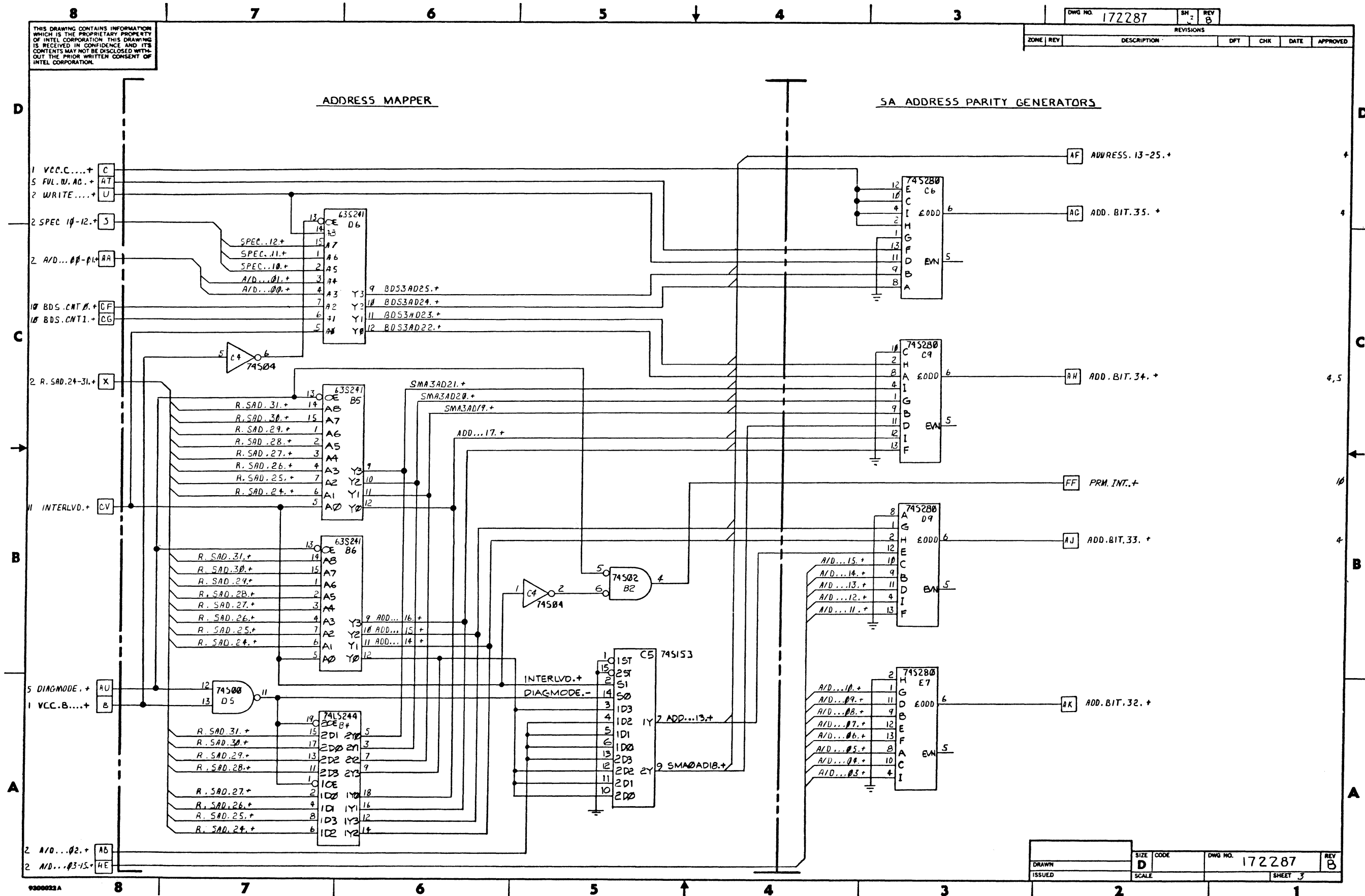
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B		PER ECO 17-0165			4/7/81	

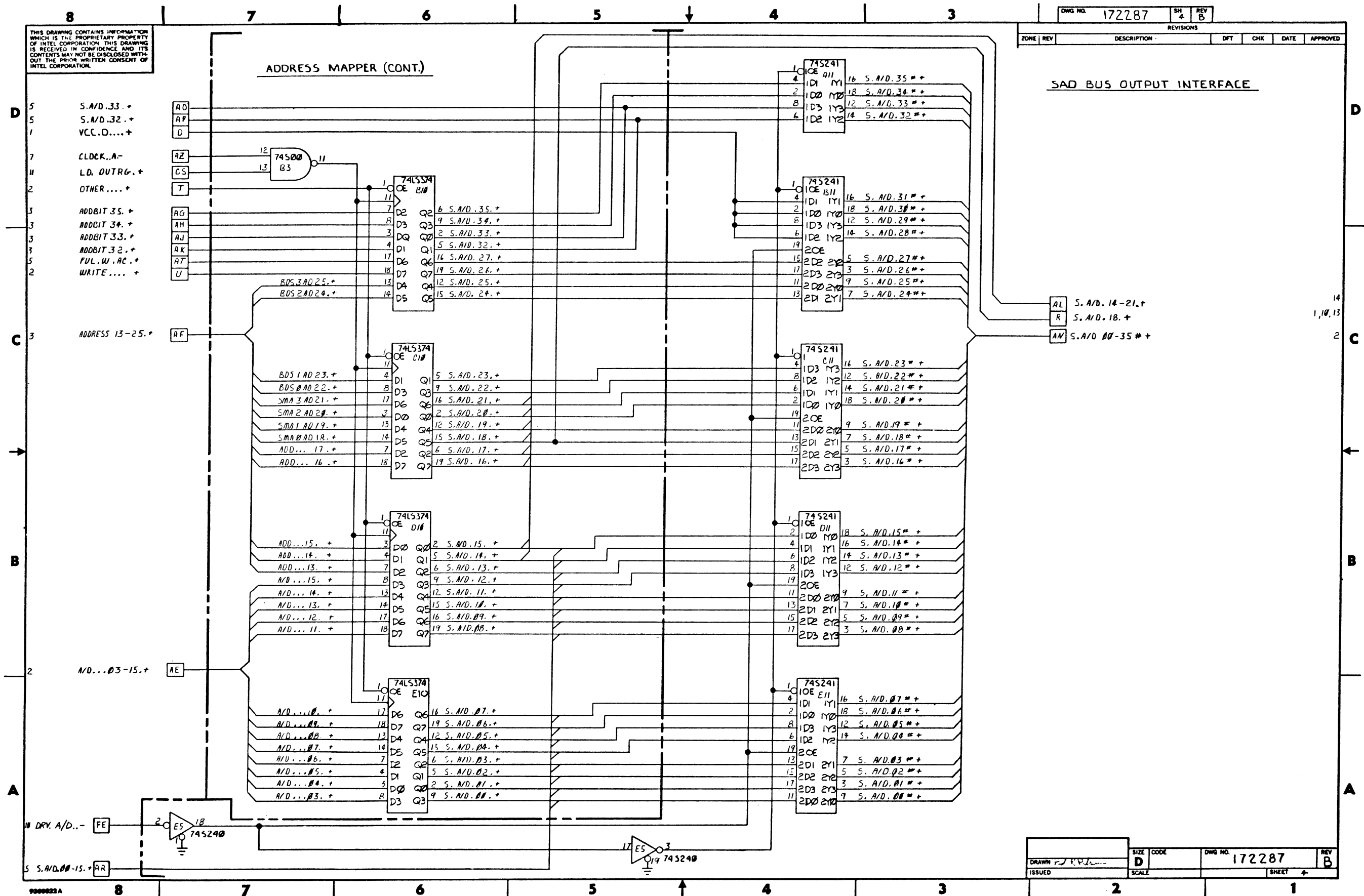
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B3, D5, F4, K3, K11	74 S 00	7	14	B3, D5, K3, K3, K11, K11-B
B2, H4	74 S 02	7	14	B2, H4, I3
J3	74 LS 02	7	14	J3, 4, 10
C4, H5	74 S 04	7	14	
H3	74 LS 08	7	14	H3, 8
D4, F5	74 LS 21	7	14	D4, B, F5, 8
J9	74 LS 27	7	14	
J8	74 S 30	7	14	
D3, J4	74 S 32	7	14	D3, 3, 6
J10	74 S 37	7	14	
H10	74 S 74	7	14	
A2	74 LS 74	7	14	
E4, F3, H9	74 S 109	8	16	
G4, G5, G6, G7	74 LS 109	8	16	
K4	74 S 112	8	16	K4, 5, 6
B1	74 LS 125	7	14	
G8	74 LS 133	8	16	
F6, H6	74 S 138	8	16	
E3	74 S 139	8	16	
H11	74 S 140	7	14	
K5	74 S 151	8	16	
C5	74 S 153	8	16	
G3, J5, J6, J7	74 LS 161	8	16	
E5	74 S 240	10	20	
G9, K12	74 LS 240	10	20	
A10, A11, B1, C11, D11, E11, H12, J12	74 S 241	10	20	A11, 3, 5, 7, 9
A3, A4, A7, B4, B12, C12, E12, F7, G10, J11	74 LS 244	10	20	
C6, C9, D9, E7	74 S 280	10	20	
A5, B7, D7, D8, E6, F9	74 LS 280	10	20	
D2, F10, H2, K7	74 S 374	10	20	
A6, A8, A9, A12, B10, C10, D10, D12, E10, F2, F8, F11, F12, G11, G12, H7, K2, K10	74 LS 374	10	20	
C1, C2, D1, E1, F1, G1, H1, J1, J2, K6	27 S 21	8	16	
B5, B6, D6, K8, K9	63 S 241	8	16	
B8, B9, C7, C8, E8, E9	93 S 16	8	16	
RP1-9				1

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DRN BY TEL PALMER		11 24 81
CHK BY P. S. [Signature]		1/15/81
ENGR APVD [Signature]		1/15/81
APVD		
APVD		
PARTS LIST		
intel 3865 BOWERS AVE. SANTA CLARA, CALIF. 95051		
TITLE LOGIC DIAGRAM, PWA, ISBC 432/604, MC		
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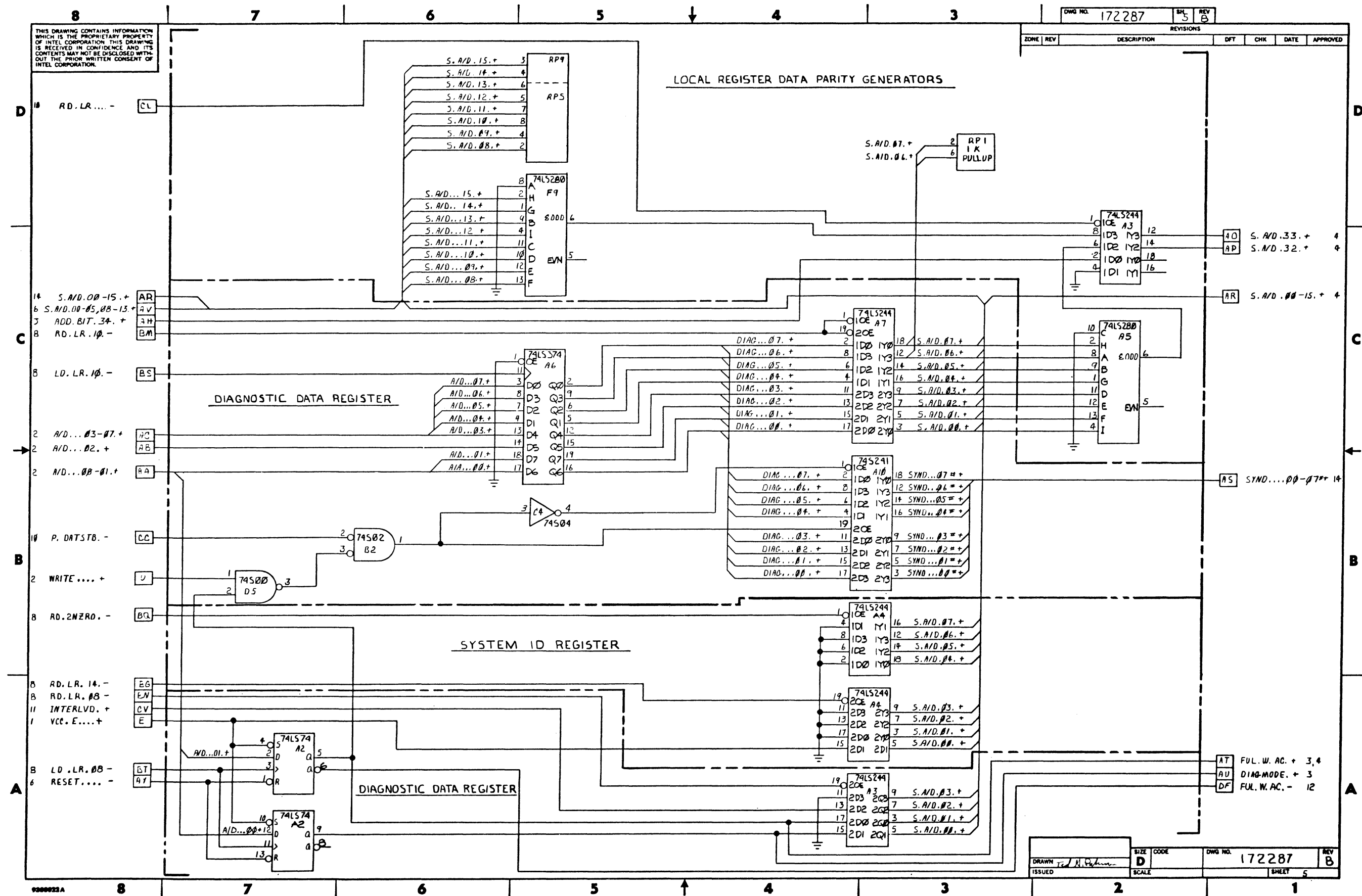
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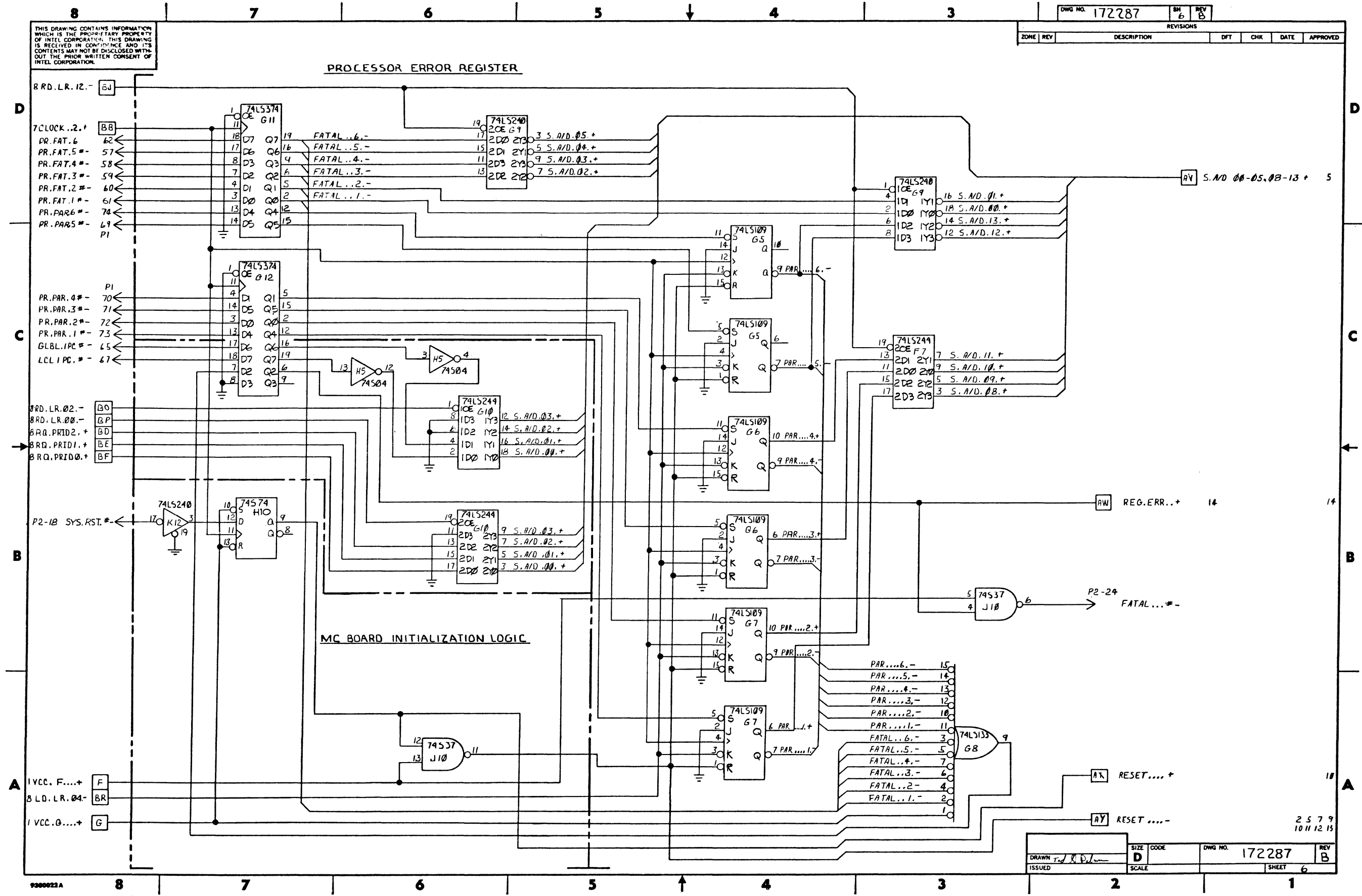


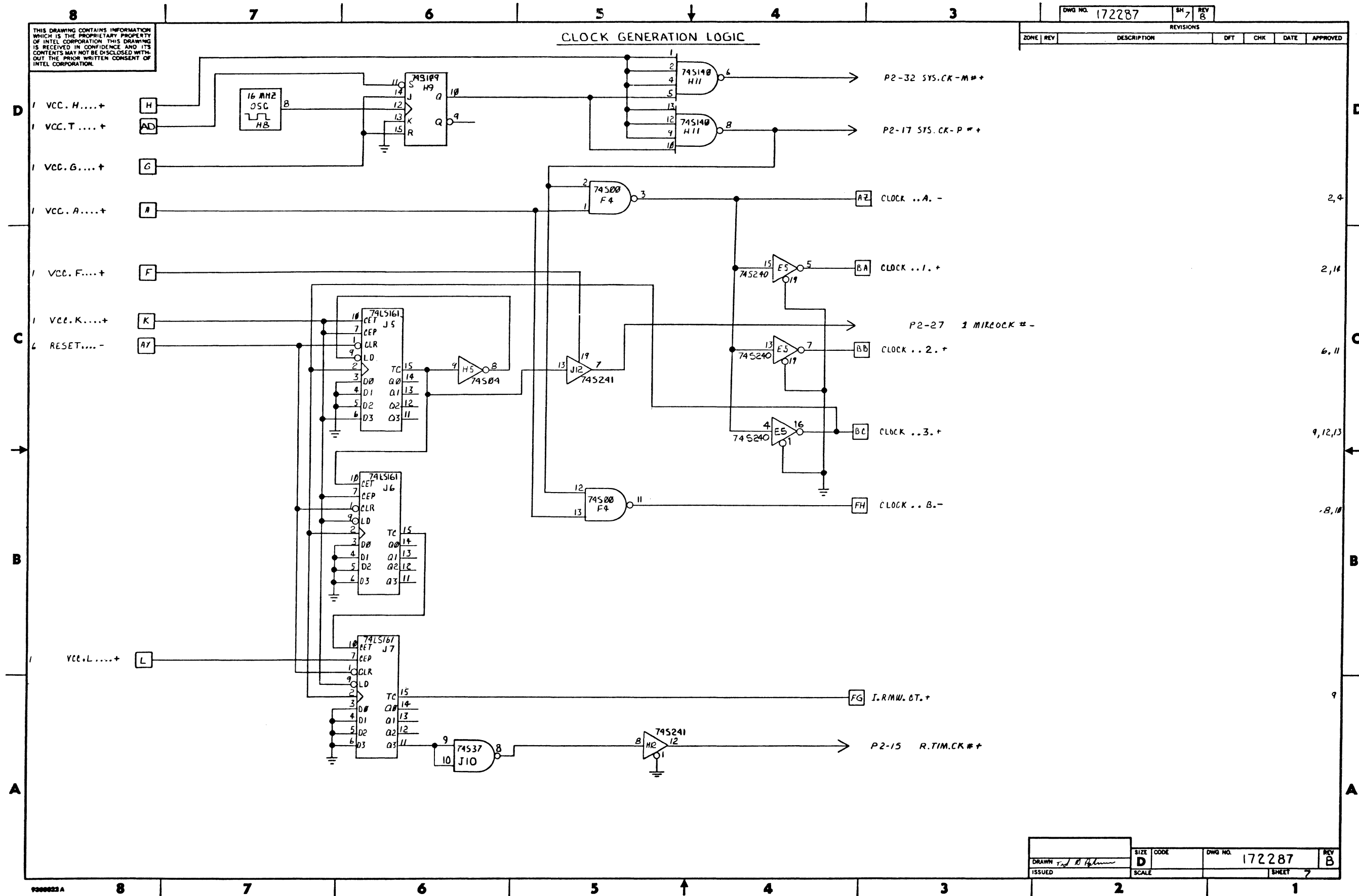




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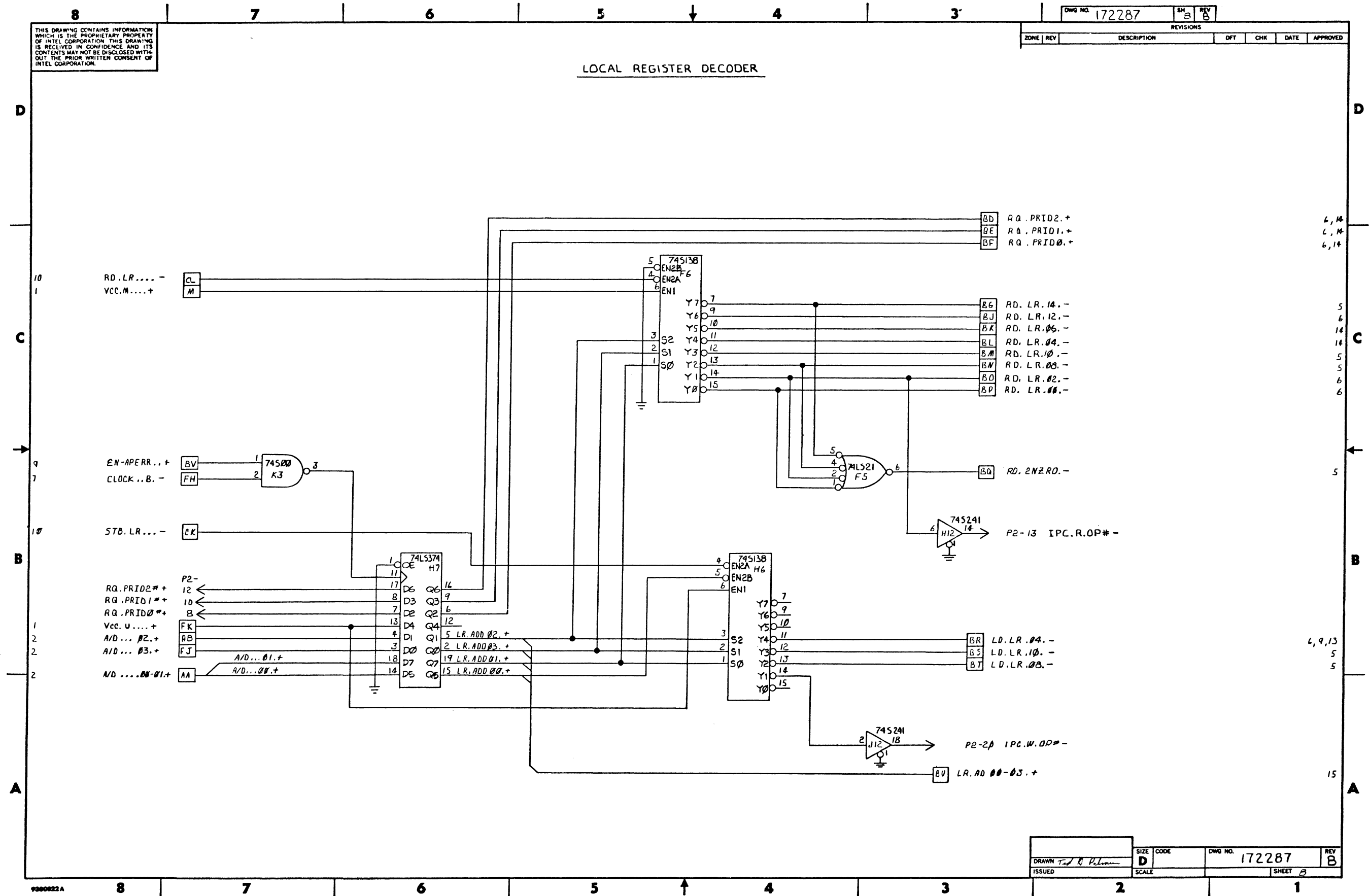






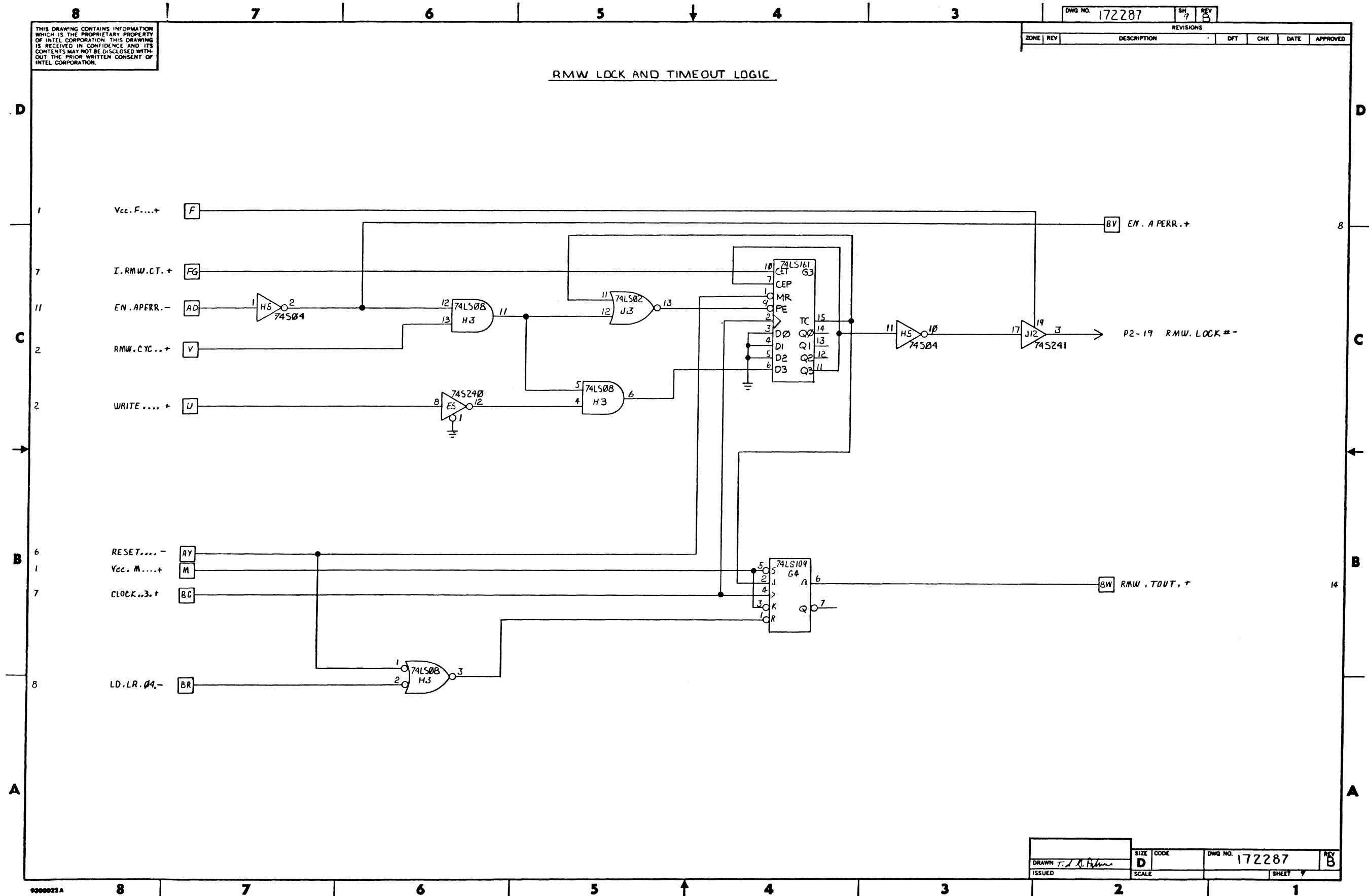
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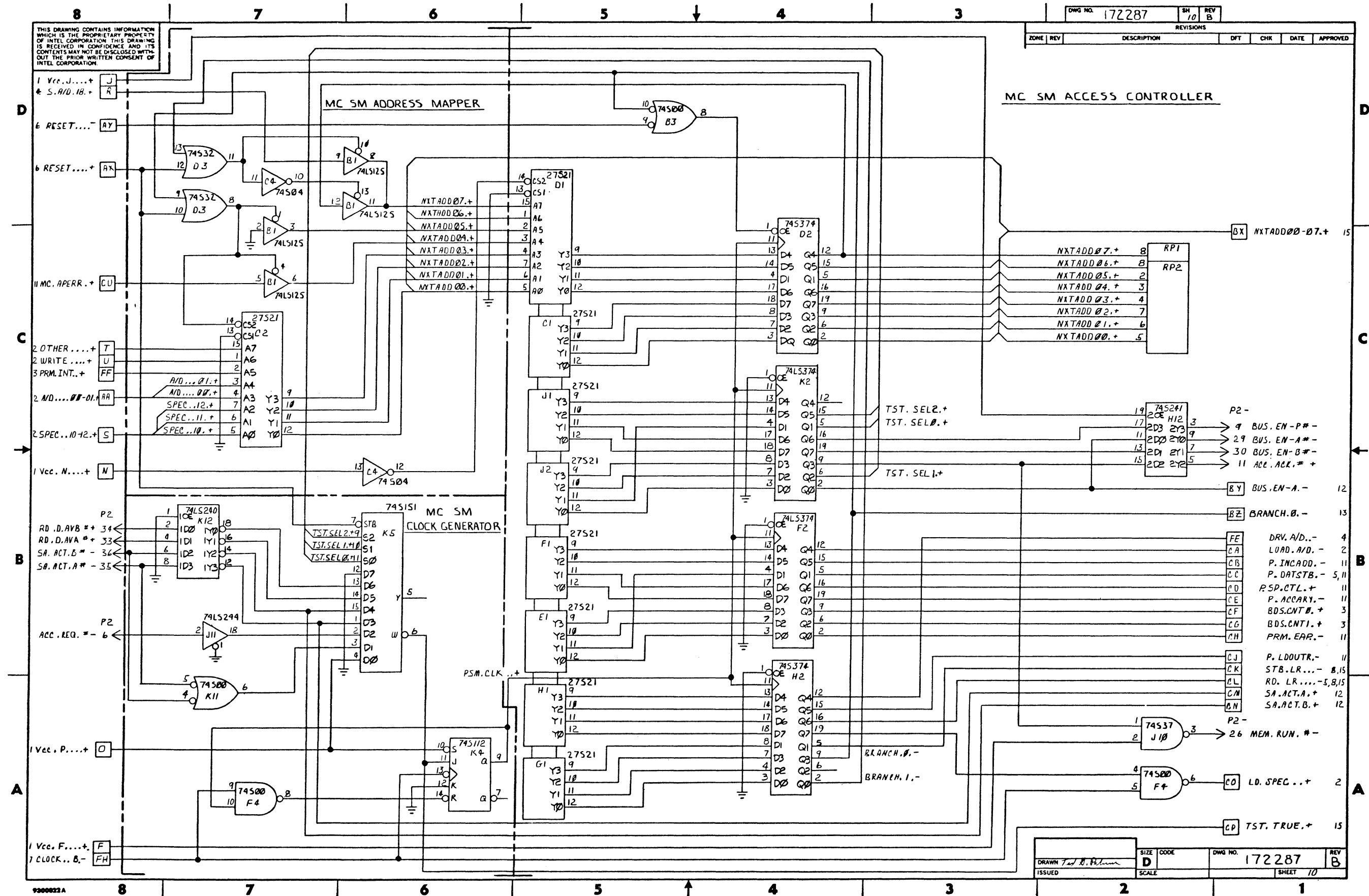
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ISSUED	SCALE		SHEET B	



9300022A

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ISSUED	SCALE		SHEET	



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ZONE	REV	DESCRIPTION	DFT	CHK	DATE
APPROVED					

MC SM ACCESS CONTROLLER

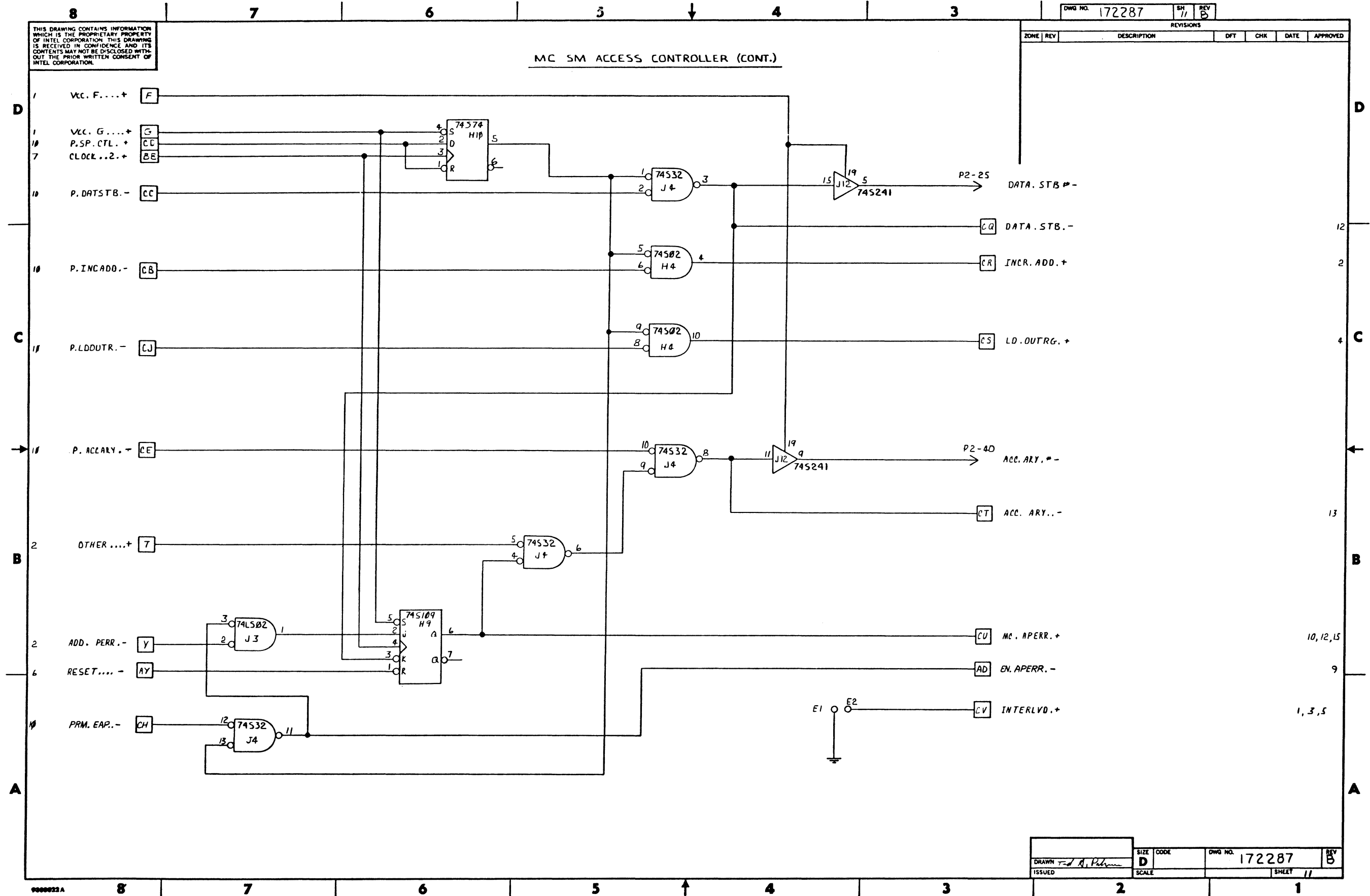
NXTADD07.+	8	RPI
NXTADD06.+	8	RP2
NXTADD05.+	2	
NXTADD04.+	3	
NXTADD03.+	4	
NXTADD02.+	7	
NXTADD01.+	6	
NXTADD00.+	5	

20E H12	3	9	BUS.EN-P#-
2D3 273	9	29	BUS.EN-A#-
2D0 270	7	30	BUS.EN-B#-
2D1 271	5	11	ACC.ACK.#+

FE	DRV.A/D.-	4
CA	LOAD.A/D.-	2
CB	P.INCADD.-	11
CC	P.DATSTB.-	5,11
CD	RSP.CTL.+	11
CE	P.ACCARY.-	11
CF	BDS.CNT#.+	3
CG	BDS.CNTI.+	3
CH	PRM.EAR.-	11
CJ	P.LDOUTR.-	11
CK	STB.LR...-	8,15
CL	RD.LR...-	5,8,15
CM	SA.ACT.A.+	12
CN	SA.ACT.B.+	12

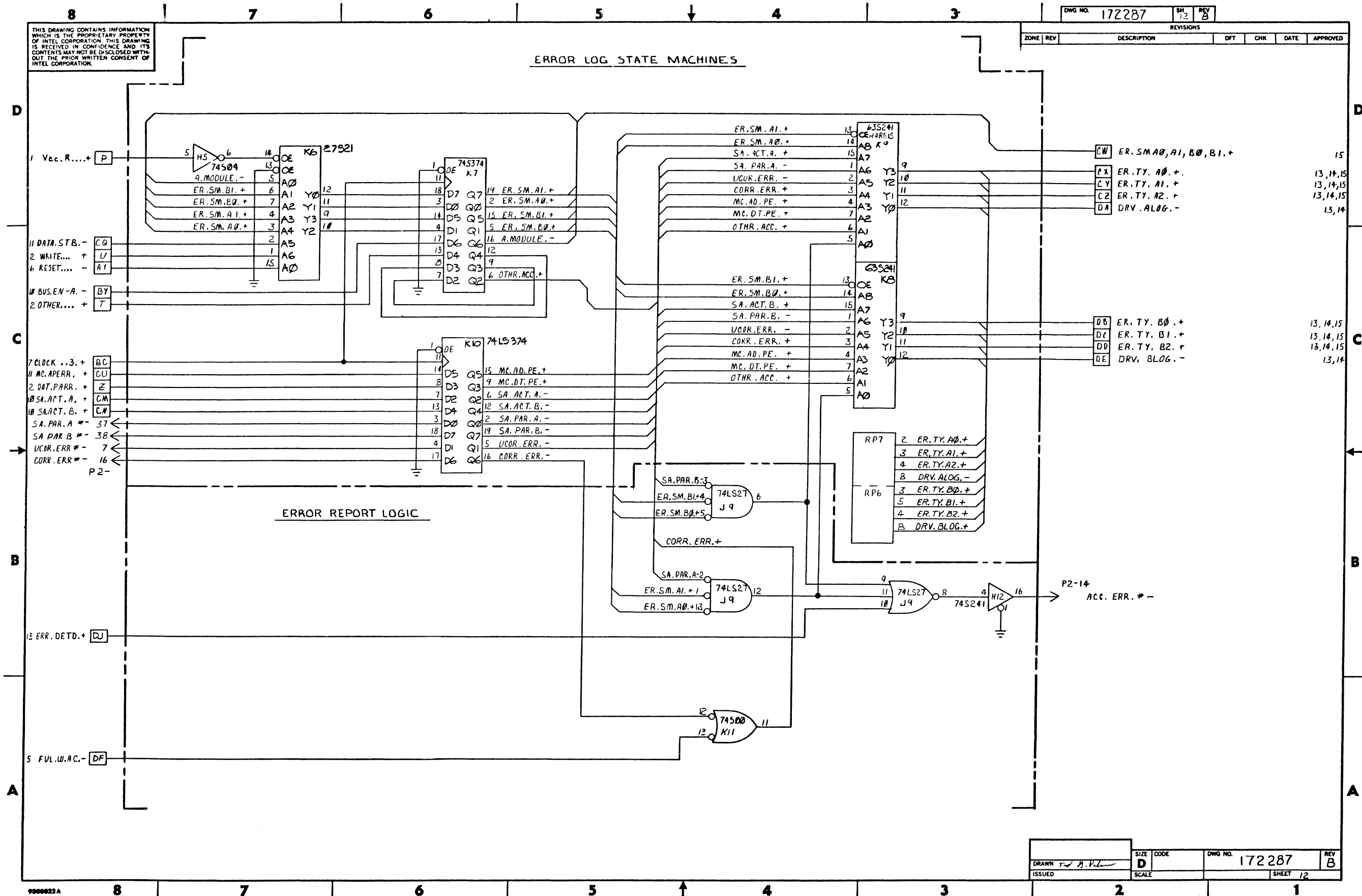
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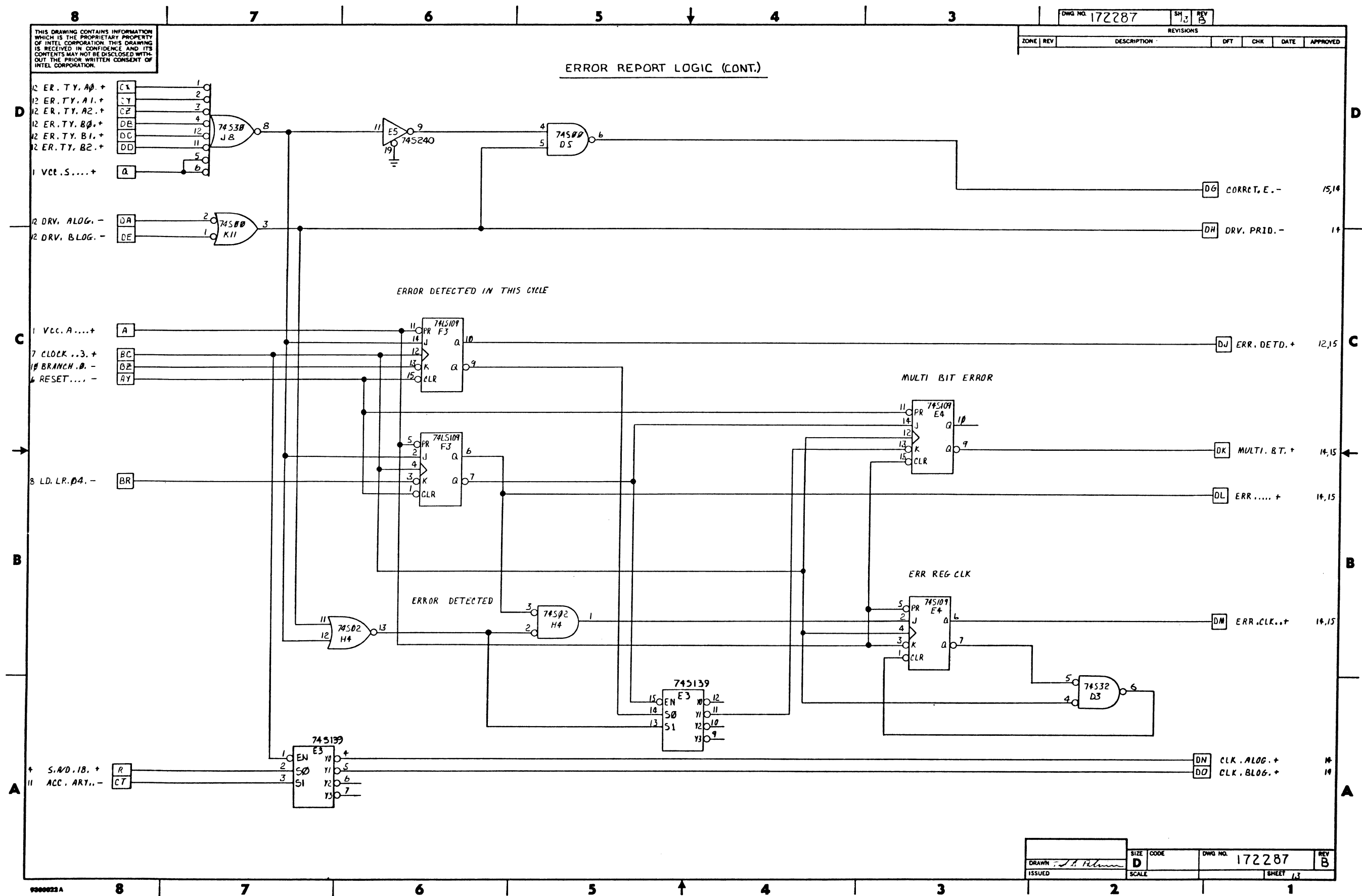
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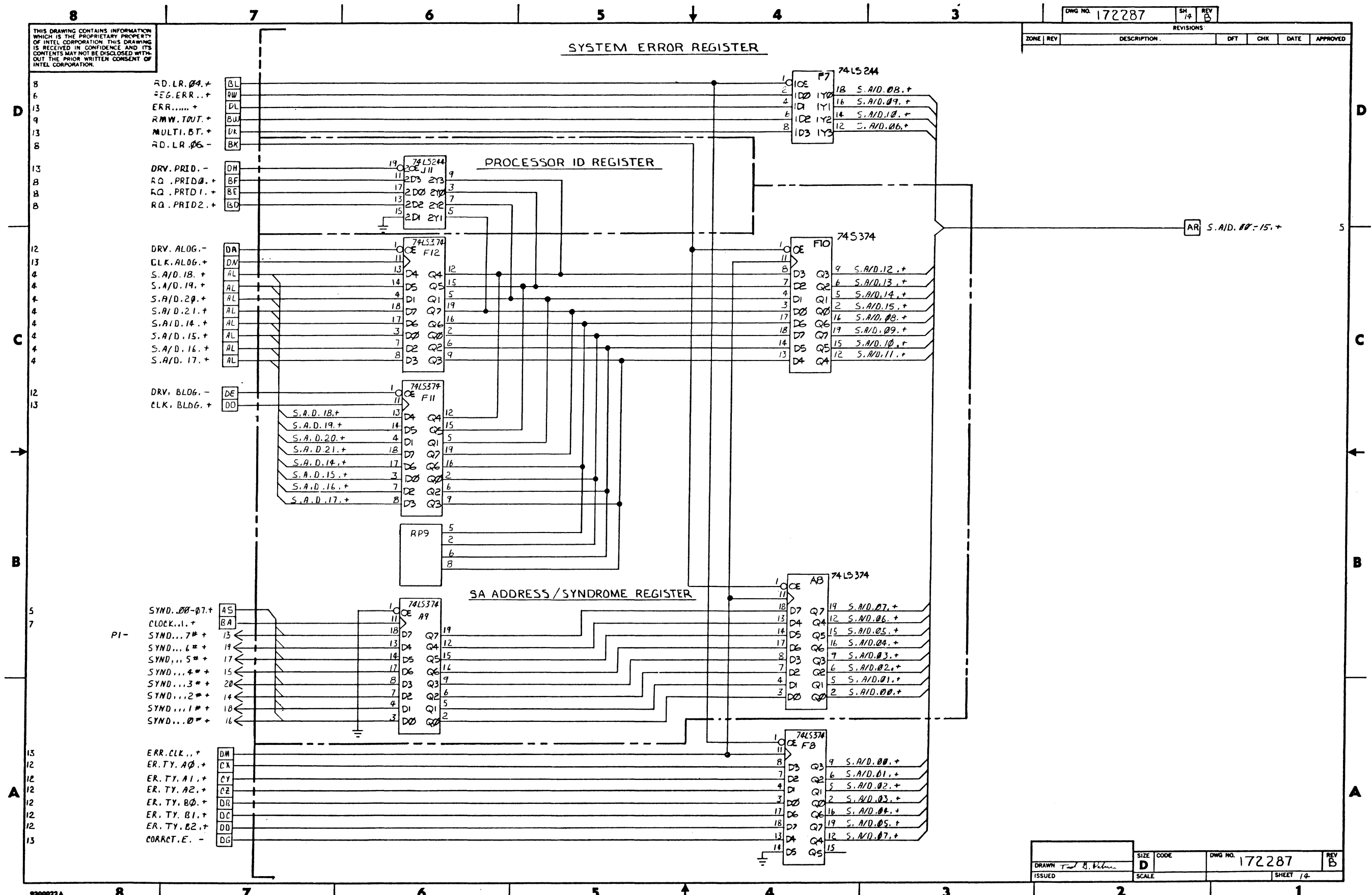
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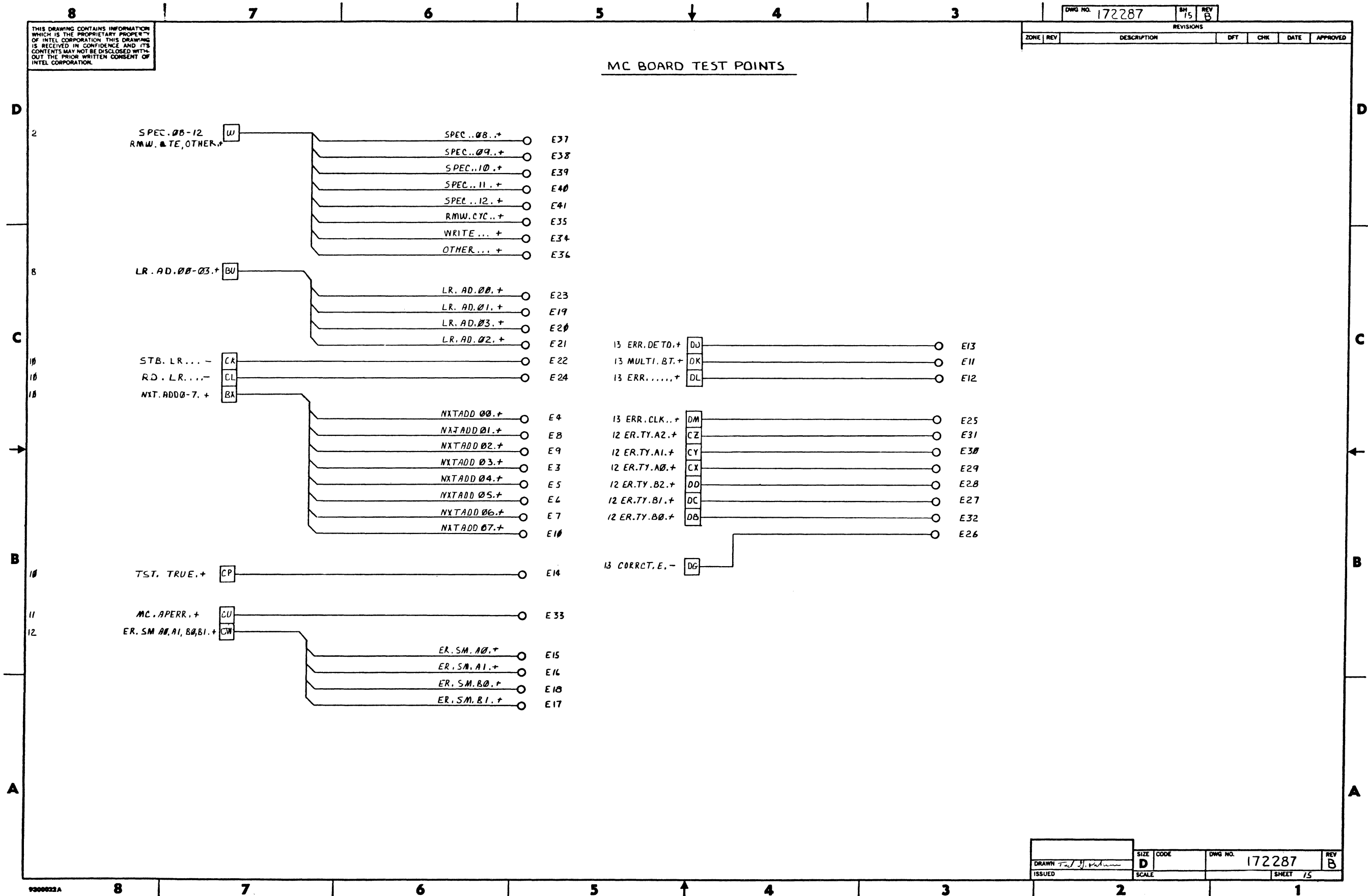
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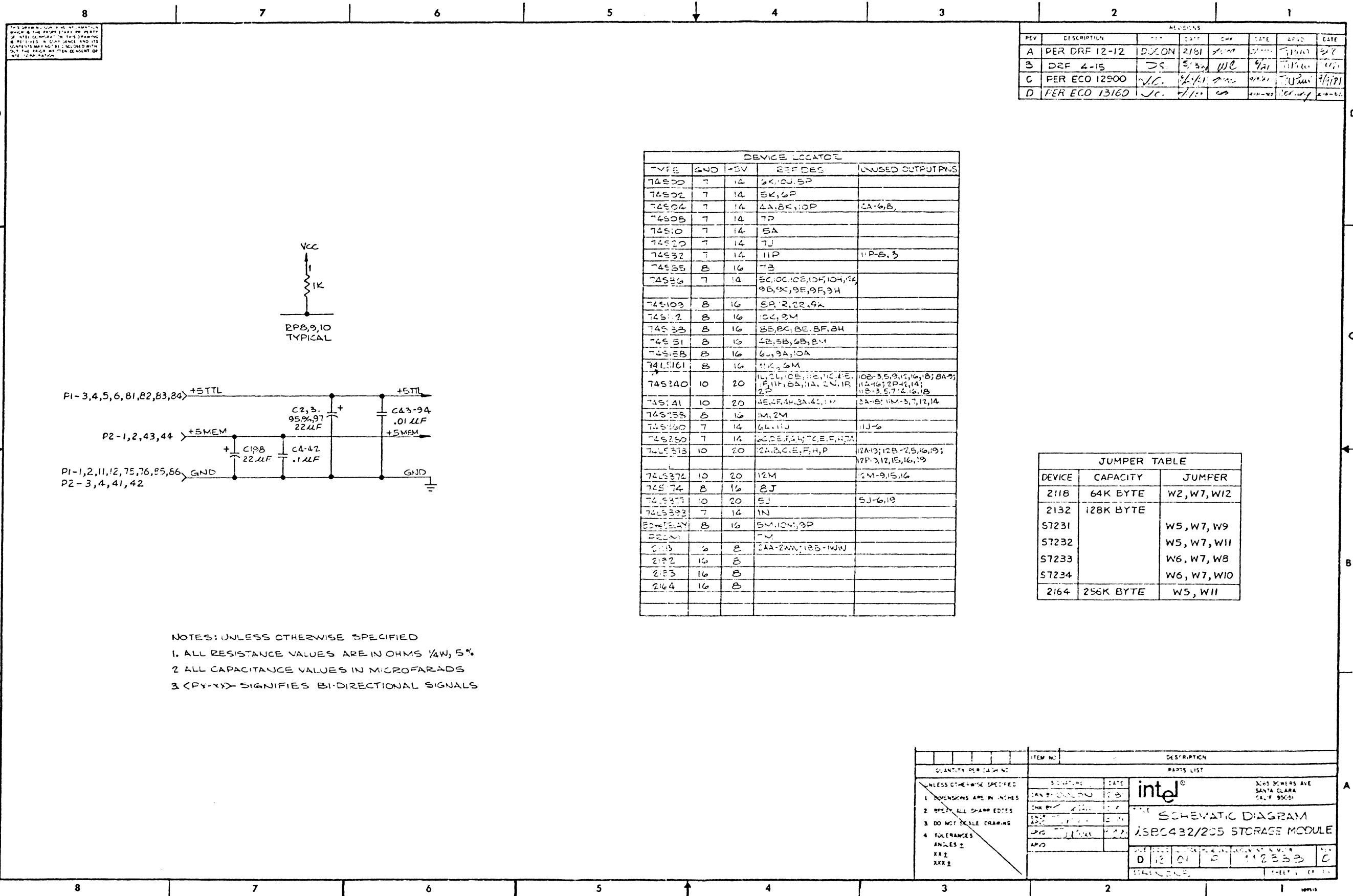




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A	PER DRF 12-12	DJCON	2/15/81	SL	2/15/81	SL
B	DRF 4-15	DS	5/30/81	WJ	5/31/81	WJ
C	PER ECO 12900	JG	6/1/81	WJ	6/1/81	WJ
D	PER ECO 13160	JG	6/1/81	WJ	6/1/81	WJ

DEVICE LOCATOR				
TYPE	GND	-5V	REF DES	UNUSED OUTPUT PINS
74S20	7	14	6K, 6P	
74S22	7	14	6K, 6P	
74S24	7	14	4A, 8K, 10P	4A-6, 8,
74S25	7	14	7P	
74S10	7	14	5A	
74S22	7	14	7J	
74S32	7	14	11P	11P-5, 3
74S85	8	16	7B	
74S86	7	14	5C, 10C, 10E, 10F, 10H, 10J, 9B, 9C, 9E, 9F, 9H	
74S103	8	16	5R, 2R, 2R, 4K	
74S112	8	16	10C, 9M	
74S33	8	16	3B, 8C, 8E, 8F, 8H	
74S31	8	16	4E, 5B, 6B, 8M	
74S58	8	16	6A, 9A, 10A	
74LS161	8	16	11C, 5M	
74S240	10	20	11L, 2L, 10B, 10E, 10F, 10G, 10H, 10J, 10K, 10L, 10M, 10N, 10P, 10Q, 10R, 10S, 10T, 10U, 10V, 10W, 10X, 10Y, 10Z, 2P	10B-3, 5, 9, 10, 11, 10; 8A-9; 11A-16; 2P-4, 14; 11B-3, 5, 7, 12, 13, 18
74S141	10	20	4E, 4F, 4H, 3A, 4C, 11V	3A-8; 11M-3, 7, 12, 14
74S155	8	16	3M, 2M	
74S160	7	14	6A, 11J	11J-6
74S162	7	14	2C, 2E, 2G, 2H, 2F, 2J, 2A	
74LS173	10	20	12A, B, C, E, F, H, P	12A-13; 12B-25, 16, 19; 12P-3, 12, 15, 16, 19
74LS374	10	20	12M	12M-9, 15, 16
74S174	8	16	8J	
74LS375	10	20	5J	5J-6, 19
74LS392	7	14	1N	
82C01	8	16	5M, 10M, 9P	
82C02	8	16	2AA-2AW, 12B-12W	
2122	16	8		
2123	16	8		
2164	16	8		

JUMPER TABLE		
DEVICE	CAPACITY	JUMPER
2118	64K BYTE	W2, W7, W12
2132	128K BYTE	
57231		W5, W7, W9
57232		W5, W7, W11
57233		W6, W7, W8
57234		W6, W7, W10
2164	256K BYTE	W5, W11

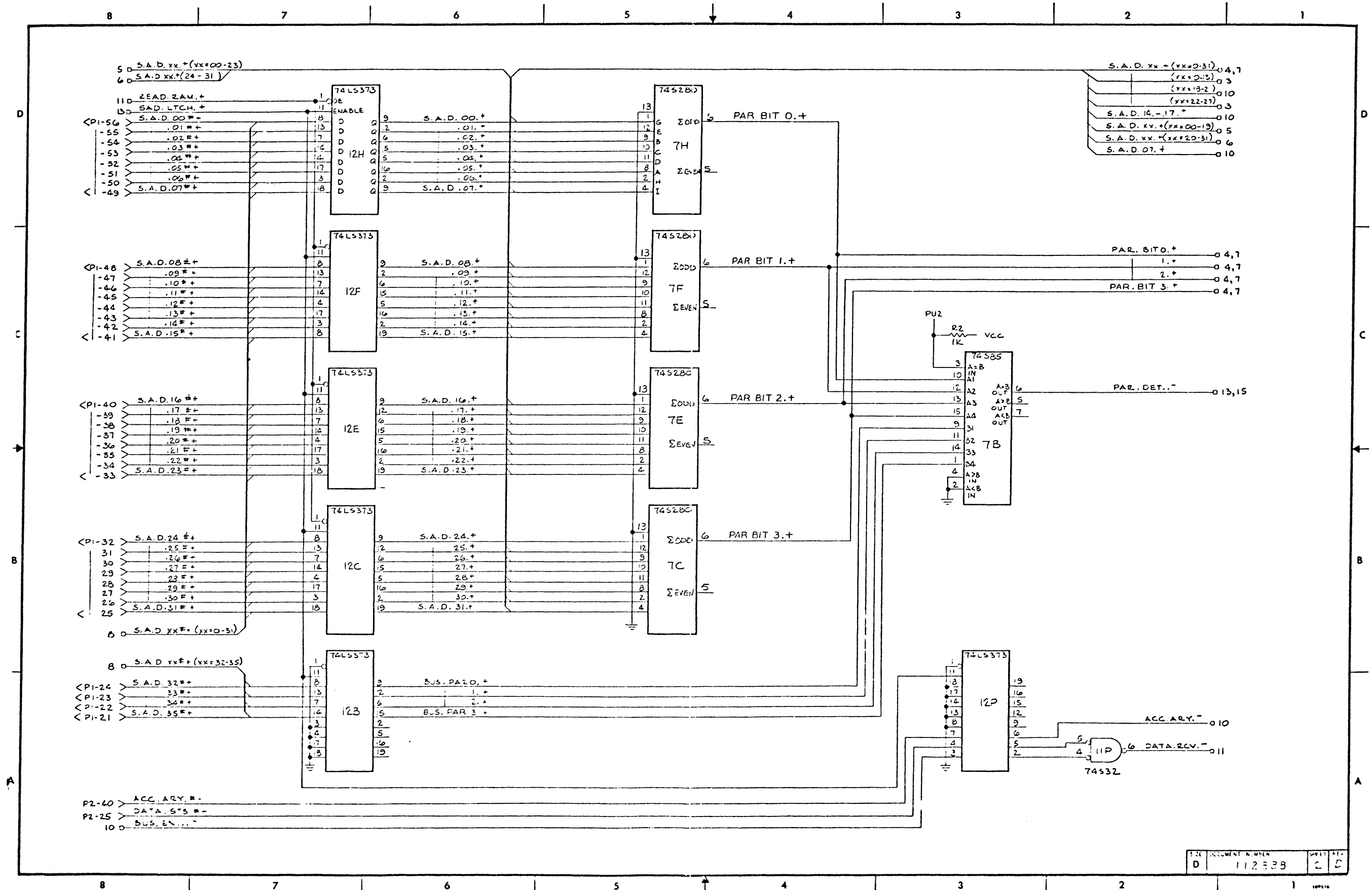
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 1. ALL RESISTANCE VALUES ARE IN OHMS 1/4W, 5%
 2. ALL CAPACITANCE VALUES IN MICROFARADS
 3. <PX-Y> SIGNIFIES BI-DIRECTIONAL SIGNALS

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2. BREAK ALL SHARP EDGES	ENG	DATE
3. DO NOT SCALE DRAWING	APP	DATE
4. TOLERANCES	APP	DATE
ANGLES ±		
XXX ±		
XXX ±		

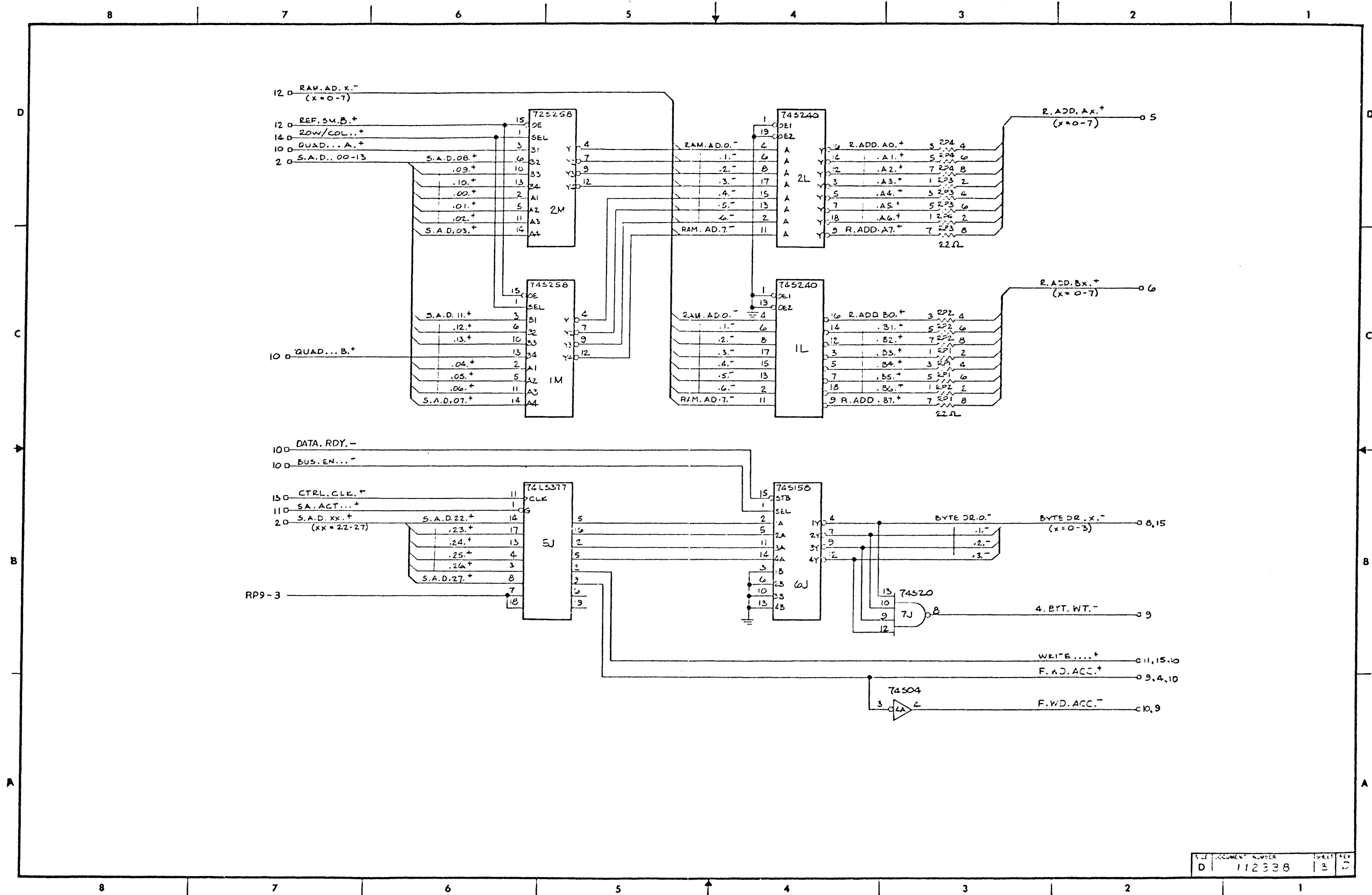
intel
 3065 BOWERS AVE
 SANTA CLARA
 CALIF. 95051

SCHEMATIC DIAGRAM
 25BC432/205 STORAGE MODULE

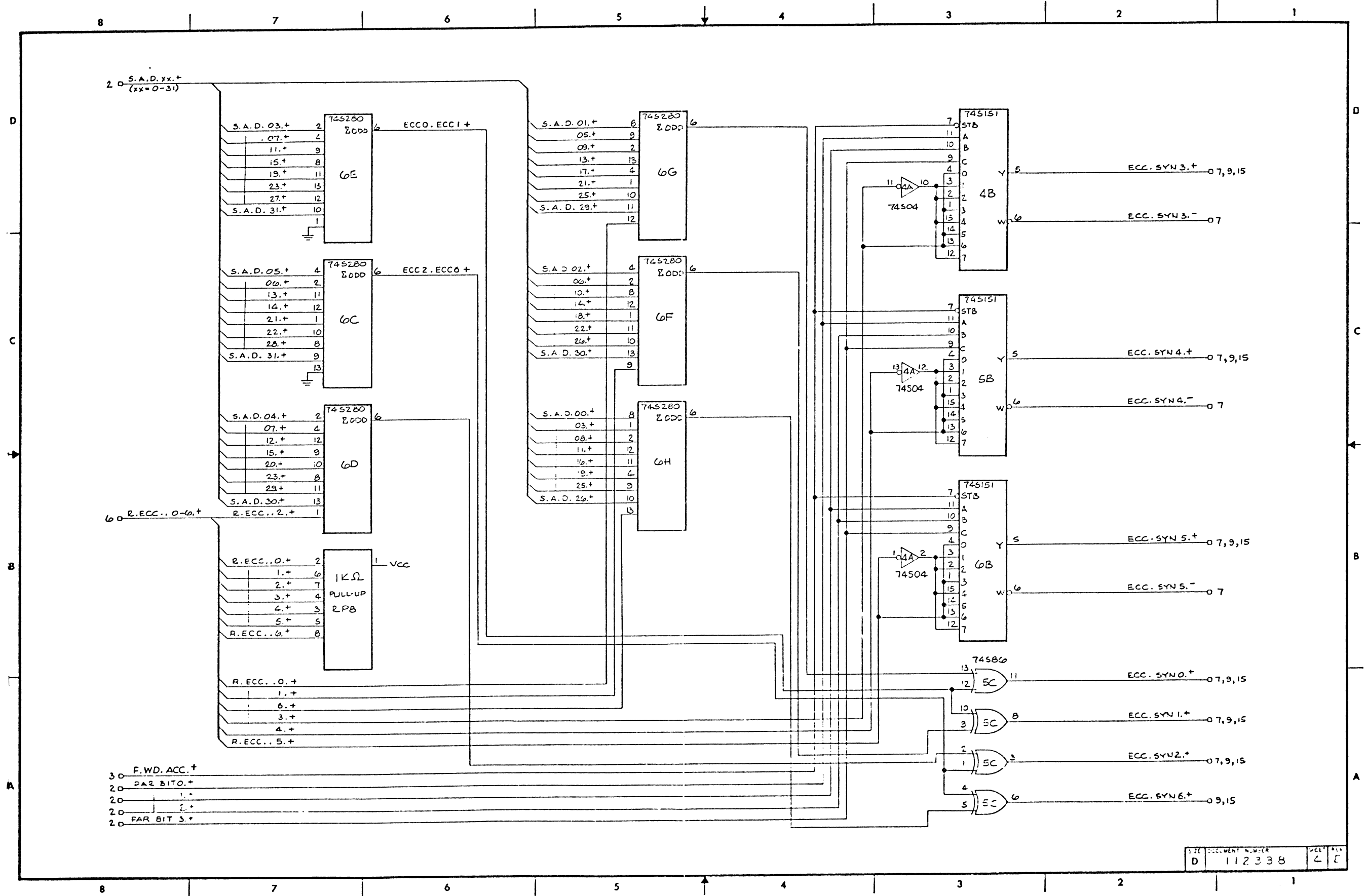
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 CHECKED BY: WJ
 APPROVED BY: WJ



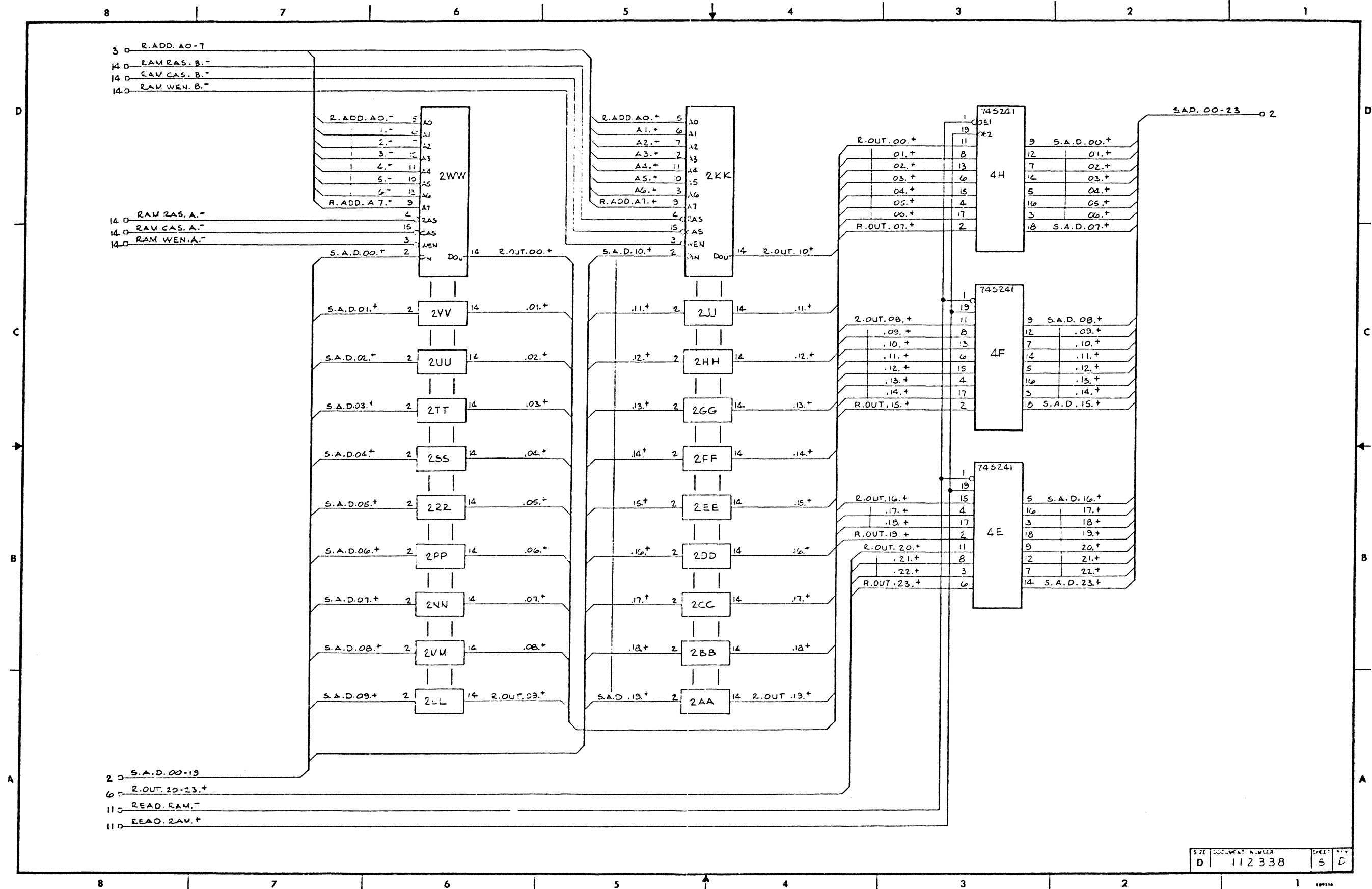
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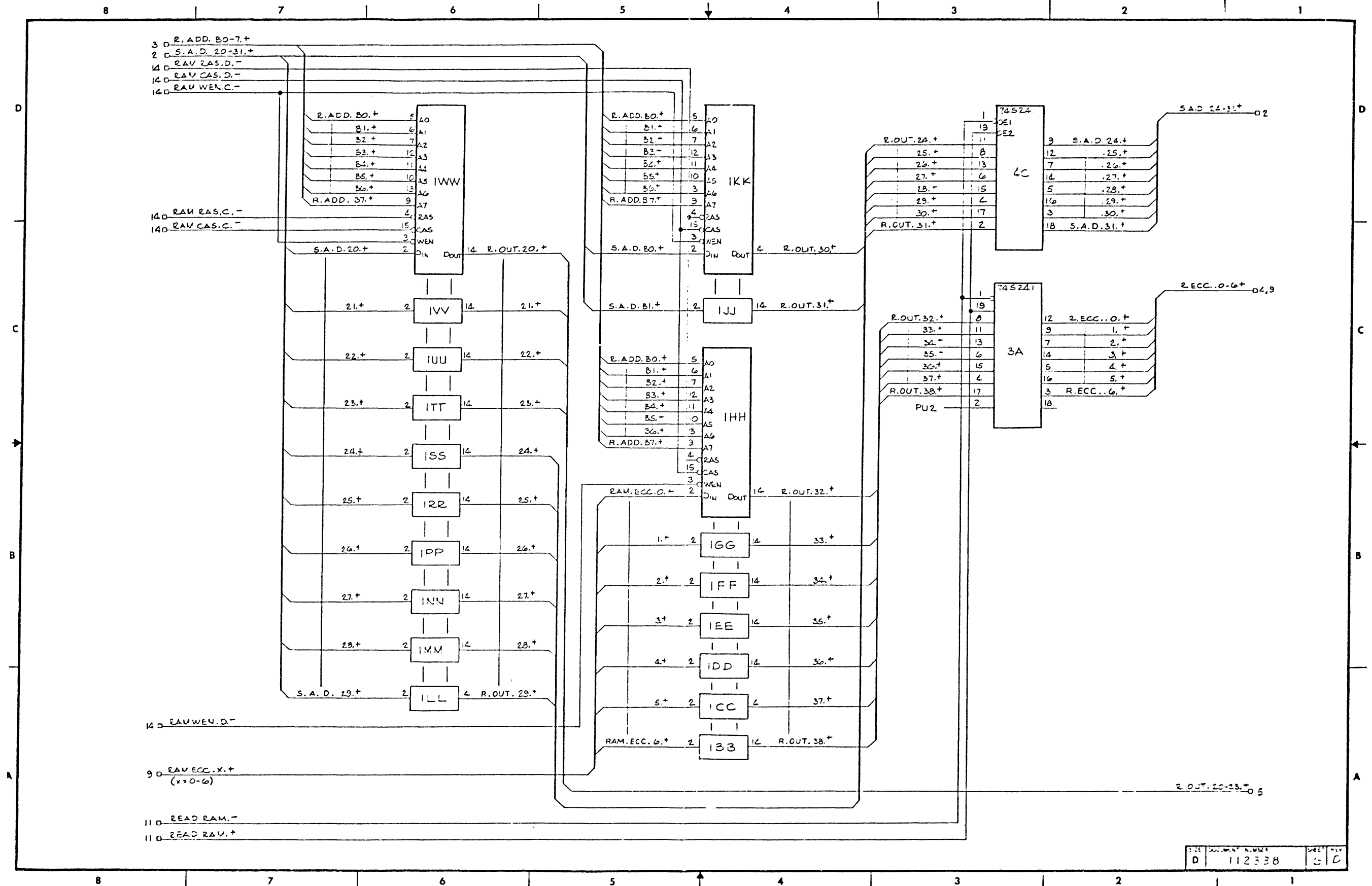
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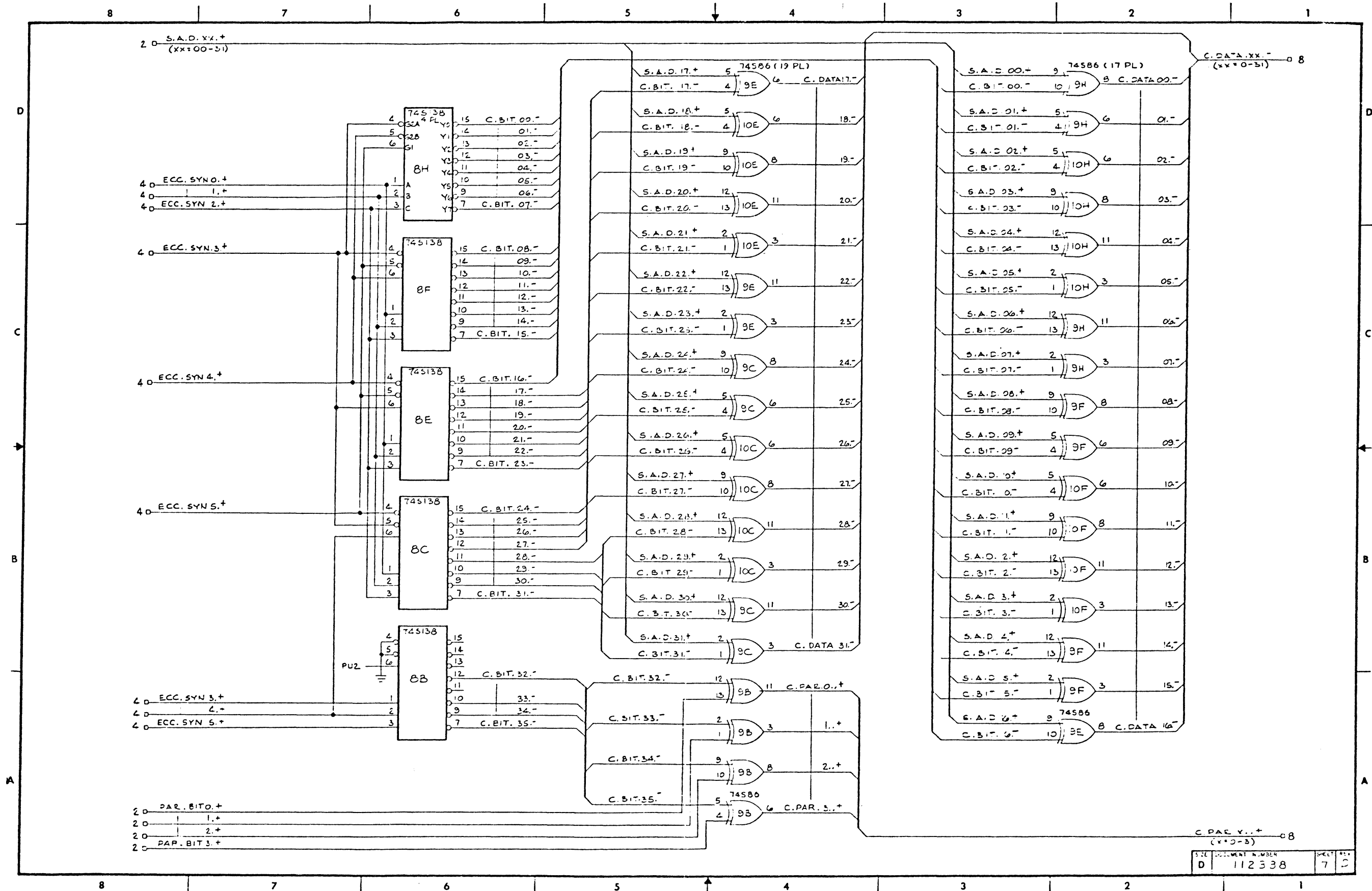


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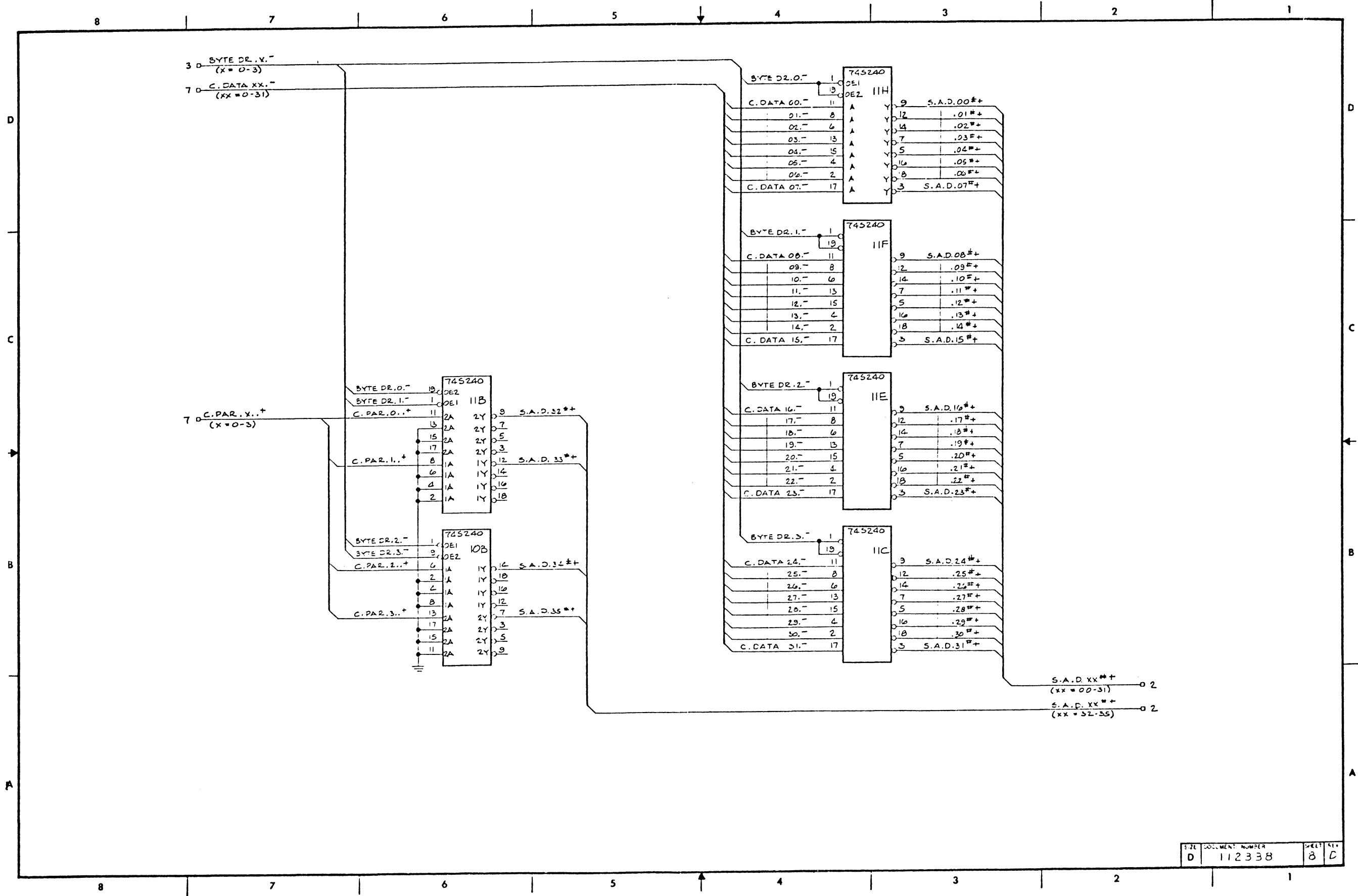


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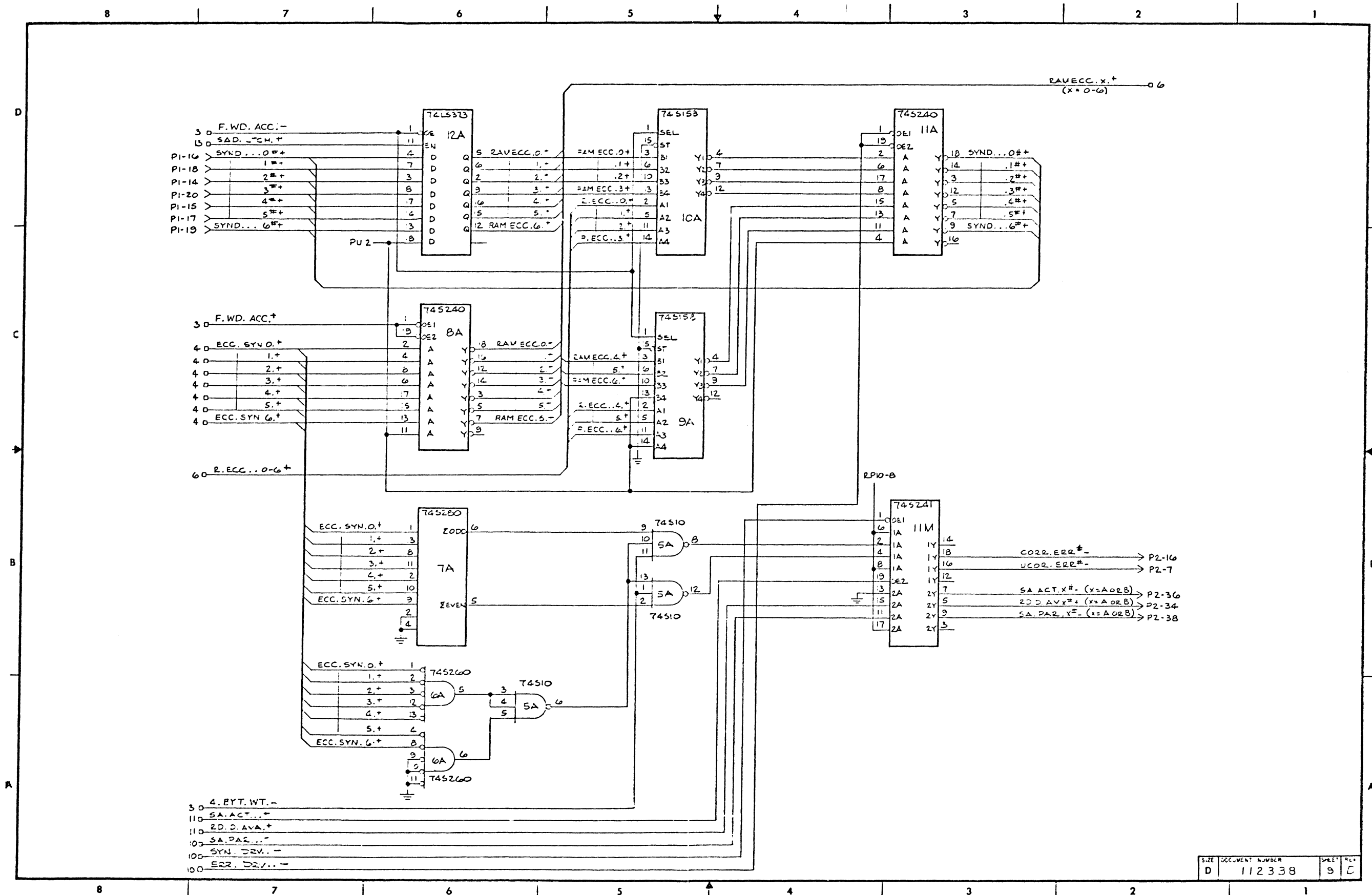




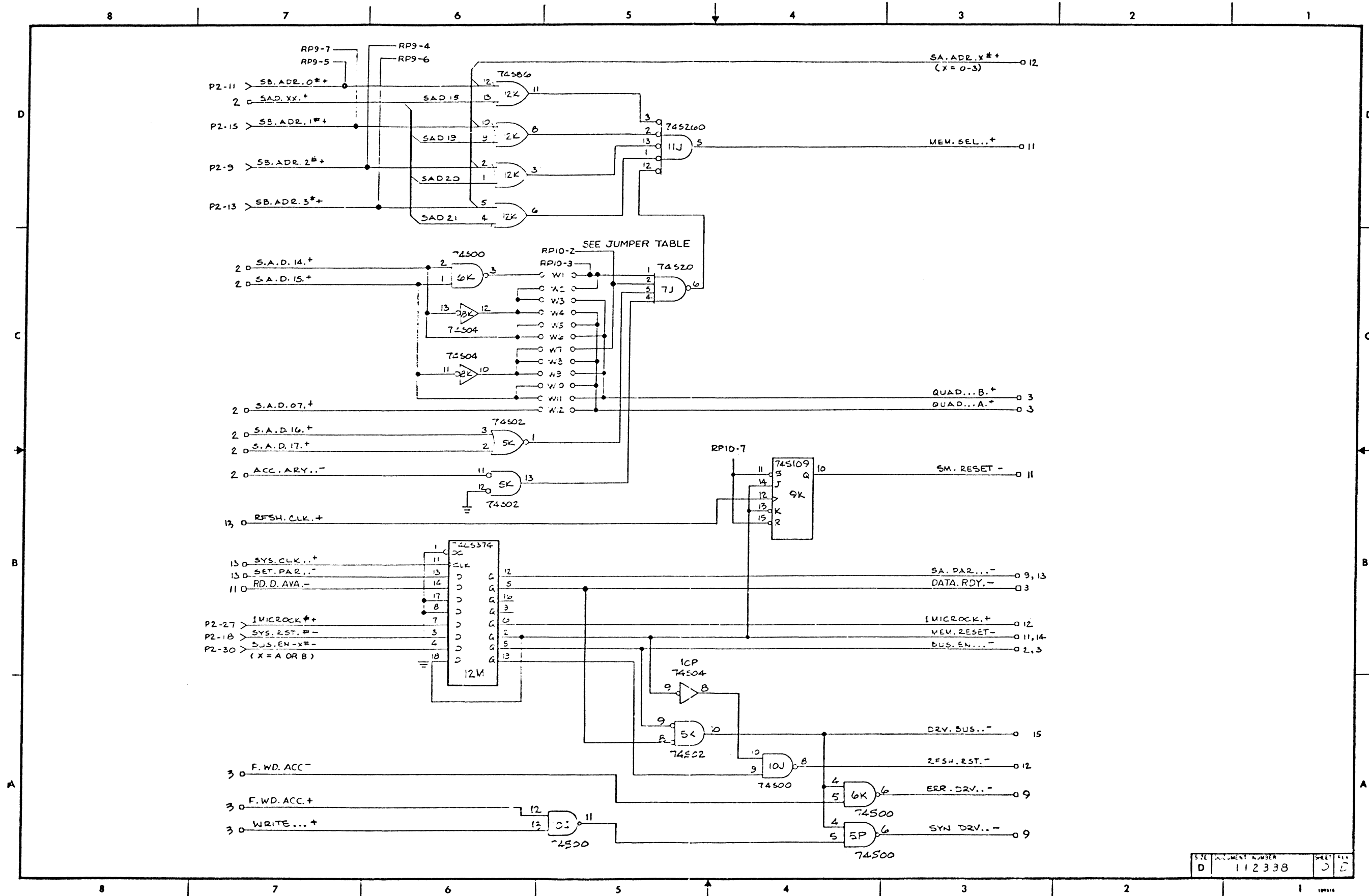
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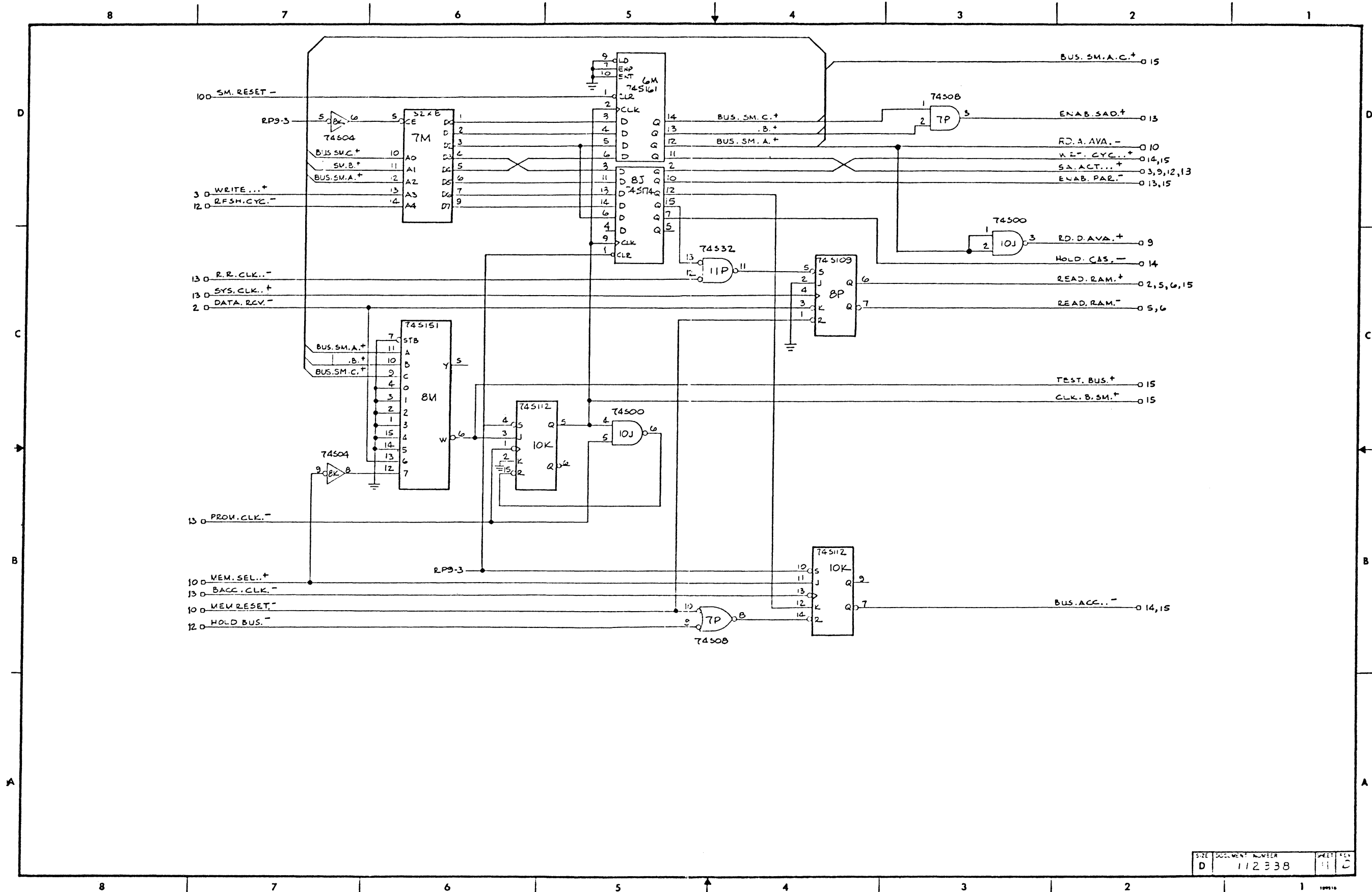
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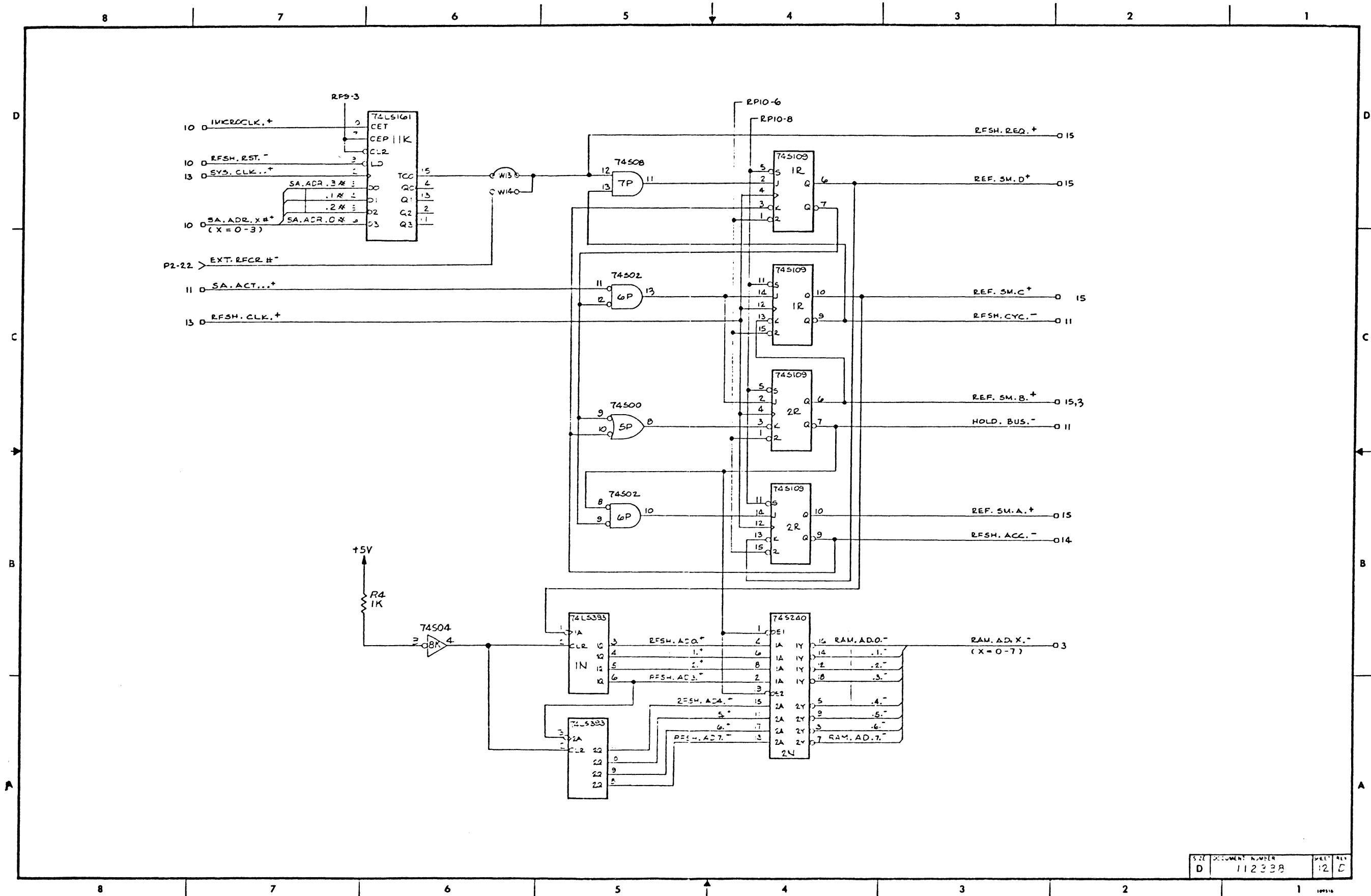


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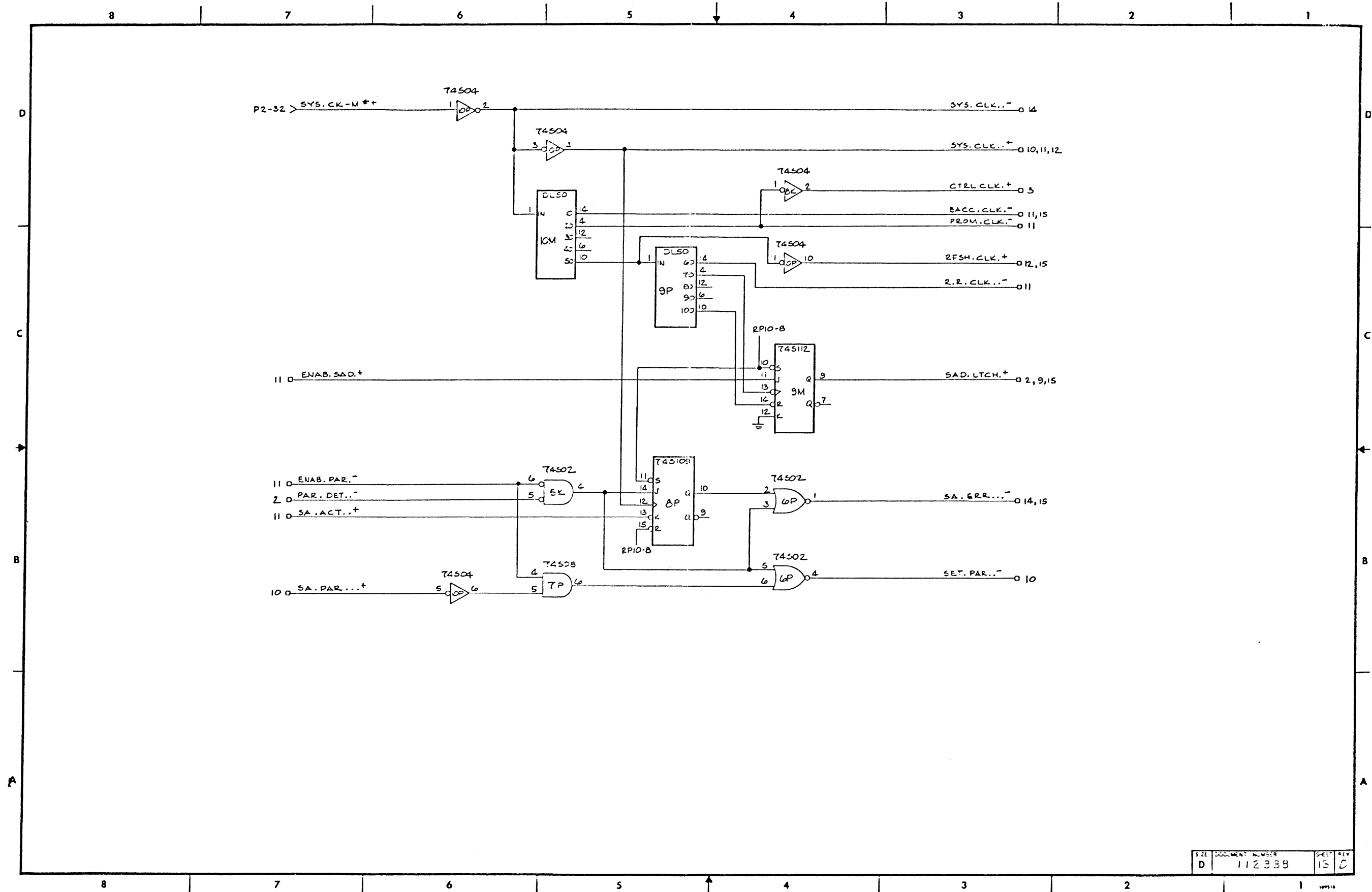


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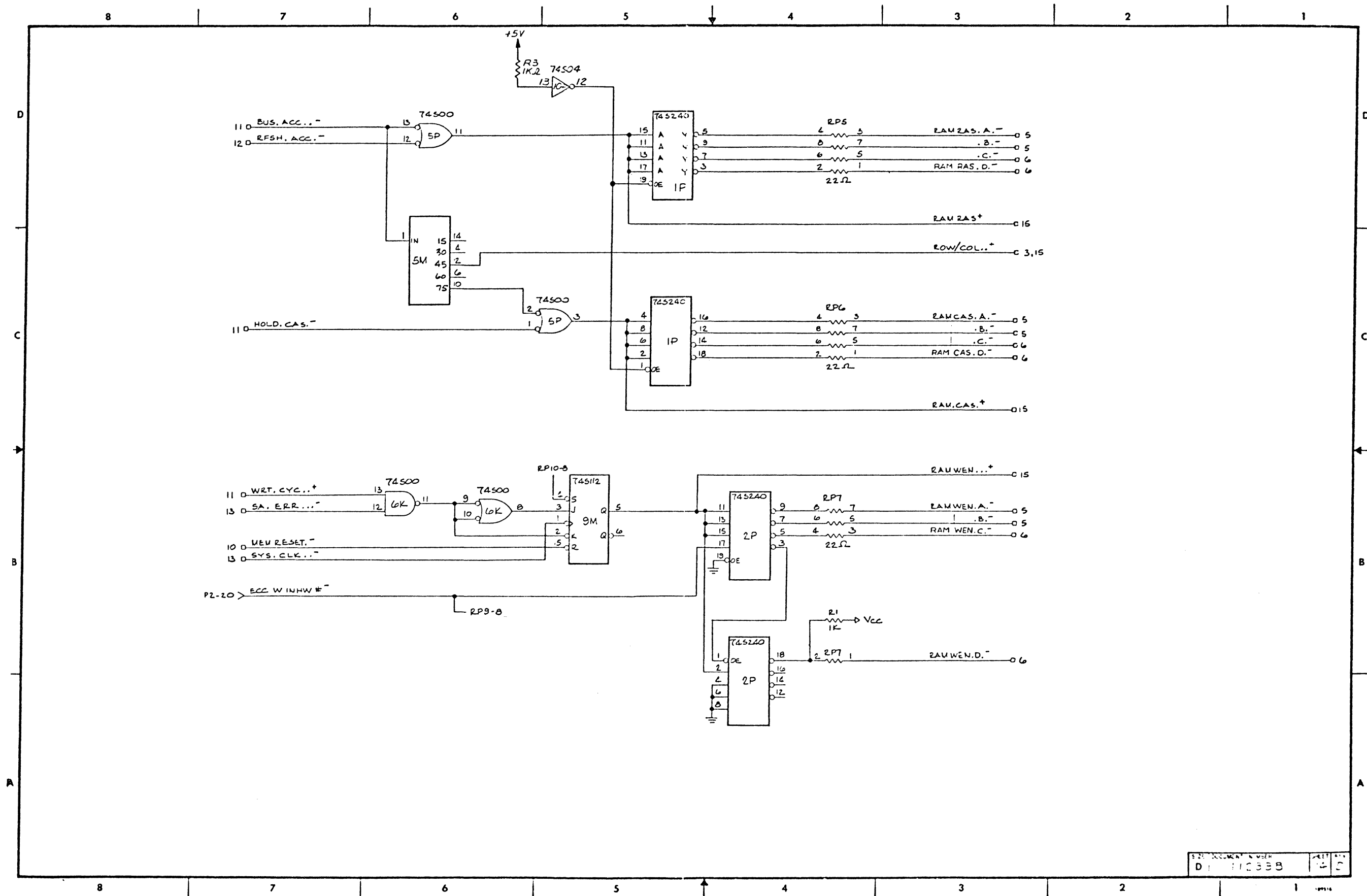




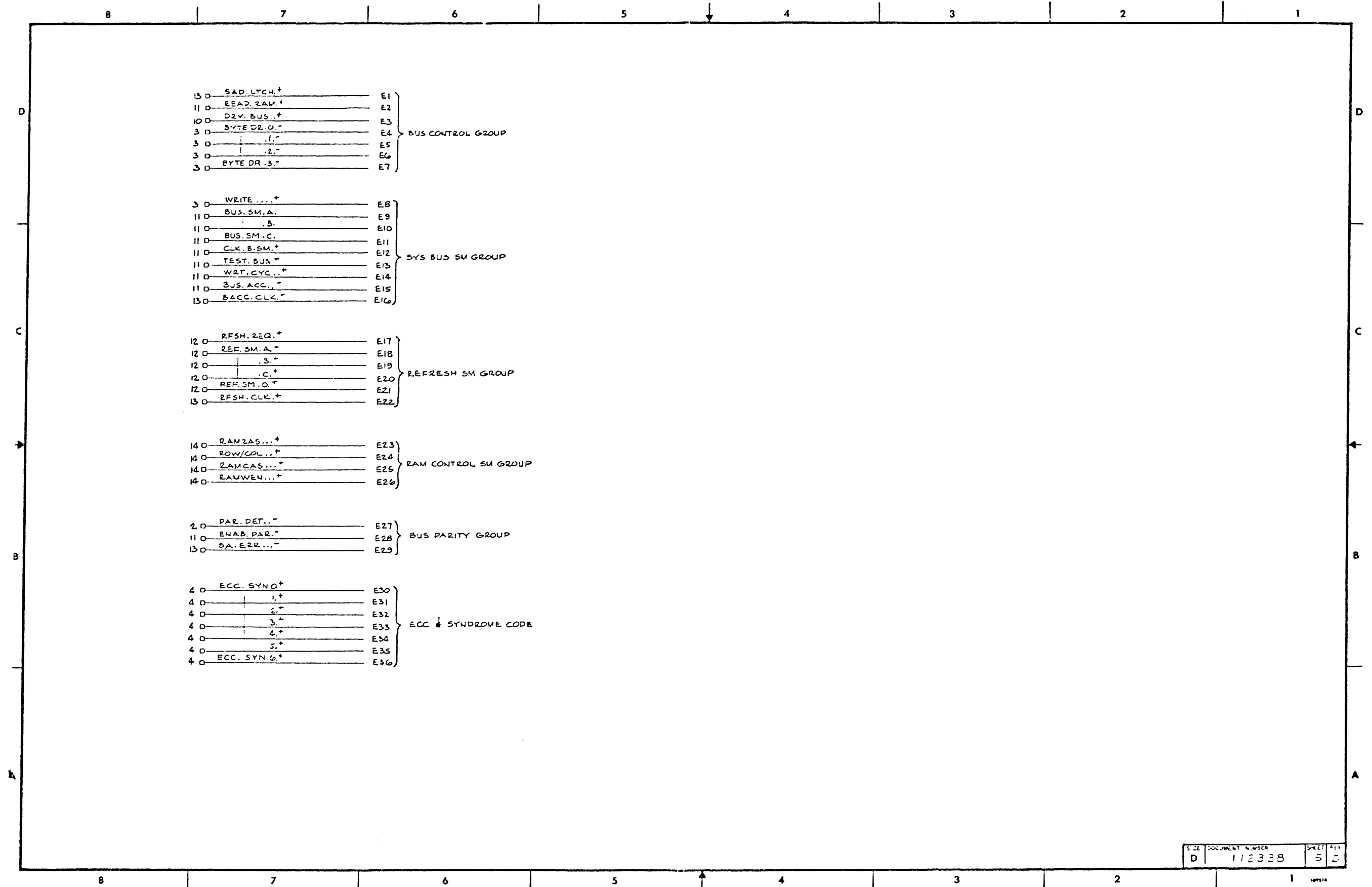
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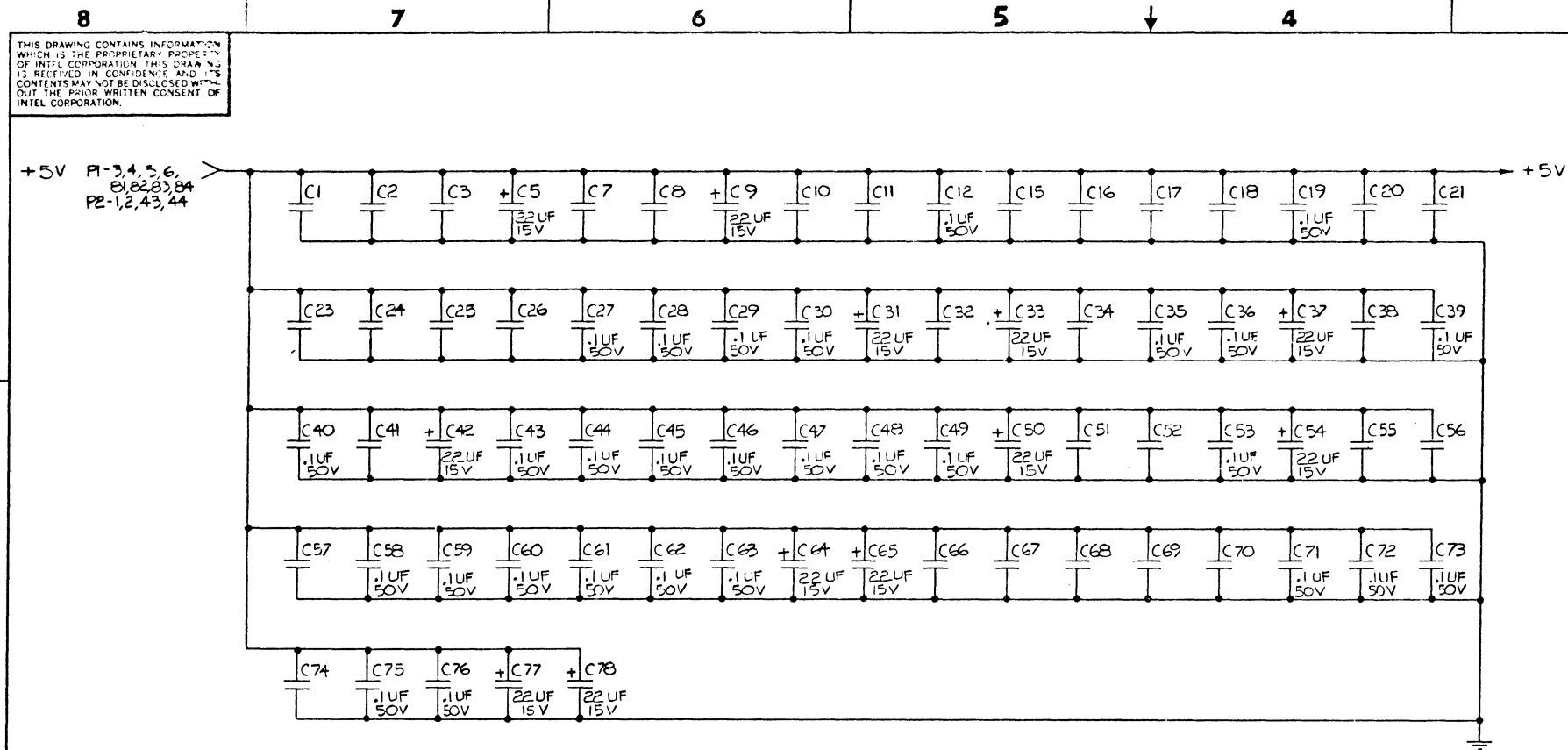
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520 DOCUMENT NUMBER
D1 710338



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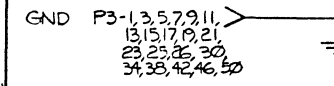


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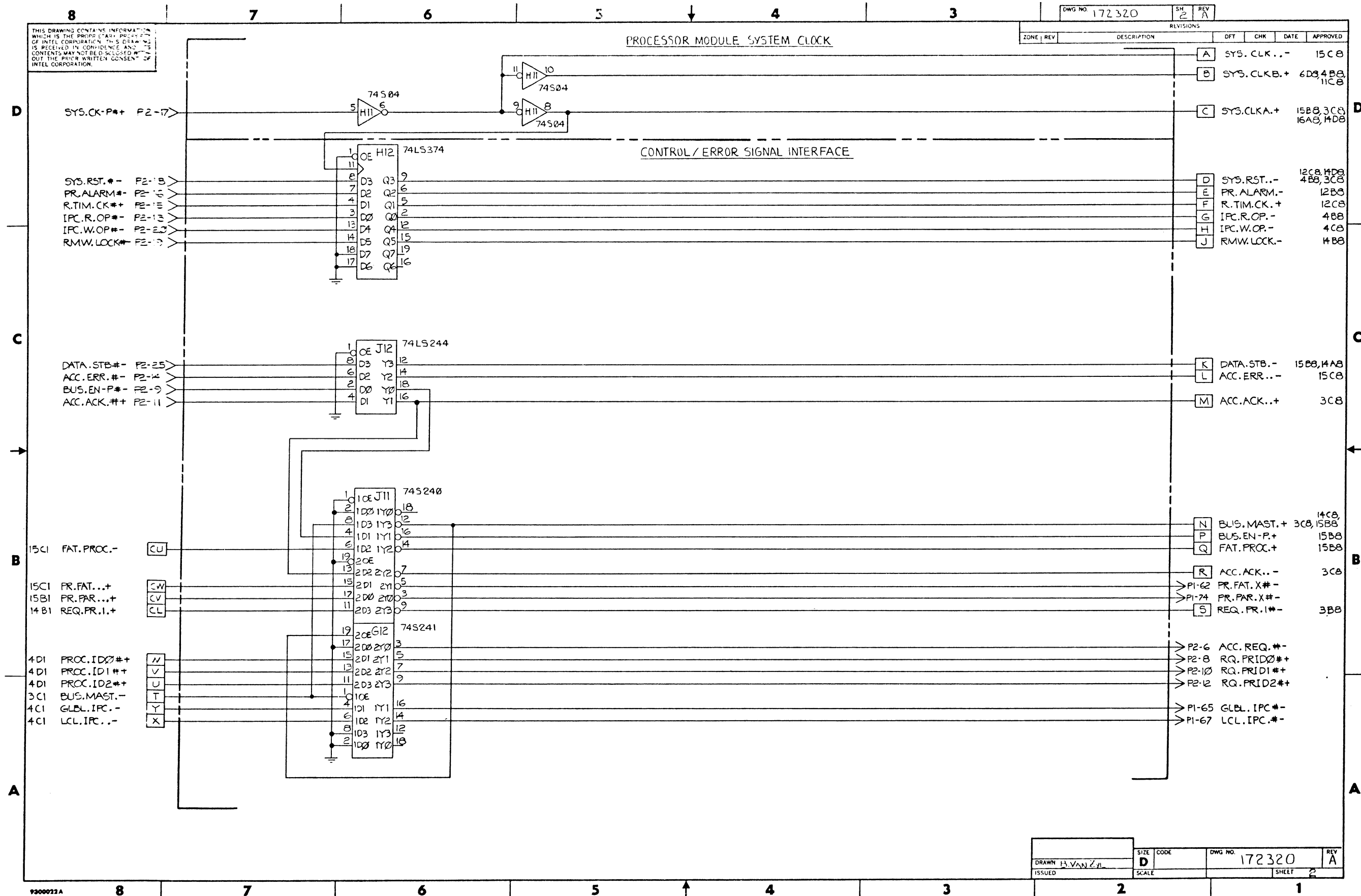
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DEVICE TABLE				
REFERENCE DESIGNATION	DEVICE TYPE	GND PIN	+5V PIN	UNUSED OUTPUT PINS
E8, H8, K4	74S00	7	14	K4-6
F11, K8	74S02	7	14	
F12, H11, J2	74S04	7	14	F12-6
H6	74LS04	7	14	
H7	74LS27	7	14	
C1, F10, K9	74S51	7	14	C1-8
F9	74S74	7	14	
H9, J1	74S109	8	16	
J10, K7	74LS109	8	16	
J8	74S112	8	16	
G10, H10	74LS138	8	16	
J7, K6	74S151	8	16	
G11	74LS151	8	16	
D1, J3	74S153	8	16	
H5, K10	74S174	8	16	
K5	74LS175	8	16	
J11	74S240	10	20	
A4, A11, B1, B4, B11, C2, C11, D11, E10, E11, G12	74S241	10	20	
J12	74LS244	10	20	
G7, J5, K12	74LS273	10	20	
B2, C3	74S280	7	14	
A2, B3	74S373	10	20	
D2, E6, E7, G8, K3	74S374	10	20	
A10, A12, B10, B12, C4, C10, C12, D4, D10, D12, E9, E12, H12, J9	74LS374	10	20	
D3	74LS377	10	20	
A5, A6, A7, A8, B5, B6, B7, B8, D5, D6, D7, D8	74LS670	8	16	
A9, B9, C5, C6, C7, C8, C9, D9, E5	25S10	8	16	
J6	27S21C	8	16	
F5, F6, F7, F8, G5, G6, H3, H4, J4, K11	27S13C	8	16	
G9	PE20102	8	16	
K2	MK1100A	8	16	
F4	43201	8,26,41,60,64	15,32,50,62	
G4	43202	6,35,39,57,64	2,15,38,50	
RP1, RP2, RP3, RP4			1	



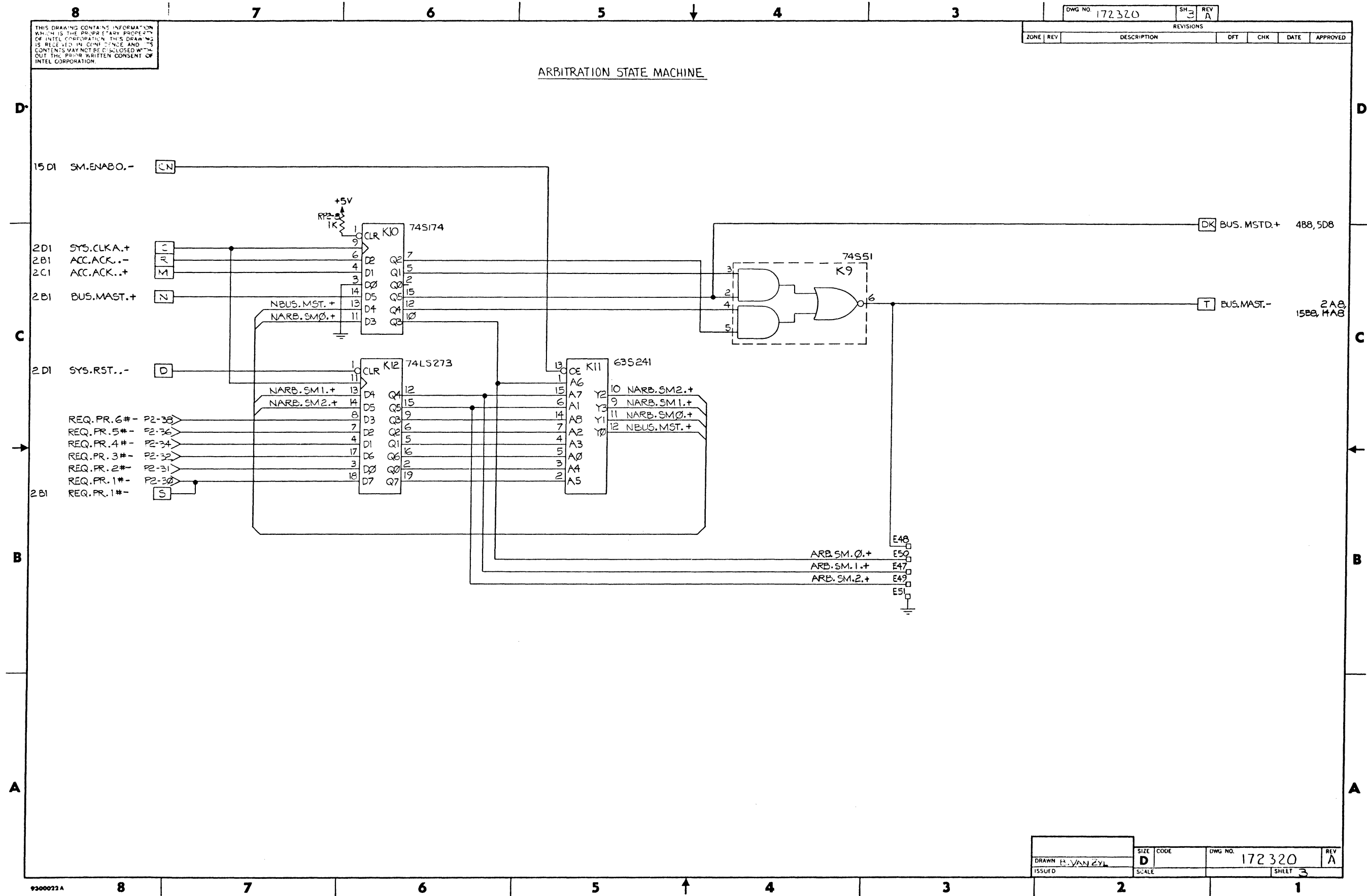
NOTES UNLESS OTHERWISE SPECIFIED:
 1. CAPACITORS ARE .01 UF, 50V.
 2. RESISTANCE IS IN OHMS.

QUANTITY PER DASH NO.	SIGNATURE	DATE	<p>3065 BOWERS AVE. SANTA CLARA, CALIF. 95051</p>
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES. DO NOT SCALE DRAWING.	DRN BY: B. VAN ZYL	1/6/82	
TOLERANCES: ANGLES ± 2° XX ± .03 XXX ± .010 SURFACE FINISH J	CHK BY: E. ROTH	1/6/82	
NEXT ASSY	USED ON		
			<p>TITLE: LOGIC DIAGRAM, PWA, -ISBC 432/601, GDP</p> <p>SIZE CODE: D 0100 DWG. NO.: 172320 SHEET 1 OF 17</p>



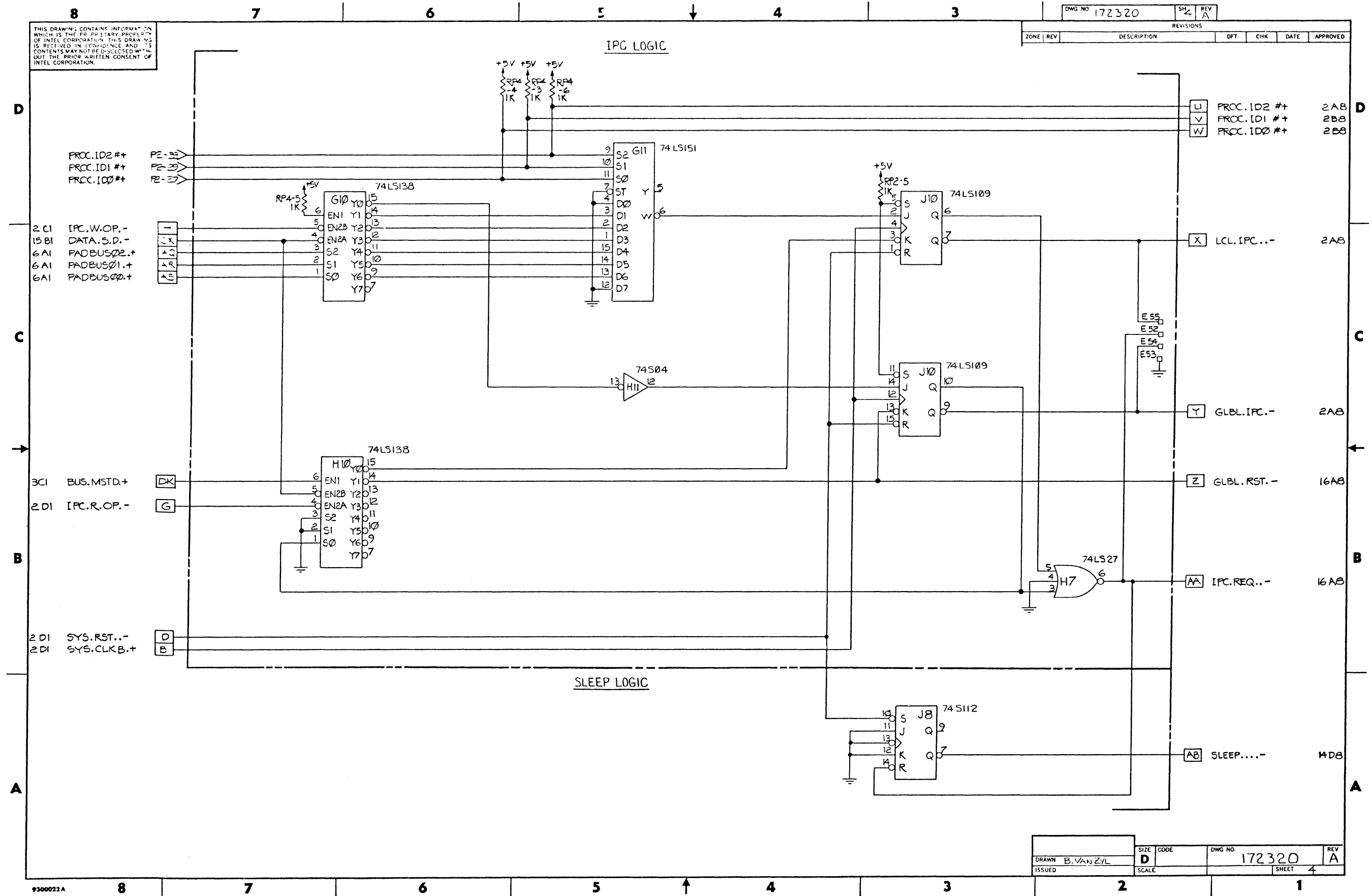
9300021A

DRAWN	ISSUED	SIZE	CODE	DWG. NO.	REV
13. VAN ZIJL		D		172320	A
		SCALE		SHEET	2



DRAWN	ISSUED	SIZE	CODE	DWG NO.	REV
R. VAN ZYL		D		172320	A

9300022A

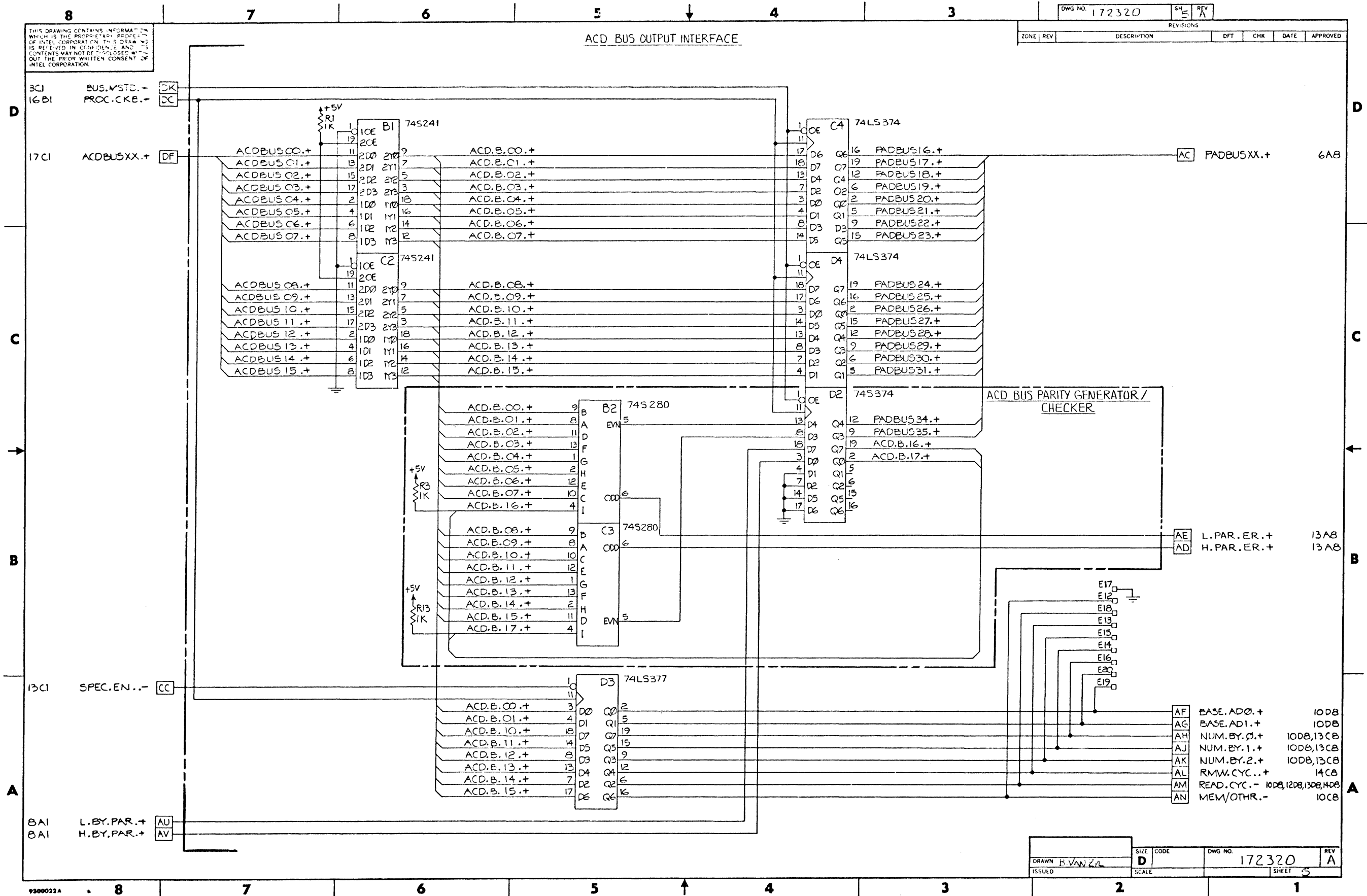


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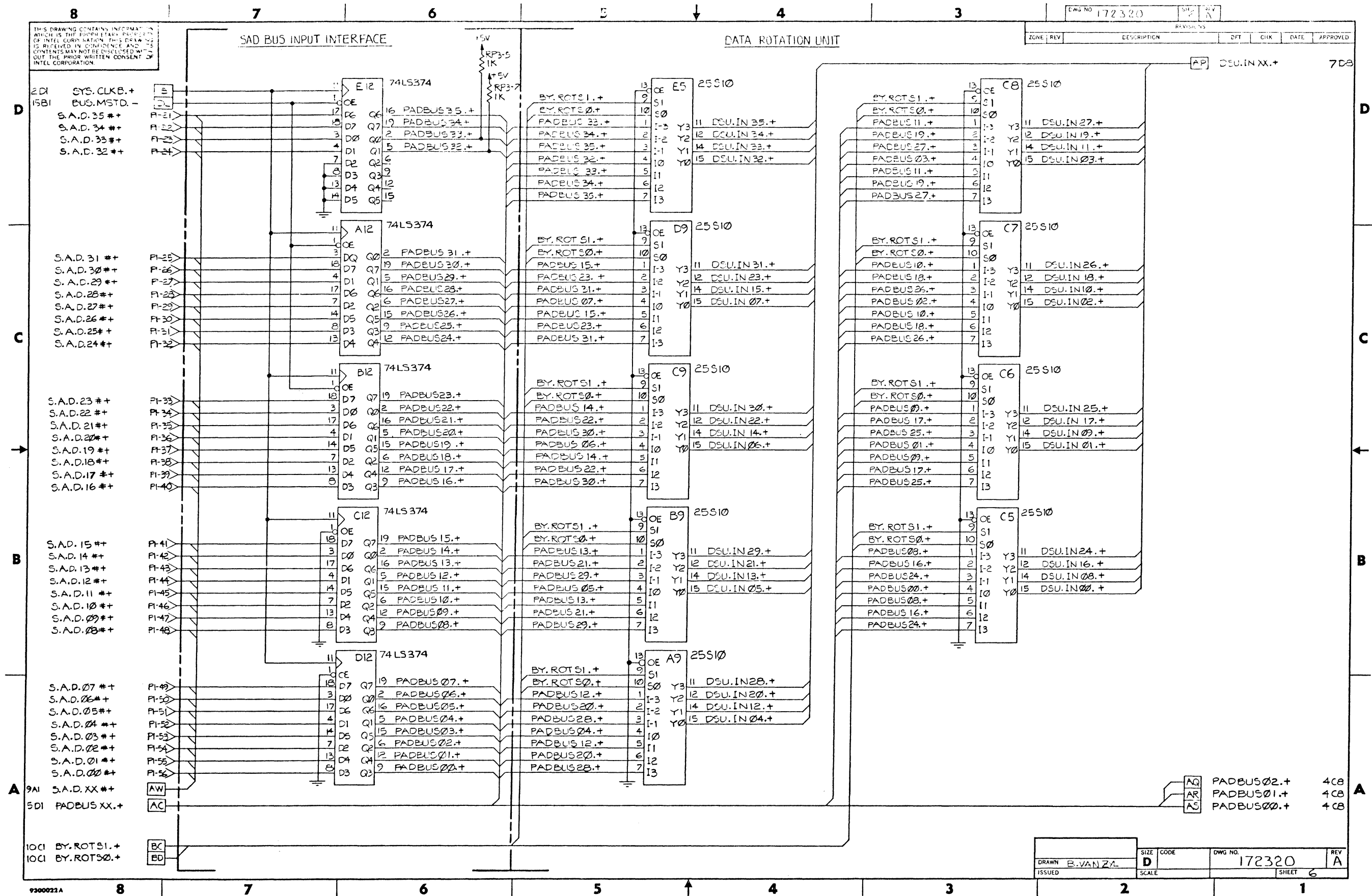
DWG NO. 172320		SH. 4	REV. A			
ZONE	REV	DESCRIPTION	DFT	CHK	DATE	APPROVED

DRAWN B. VAN ZYL	SIZE D	CODE	DWG NO. 172320	REV. A
ISSUED	SCALE		SHEET 4	

9300022A

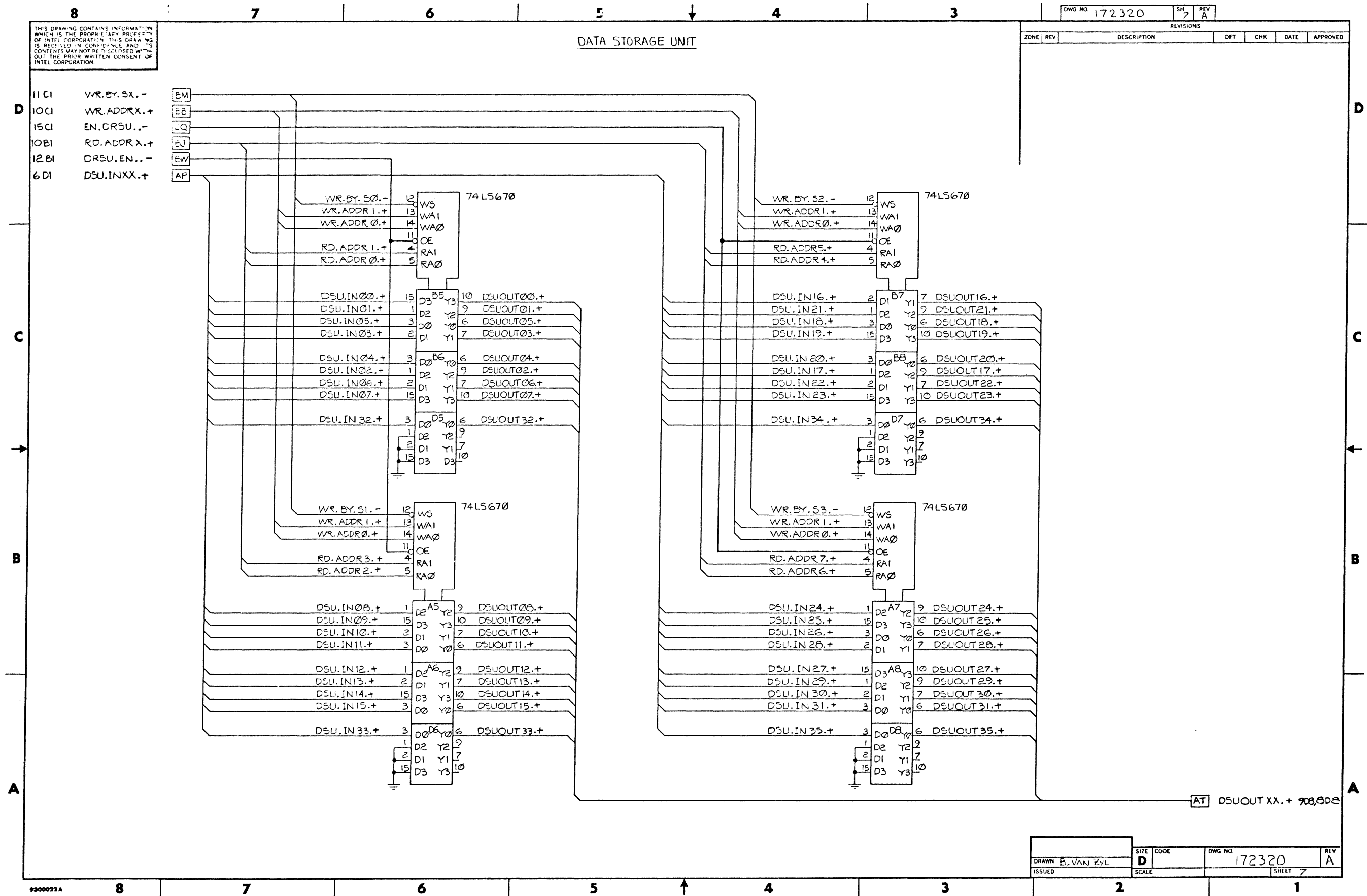


9300022A



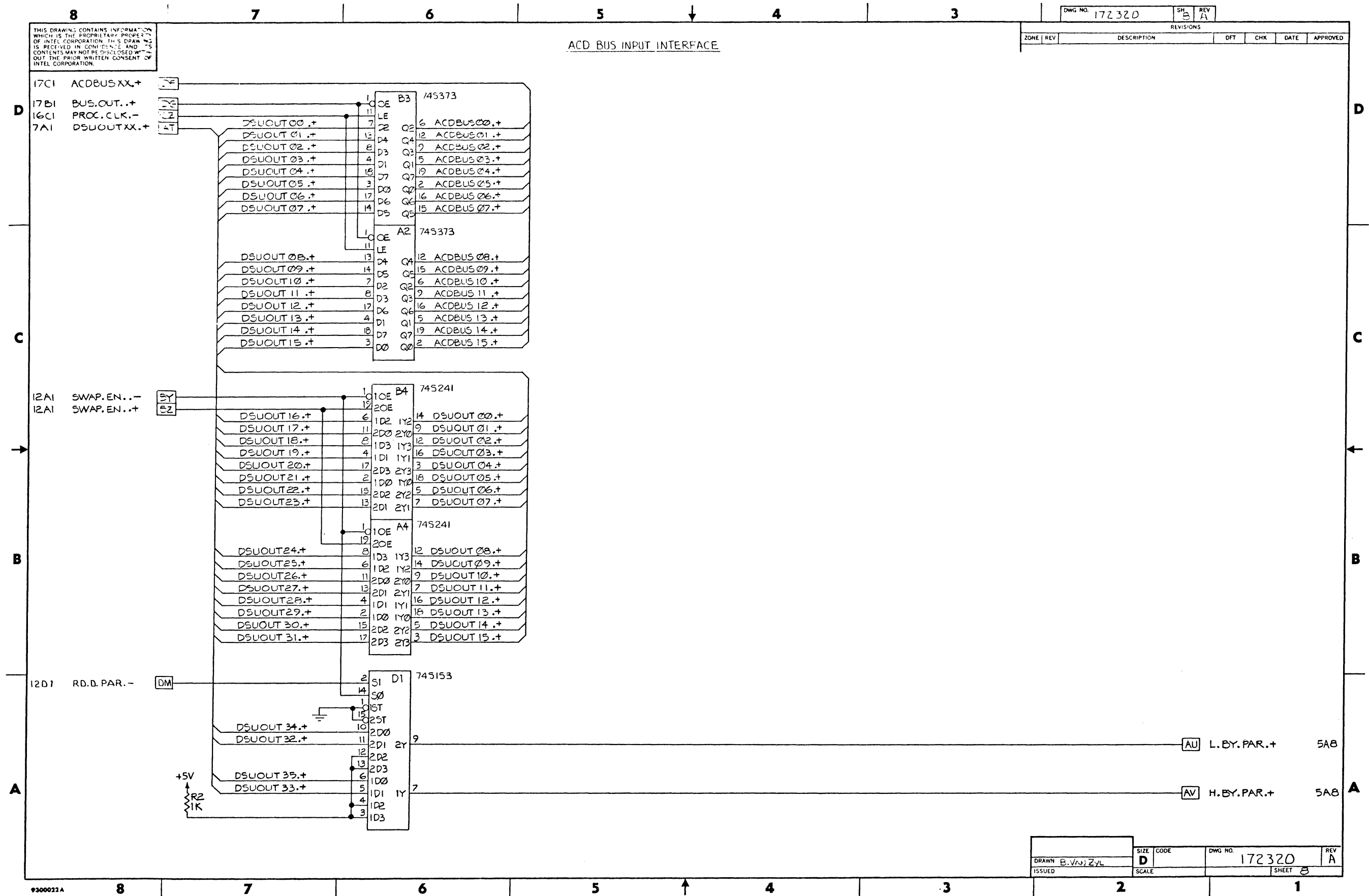
9300022A

DRAWN	B. VAN ZIL	SIZE	D	CODE		DWG NO.	172320	REV	A
ISSUED		SCALE				SHEET	6		



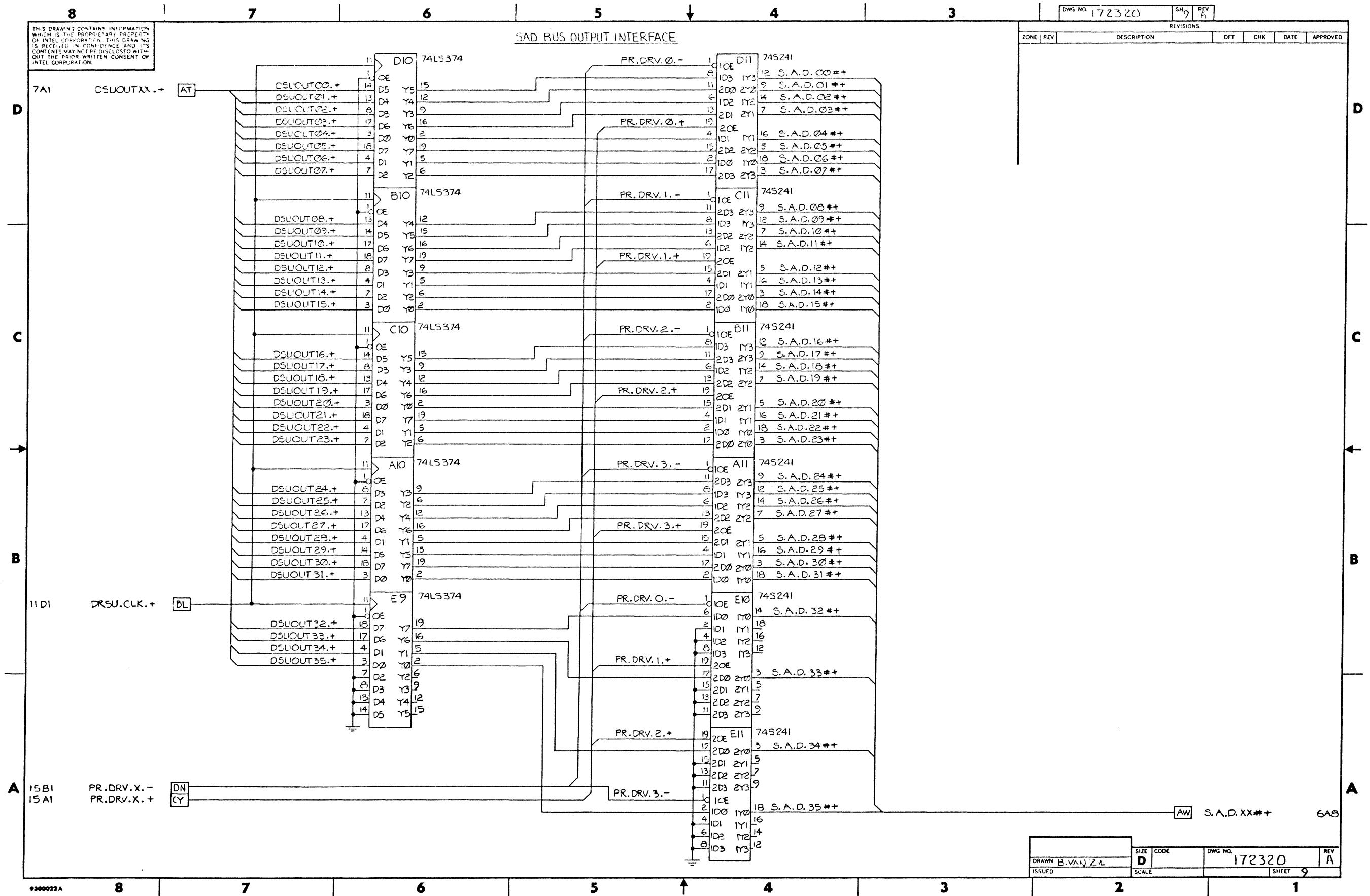
DRAWN B. VAN ZYL	SIZE D	CODE	DWG NO. 172320	REV A
ISSUED	SCALE		SHEET 7	

9300023A



DRAWN E.V.R. ZYL	SIZE D	CODE	DWG NO. 172320	REV A
ISSUED	SCALE		SHEET 8	

9300022A



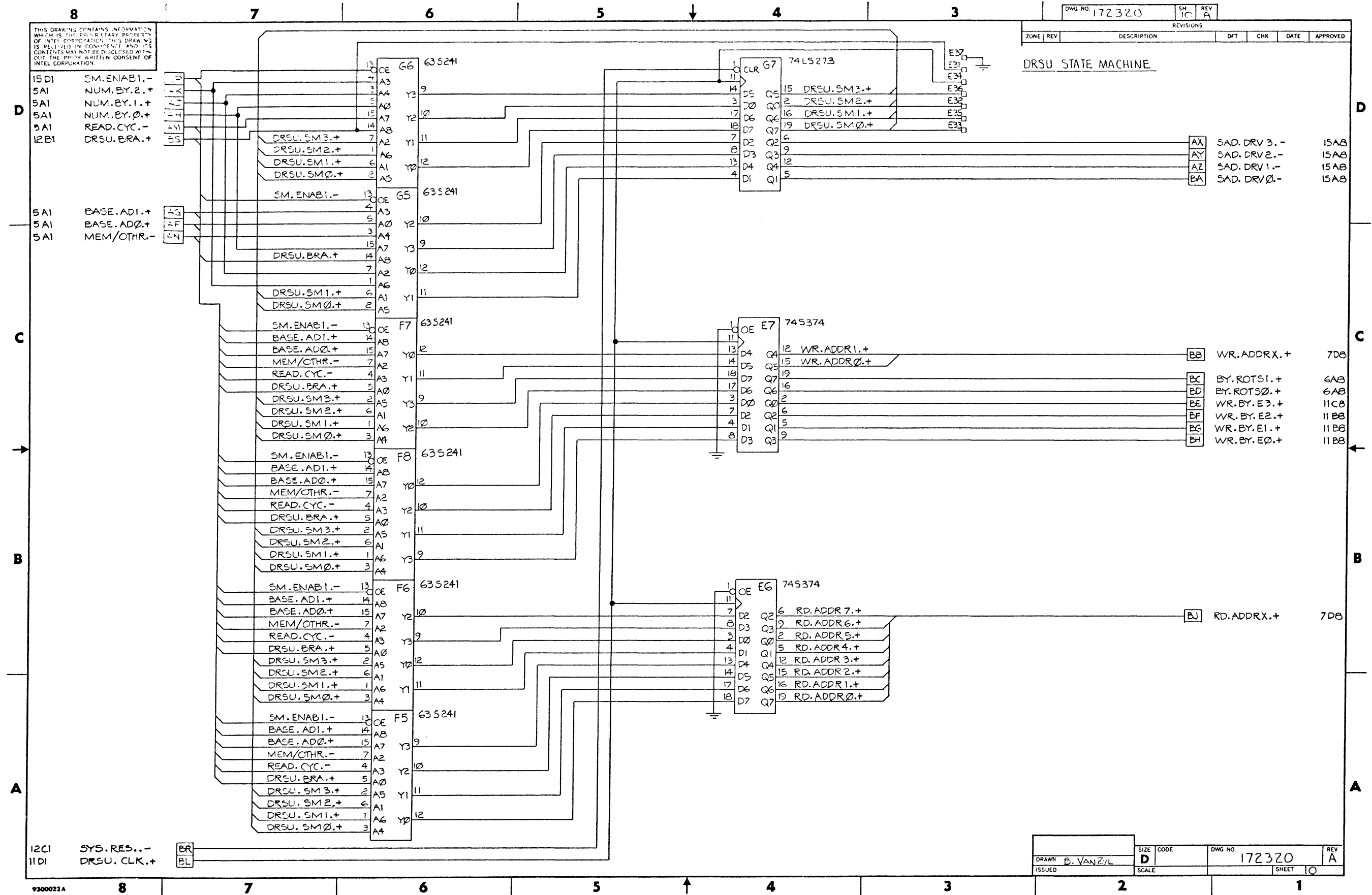
THIS DRAWING CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF INTEL CORPORATION. THIS DRAWING IS RECEIVED IN CONFIDENCE AND ITS CONTENTS MAY NOT BE DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF INTEL CORPORATION.

DWG NO. 172320 SH 9 REV A

ZONE	REV	DESCRIPTION	DFT	CHK	DATE	APPROVED

DRAWN B.VAN ZL	SIZE D	DWG NO. 172320	REV A
ISSUED	SCALE	SHEET 9	

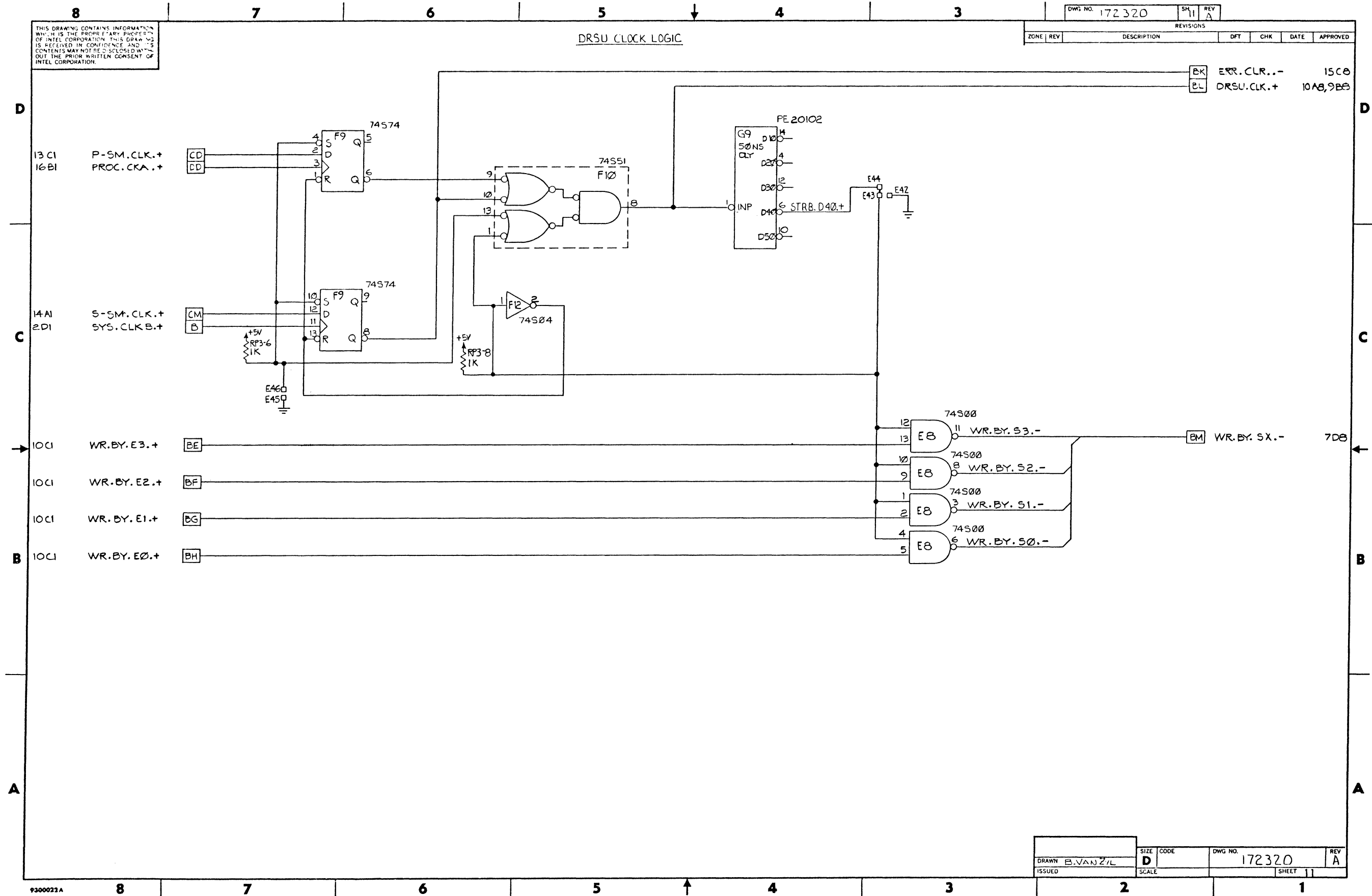
9300022A



DWG NO. 172320		SH	REV			
		IC	A			
ZONE	REV	DESCRIPTION	DFT	CHK	DATE	APPROVED

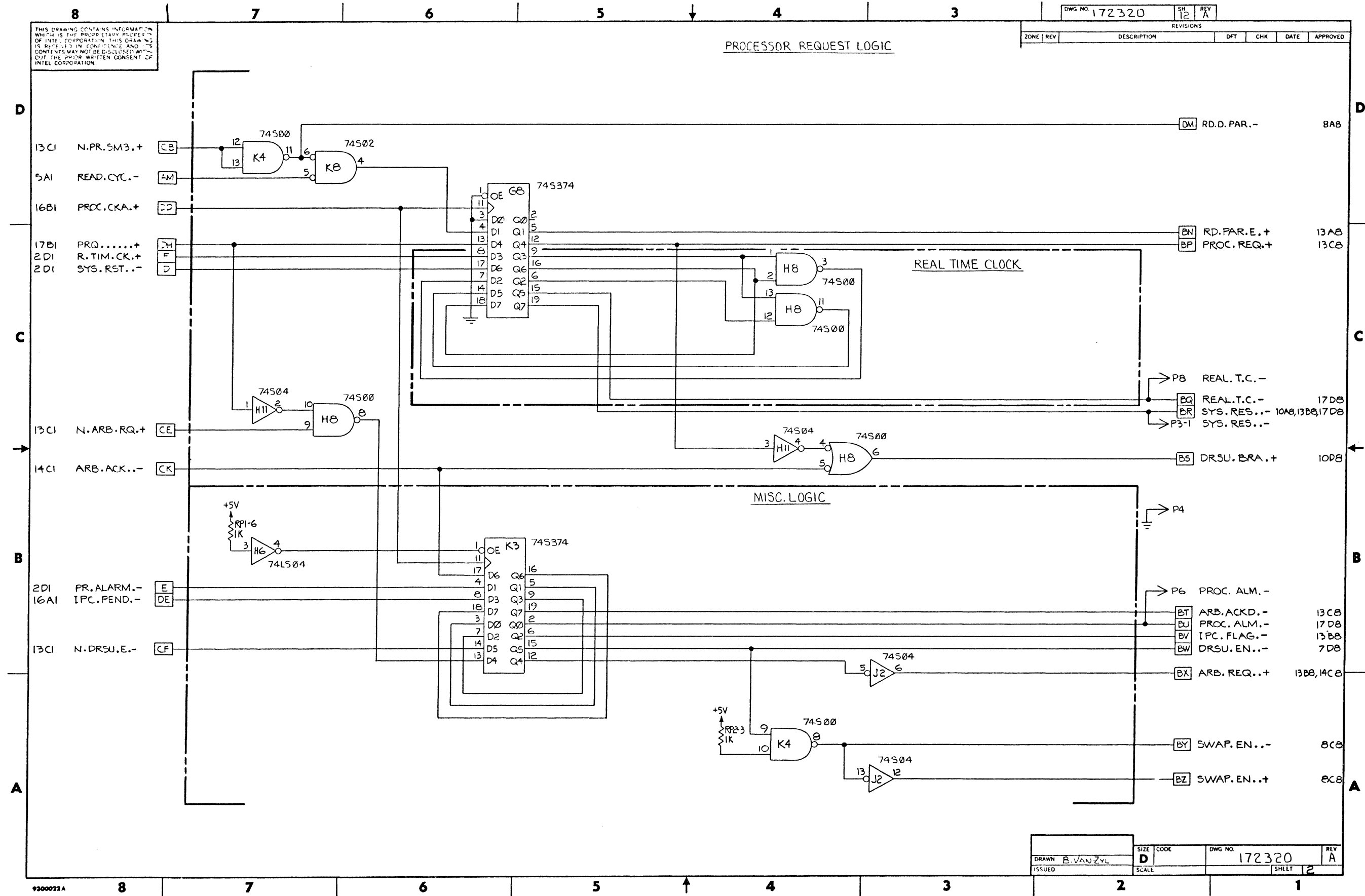
DRAWN ISSUED	B. VANZYL	SIZE SCALE	D	DWG NO. 172320	REV A
			SHEET	1	

93000221A

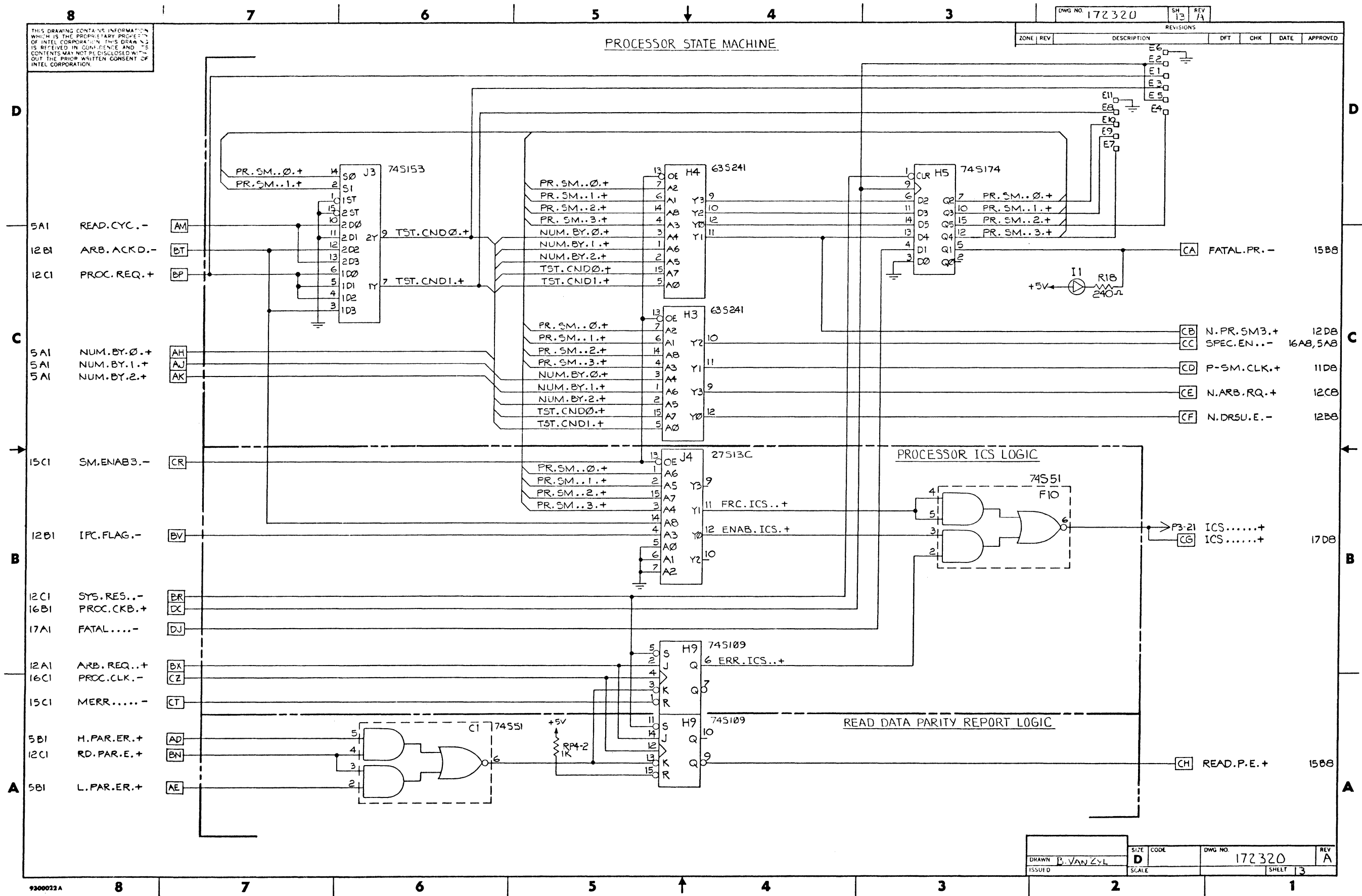


DRAWN B.VAN ZYL	SIZE D	CODE	DWG NO. 172320	REV A
ISSUED	SCALE		SHEET 11	

9300022A

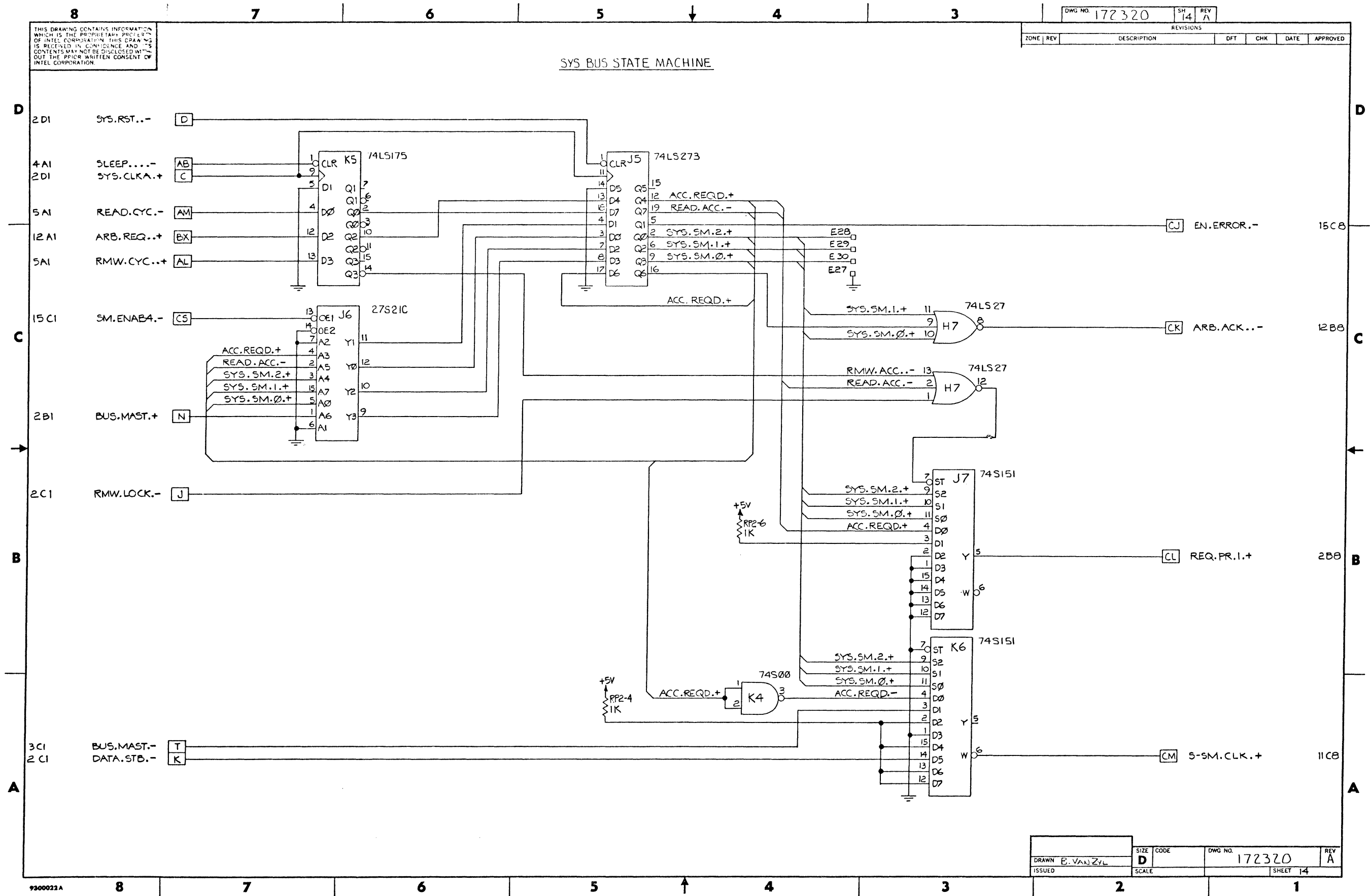


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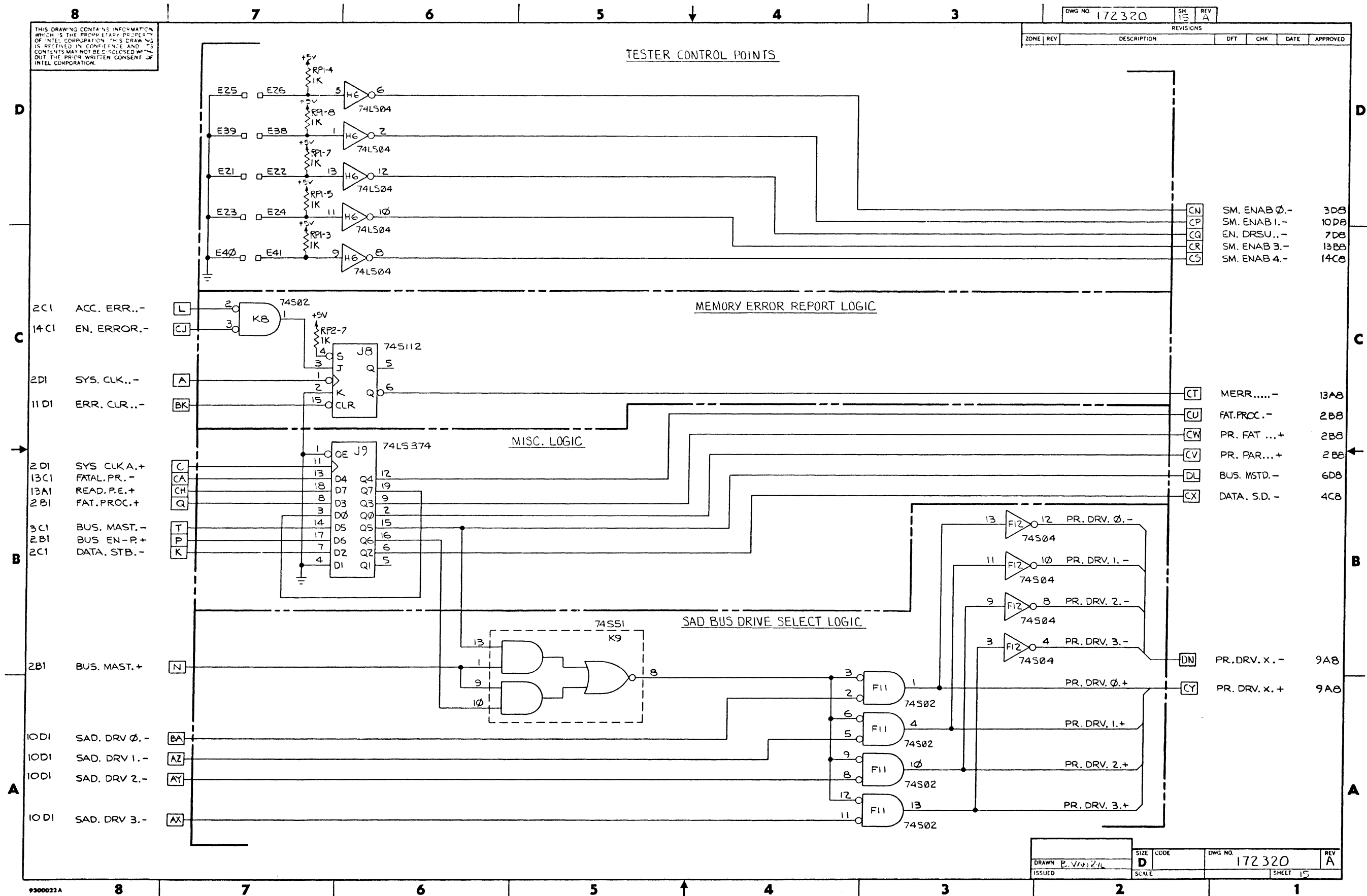


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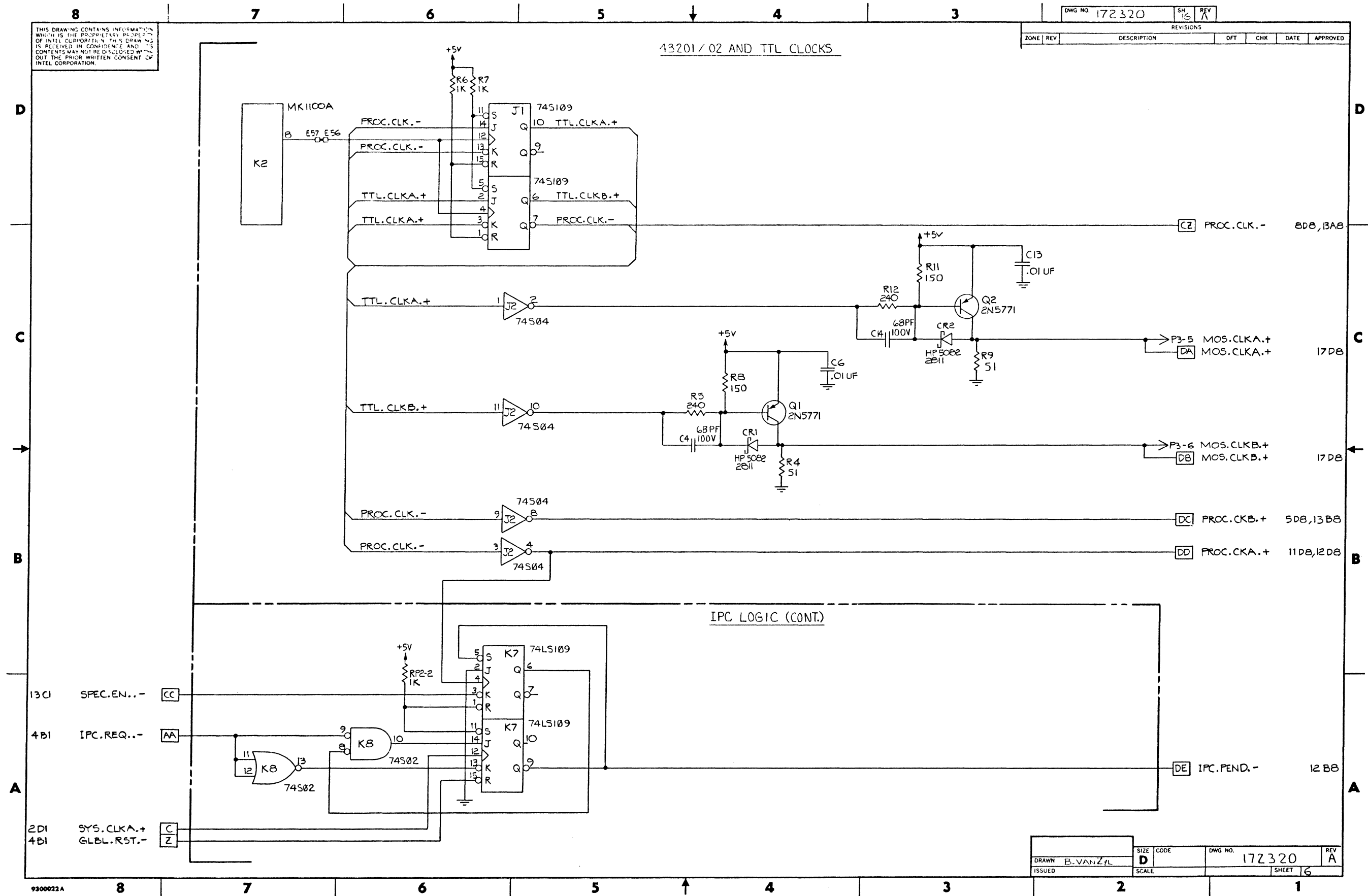
DRAWN	B. VAN ZYL	SIZE	D	CODE		DWG NO.	172320	REV	A
ISSUED		SCALE				SHEET	3		

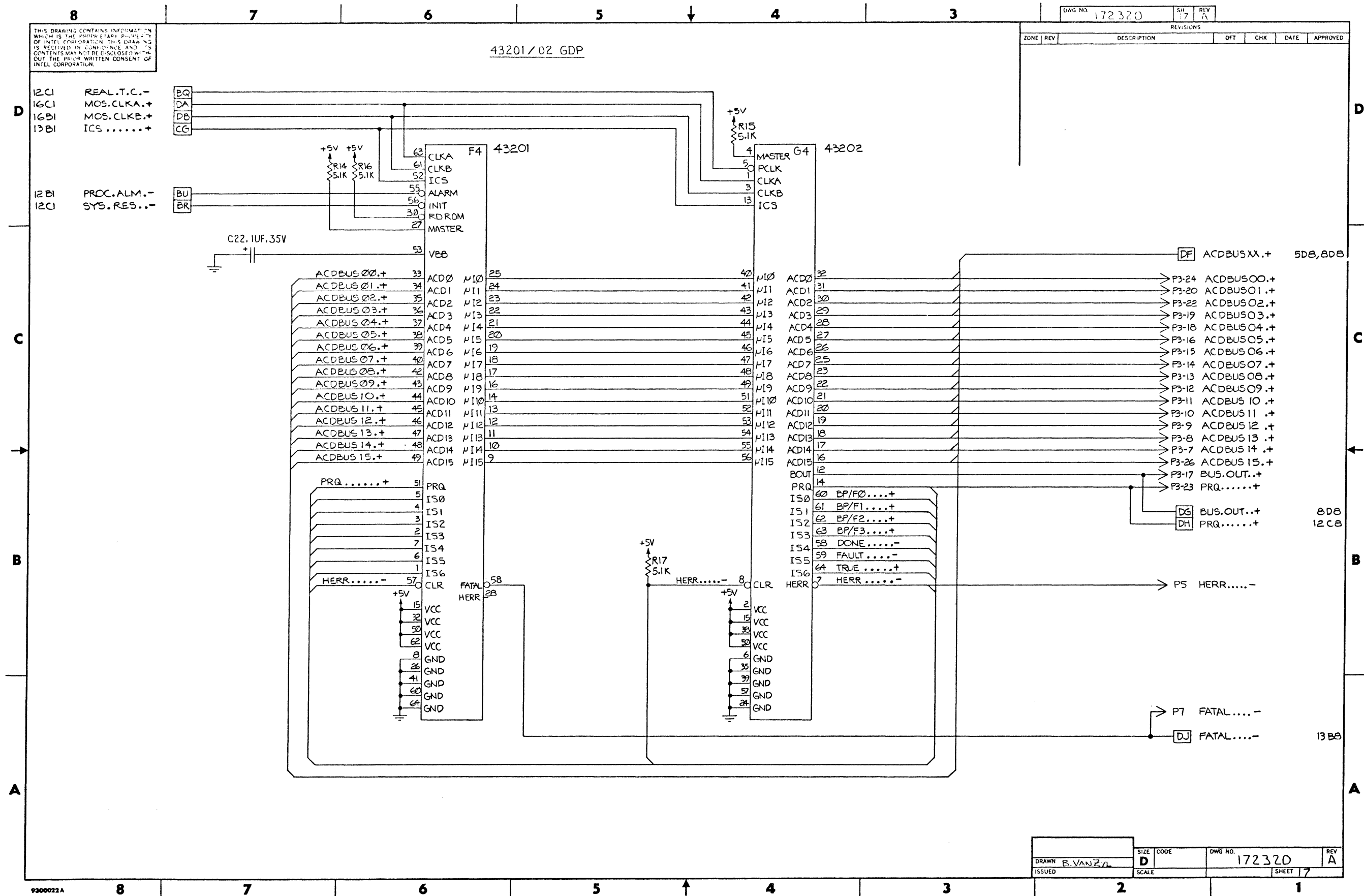


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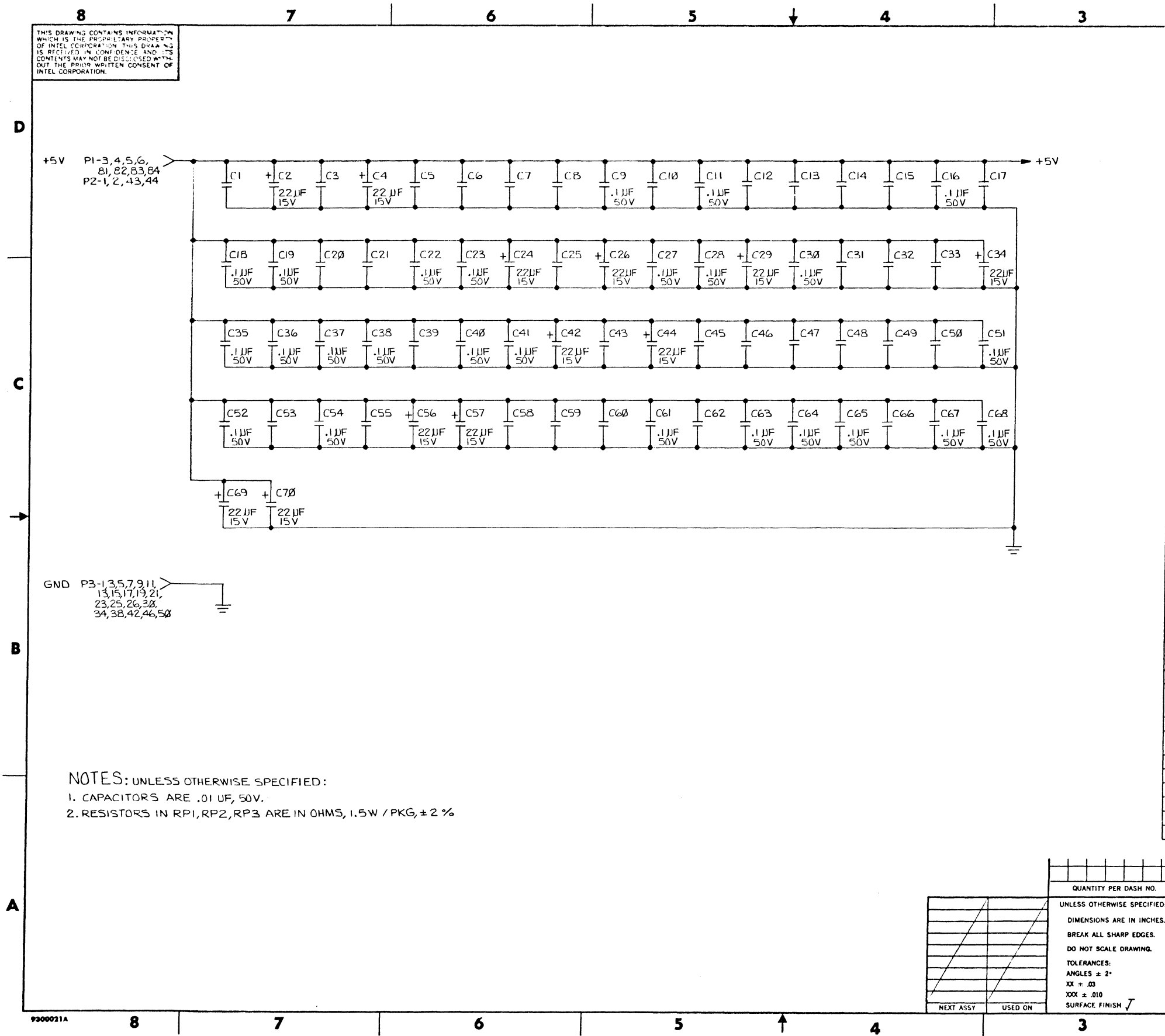
9300022A





92000221A

DRAWN	E. VANZYL	SIZE	D	CODE		DWG NO.	172320	REV	A
ISSUED		SCALE						SHEET	17

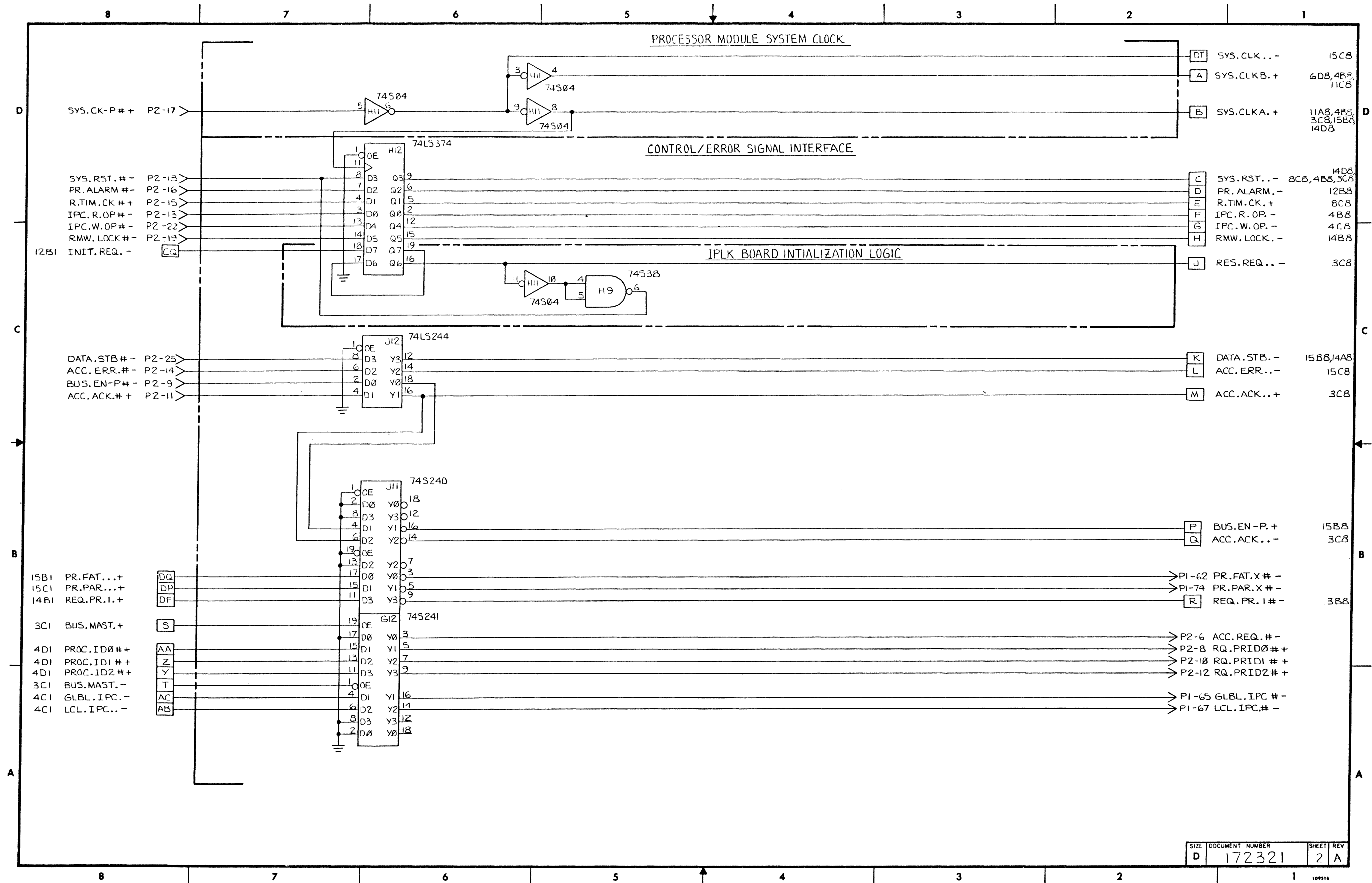


DWG NO. 172321		SH 1	REV A
REVISIONS			
ZONE	REV	DESCRIPTION	APPROVED
A	PER	ECO 17-0213A	T.E.R.

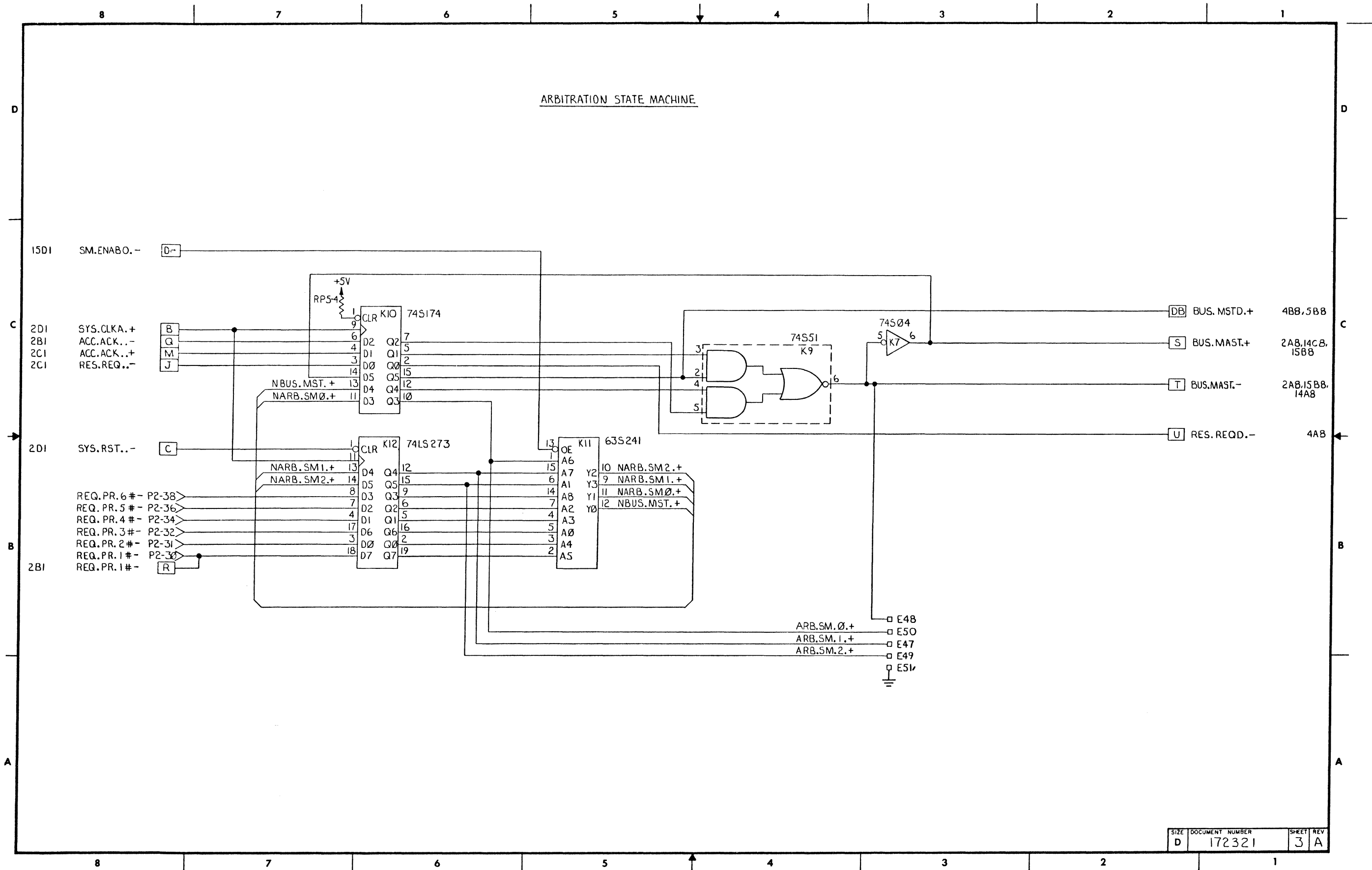
REFERENCE DESIGNATION	DEVICE TYPE	GND PIN	+5V PIN	UNUSED OUTPUT PINS
C2, E8, H8	74S00	7	14	C2-11
F11, K5, K8	74S02	7	14	K5-1, 4, 10
K7, H1, H11, F12	74S04	7	14	H11-2; K7-8, 10; F12-6; H8
H5	74LS04	7	14	—
H7	74S10	7	14	H7-8
J7	74LS27	7	14	—
H9	74S38	7	14	H9-3, 8, 11
K9, F10	74S51	7	14	F10-6
F9	74S74	7	14	—
J3, J10	74LS109	8	16	—
J8	74S112	8	16	—
G10, H10	74LS138	8	16	—
H6, K6	74S151	8	16	—
G11	74LS151	8	16	—
G3	74S153	8	16	—
H4, K10	74S174	8	16	—
G8	74S175	8	16	—
J4	74LS175	8	16	—
J11	74S240	10	20	—
A2, A4, A11, B2, B4, B11, C11, D2, D4, D11, E10, E11, G12	74S241	10	20	—
C3, E3, F3, J12	74LS244	10	20	—
G7, J5, K12	74LS273	10	20	—
E6, E7, G2	74S374	10	20	—
A3, A10, A12, B3, B10, B12, C4, C10, C12, D3, D10, D12, E4, E9, E12, F4, H12, J9	74LS374	10	20	—
G4	74LS377	10	20	—
A5, A6, A7, A8, B5, B6, B7, B8, D5, D6, D7, D8	74LS670	8	16	—
A9, B9, C5, C6, C7, C8, C9, D9, E5	25S10	8	16	—
J6	27S21C	8	16	—
F5, F6, F7, F8, G5, G6, H2, H3, K11	63S241	8	16	—
RP1, RP2, RP3		8	16	—
RP4, RP5, RP6, RP7		8	16	—

NOTES: UNLESS OTHERWISE SPECIFIED:
 1. CAPACITORS ARE .01 µF, 50V.
 2. RESISTORS IN RP1, RP2, RP3 ARE IN OHMS, 1.5W / PKG, ± 2 %

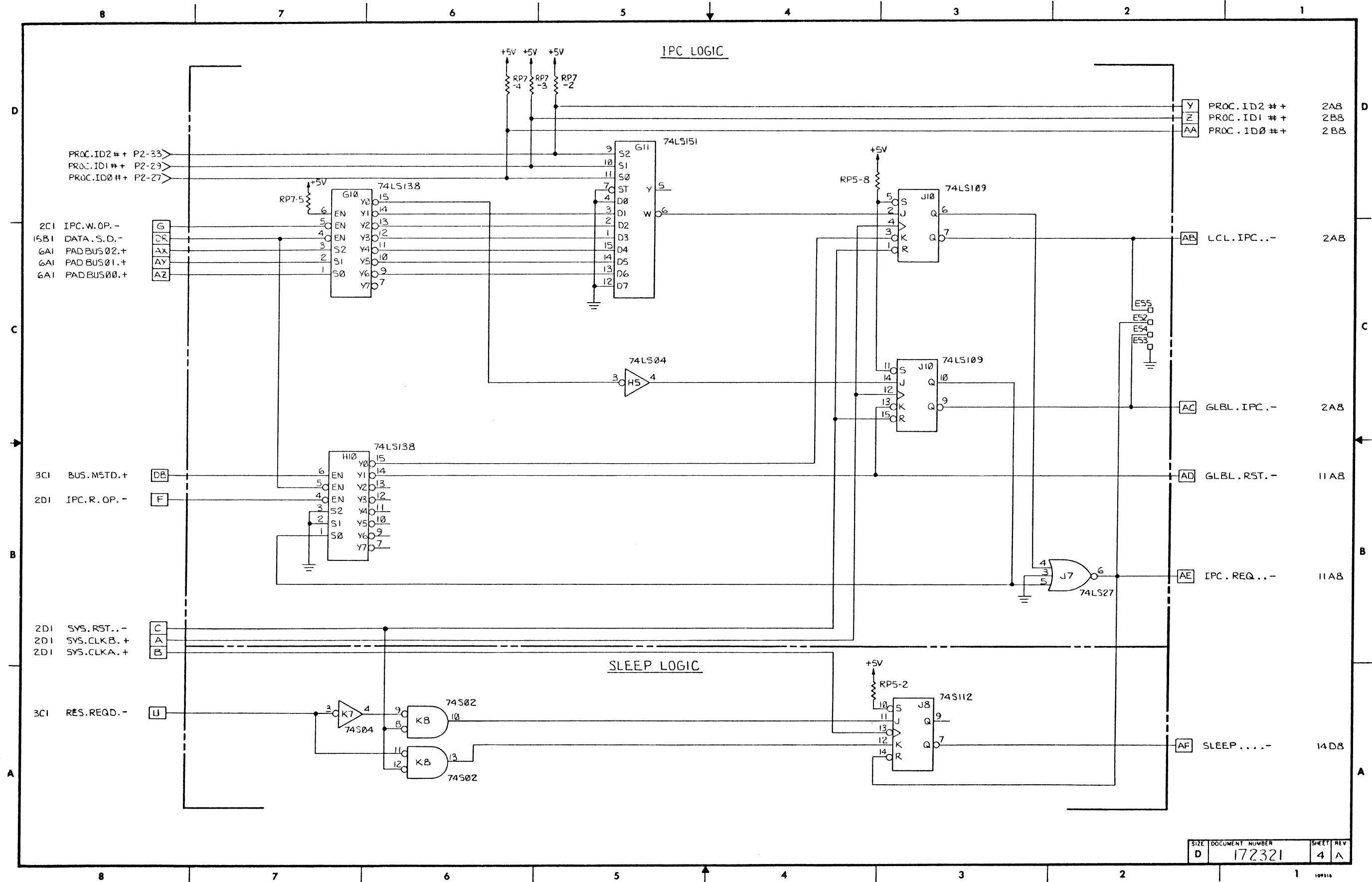
QUANTITY PER DASH NO.	ITEM NO.	PART NUMBER	DESCRIPTION
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES. DO NOT SCALE DRAWING. TOLERANCES: ANGLES ± 2° XX ± .03 XXX ± .010 SURFACE FINISH ✓		SIGNATURE DRN BY B. VAN ZYL 2-8-81 CHK BY T.E. ROTH 2-8-81 ENGR APVD T.E. ROTH 2-8-81 APVD APVD	DATE 2-8-81 2-8-81 2-8-81
intel 3065 BOWERS AVE. SANTA CLARA, CALIF. 95051		TITLE LOGIC DIAGRAM, PWA, iSBC 432/603, IPL	
NEXT ASSY		USED ON	SCALE
SIZE D		CODE 0100	DWG NO. 172321
REV A		SHEET 1 OF 15	



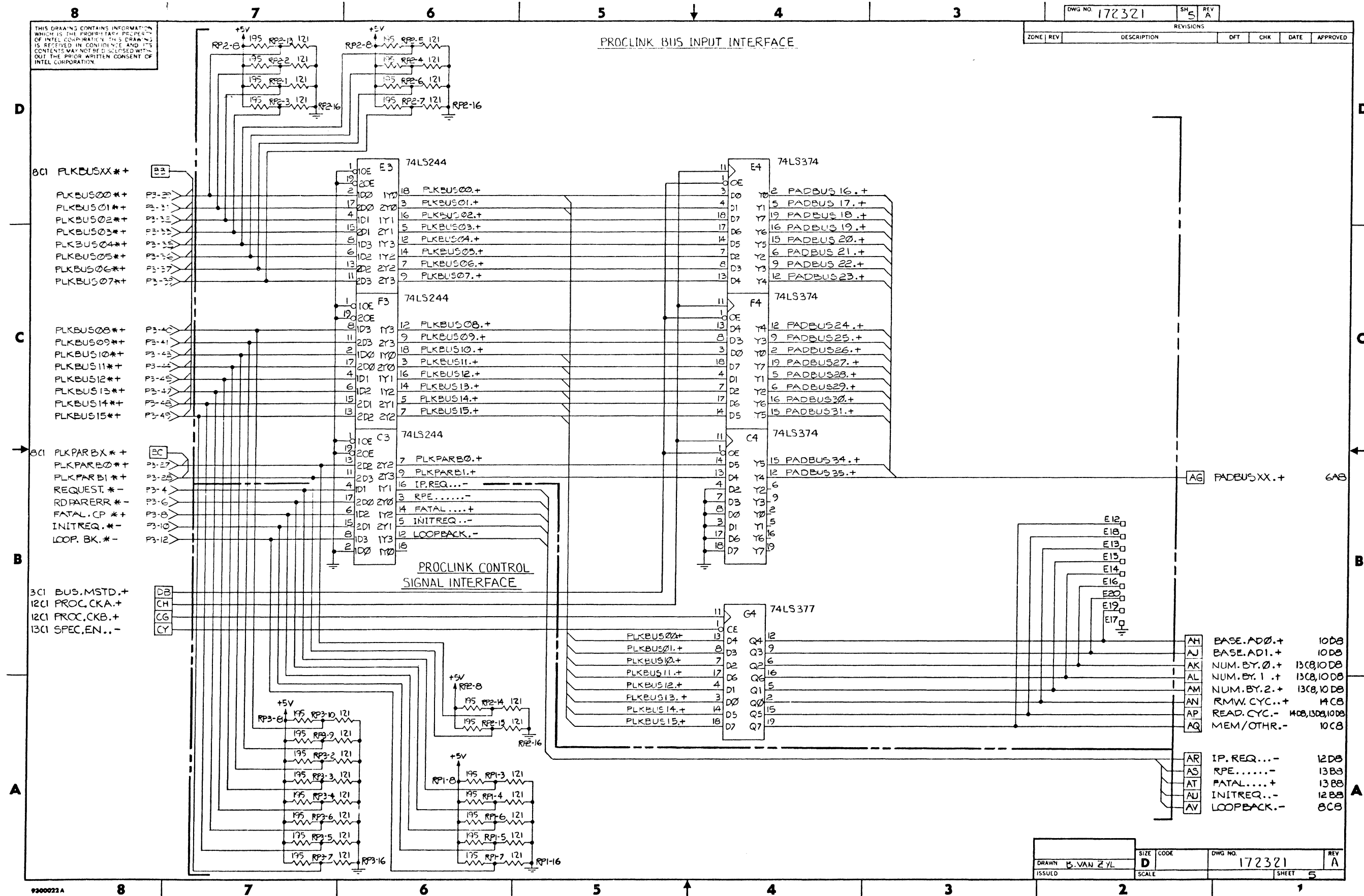
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	2	A



SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	3	A



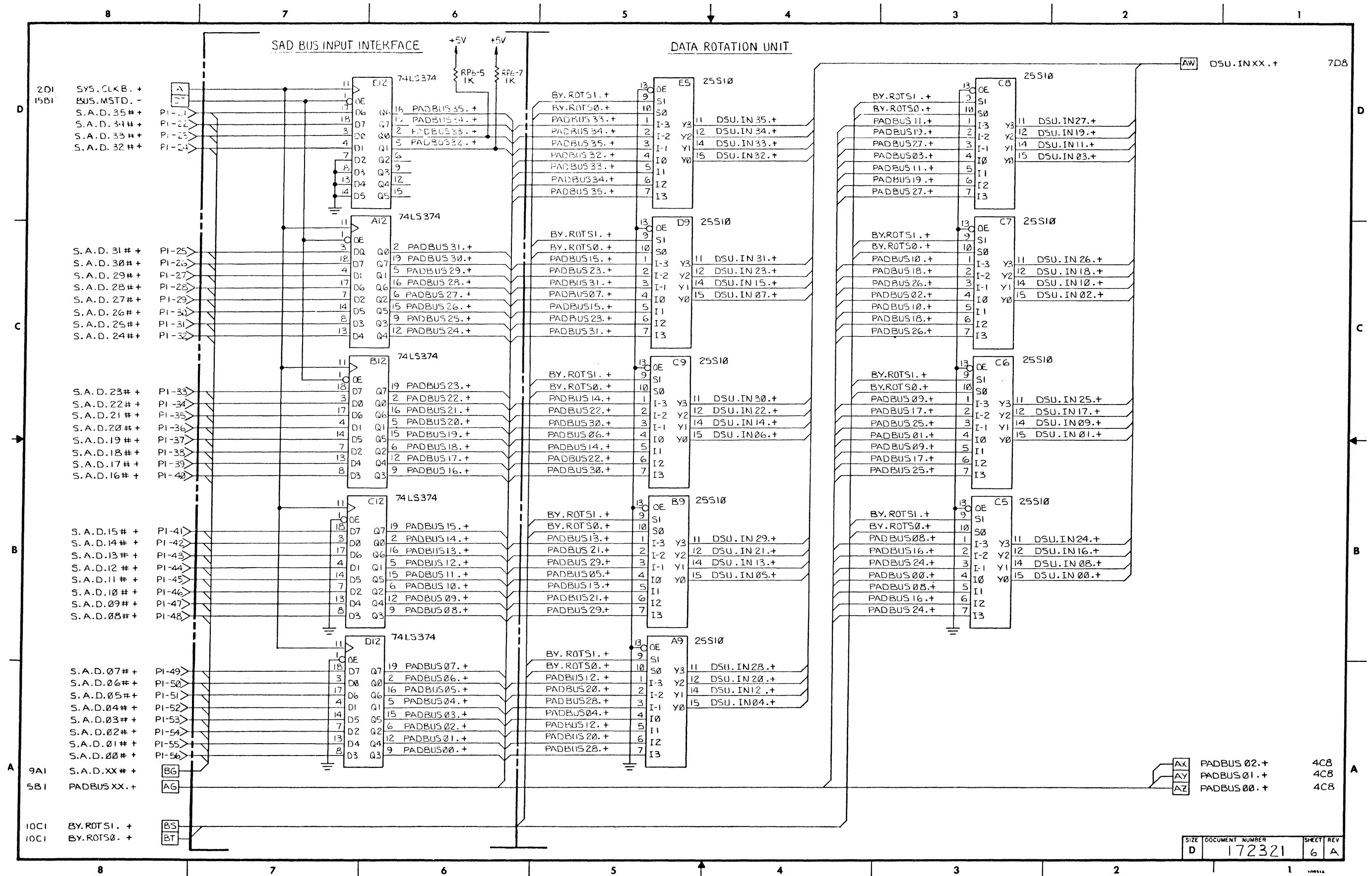
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	4	A

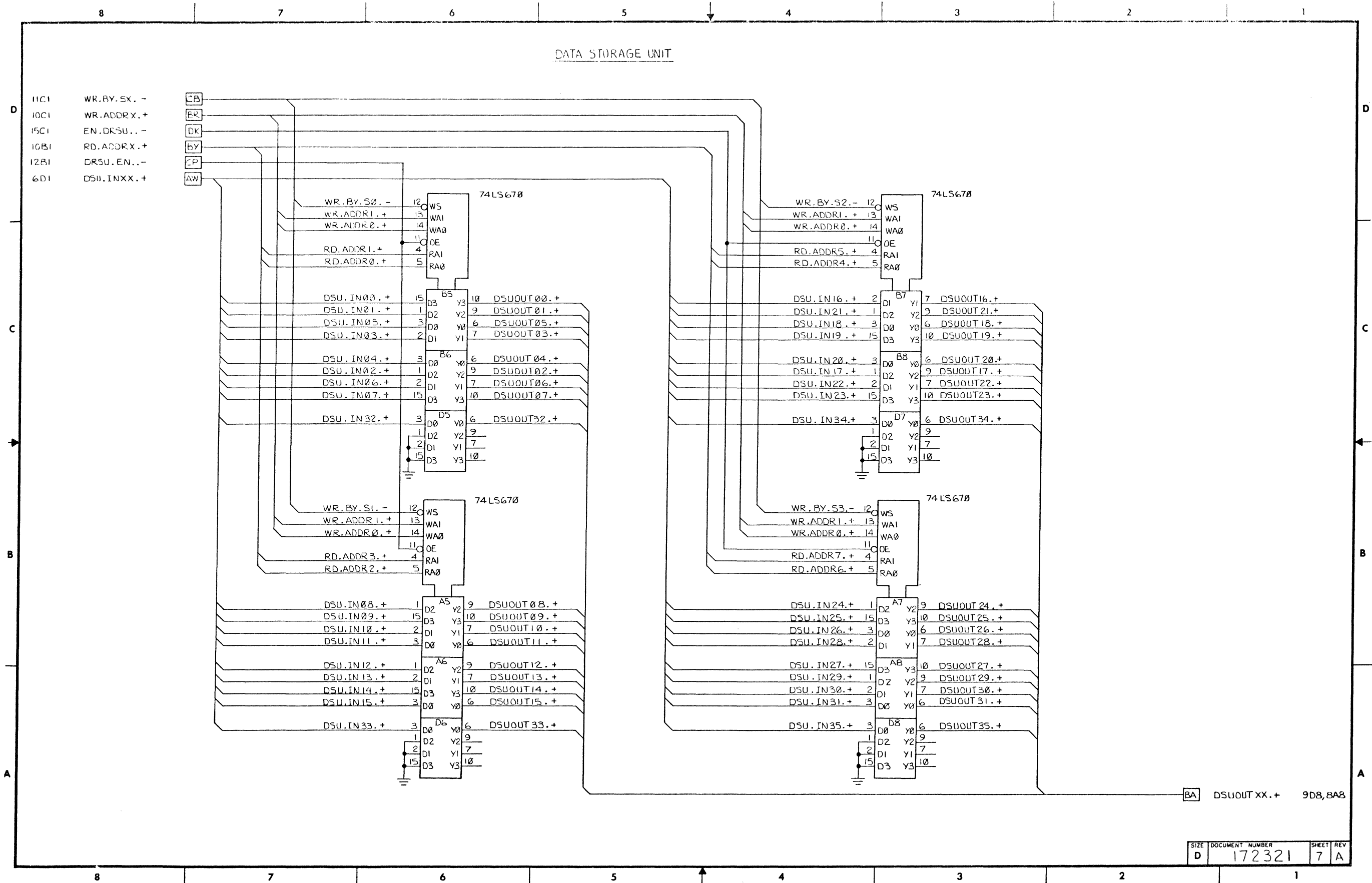


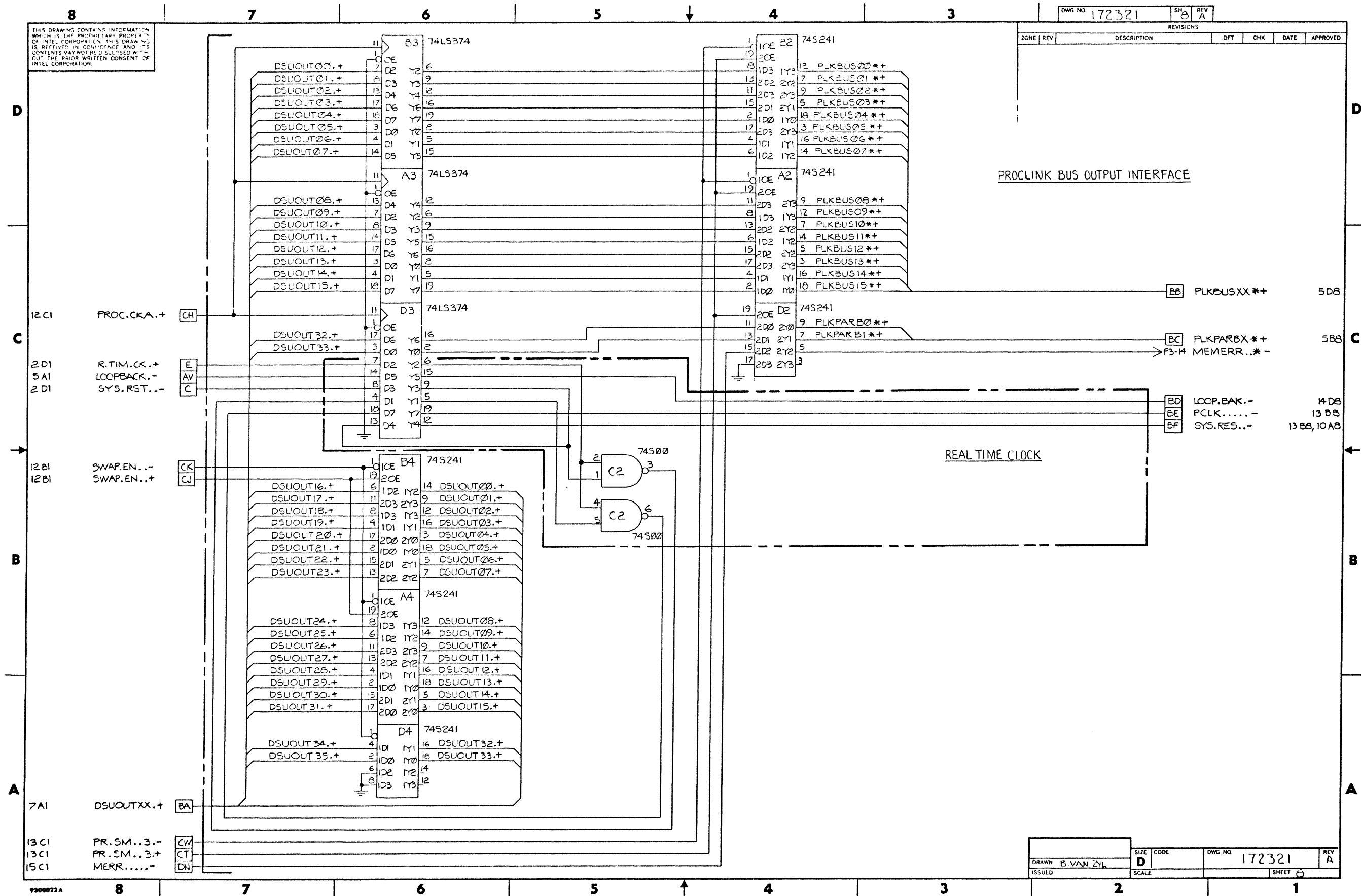
DWG NO.	172321	SH	5	REV	A	
ZONE	REV	DESCRIPTION	DFT	CHK	DATE	APPROVED

DRAWN	B. VAN ZYL	SIZE	D	CODE		DWG NO.	172321	REV	A
ISSUED		SCALE				SHEET	5		

9300022A

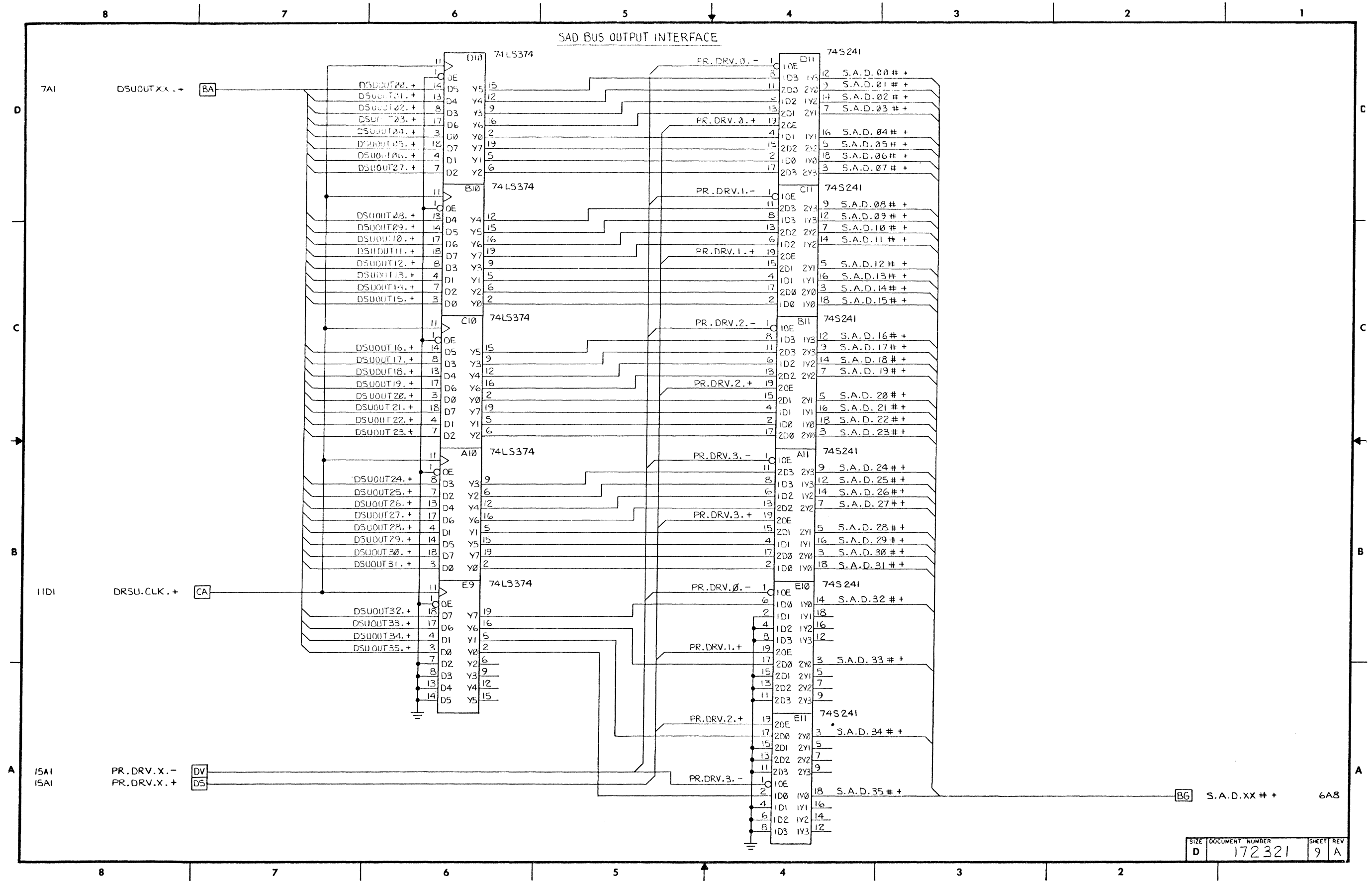




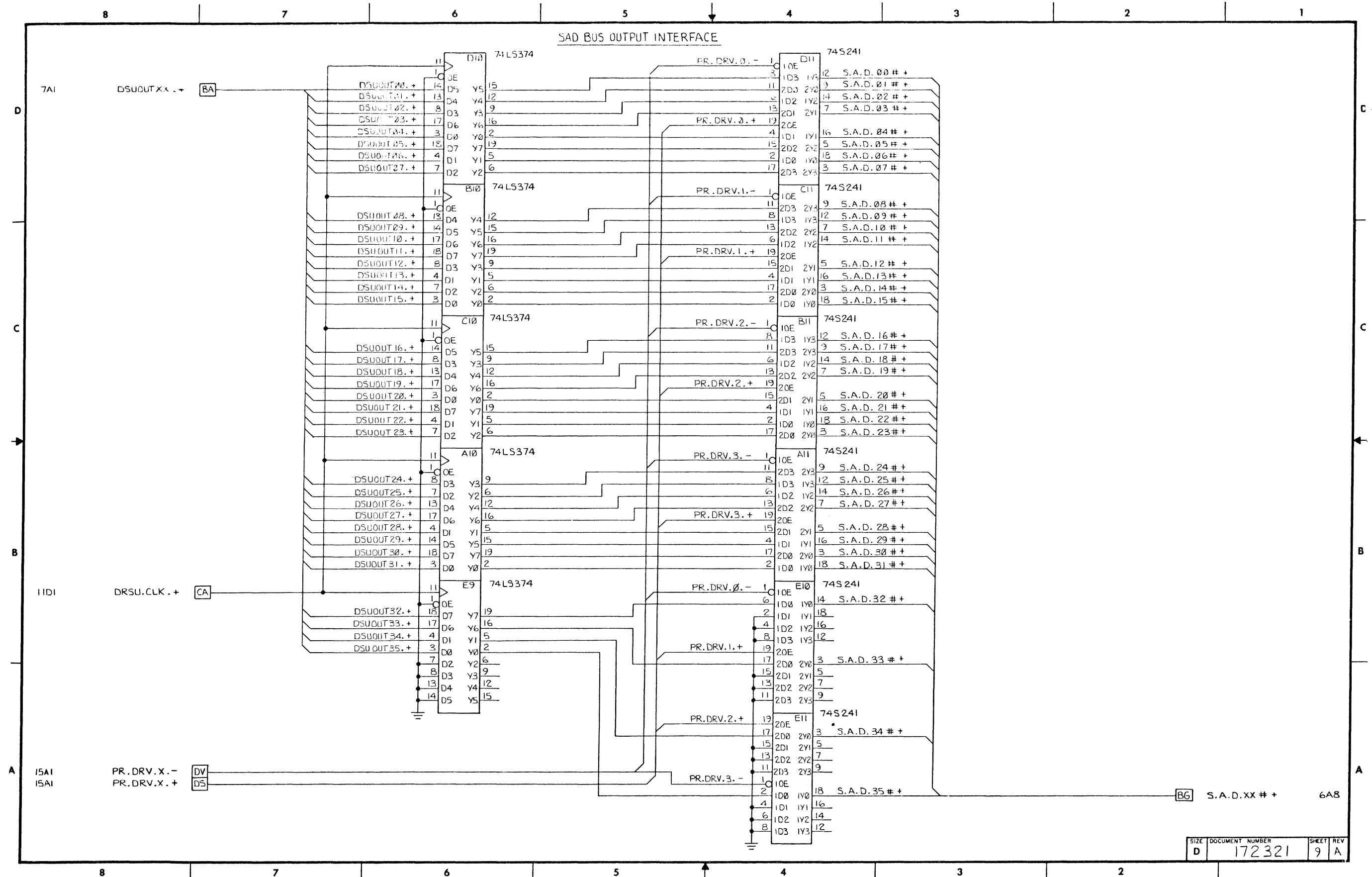


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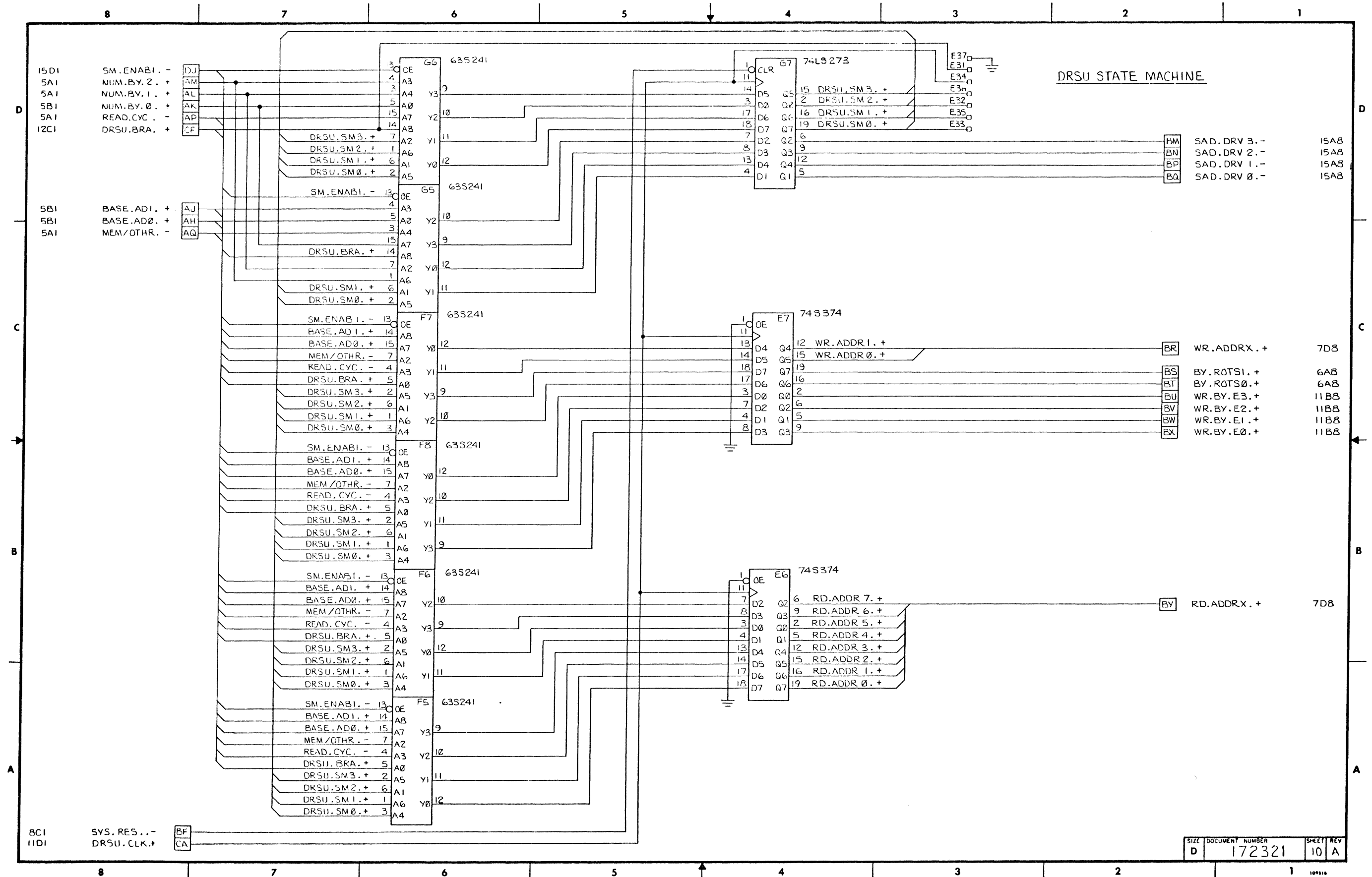
DRAWN	B. VAN ZYL	SIZE	CODE	DWG NO.	172321	REV	A
ISSUED		SCALE				SHEET	8



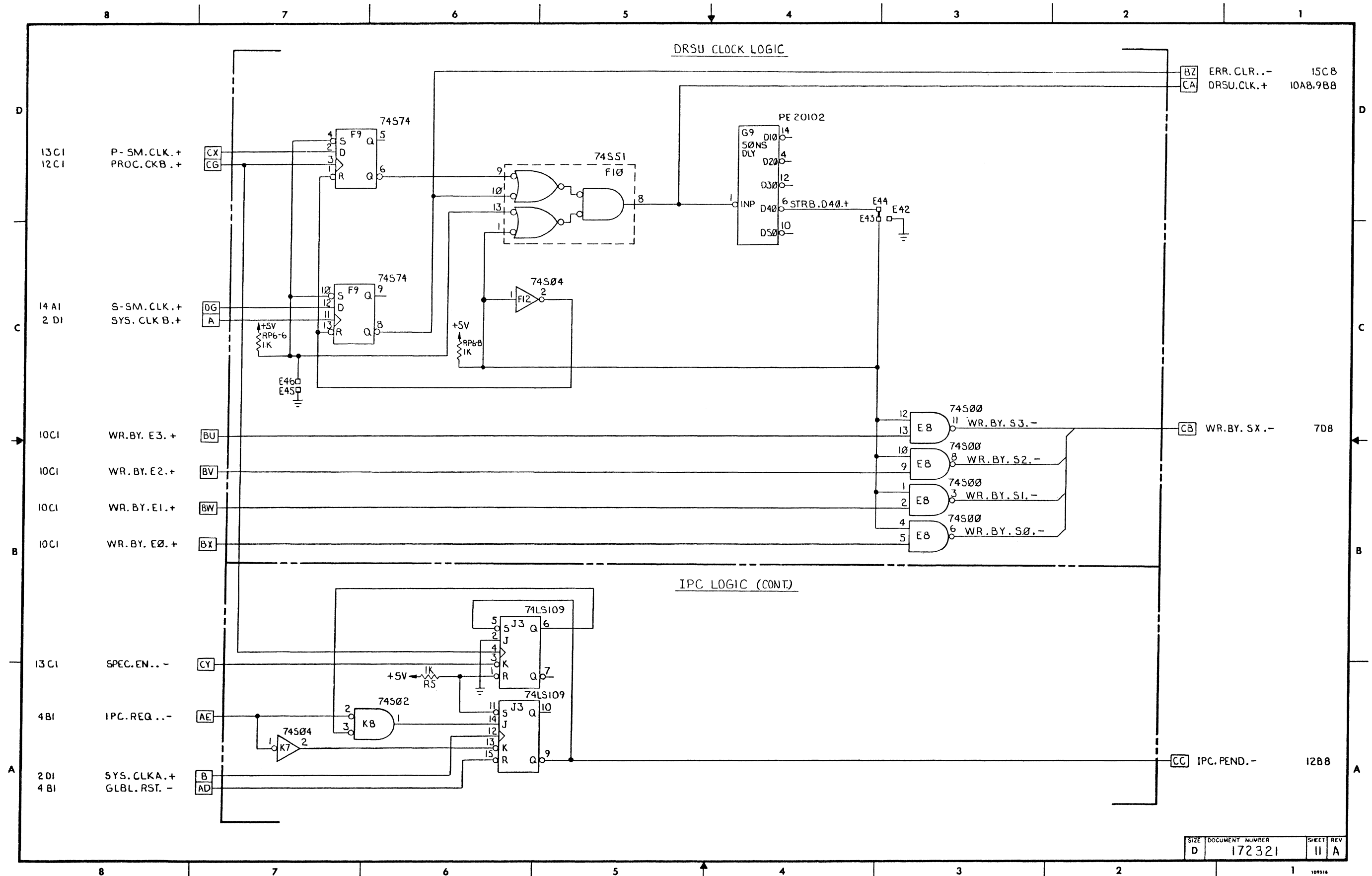
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	9	A



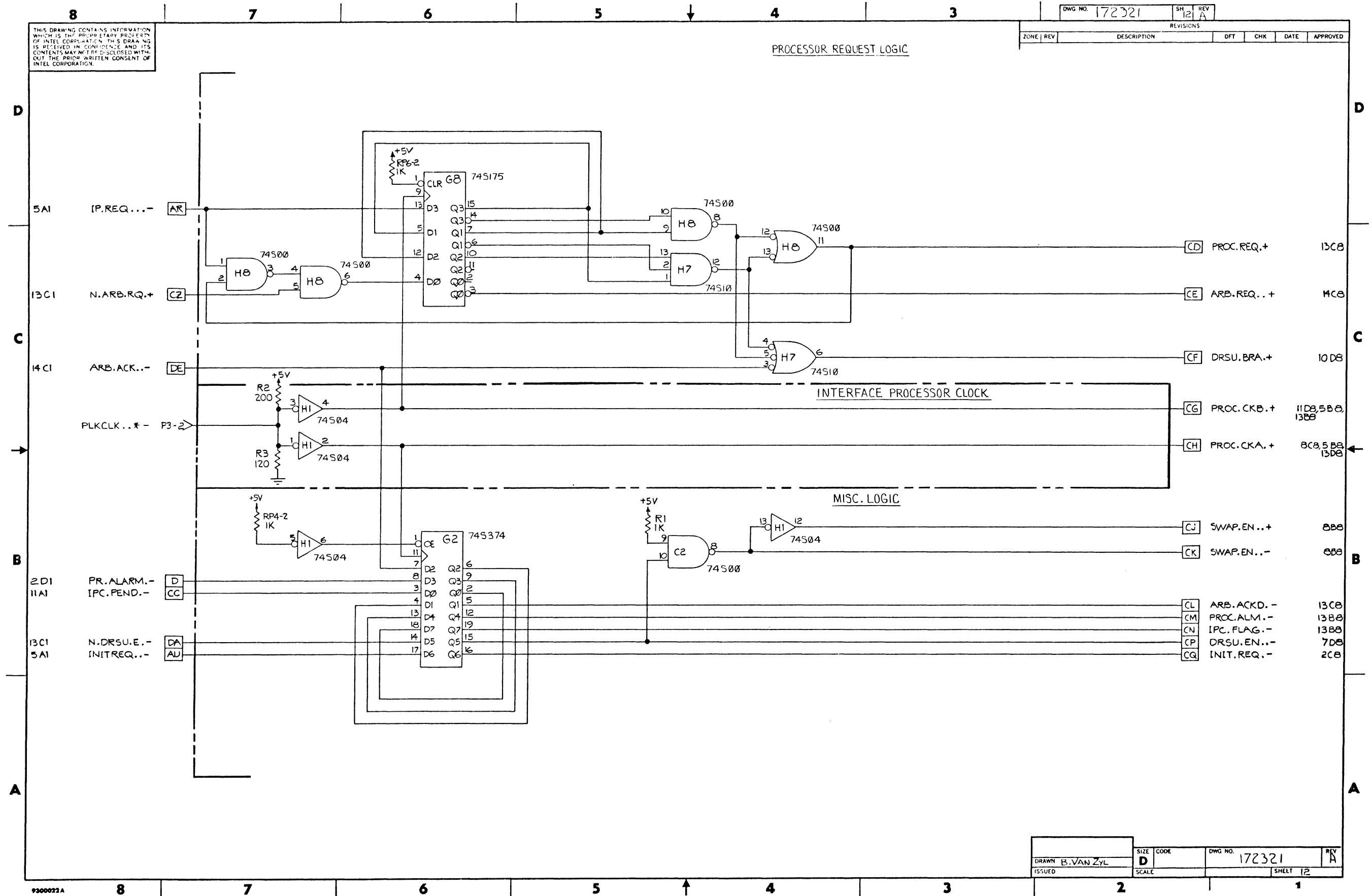
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	9	A

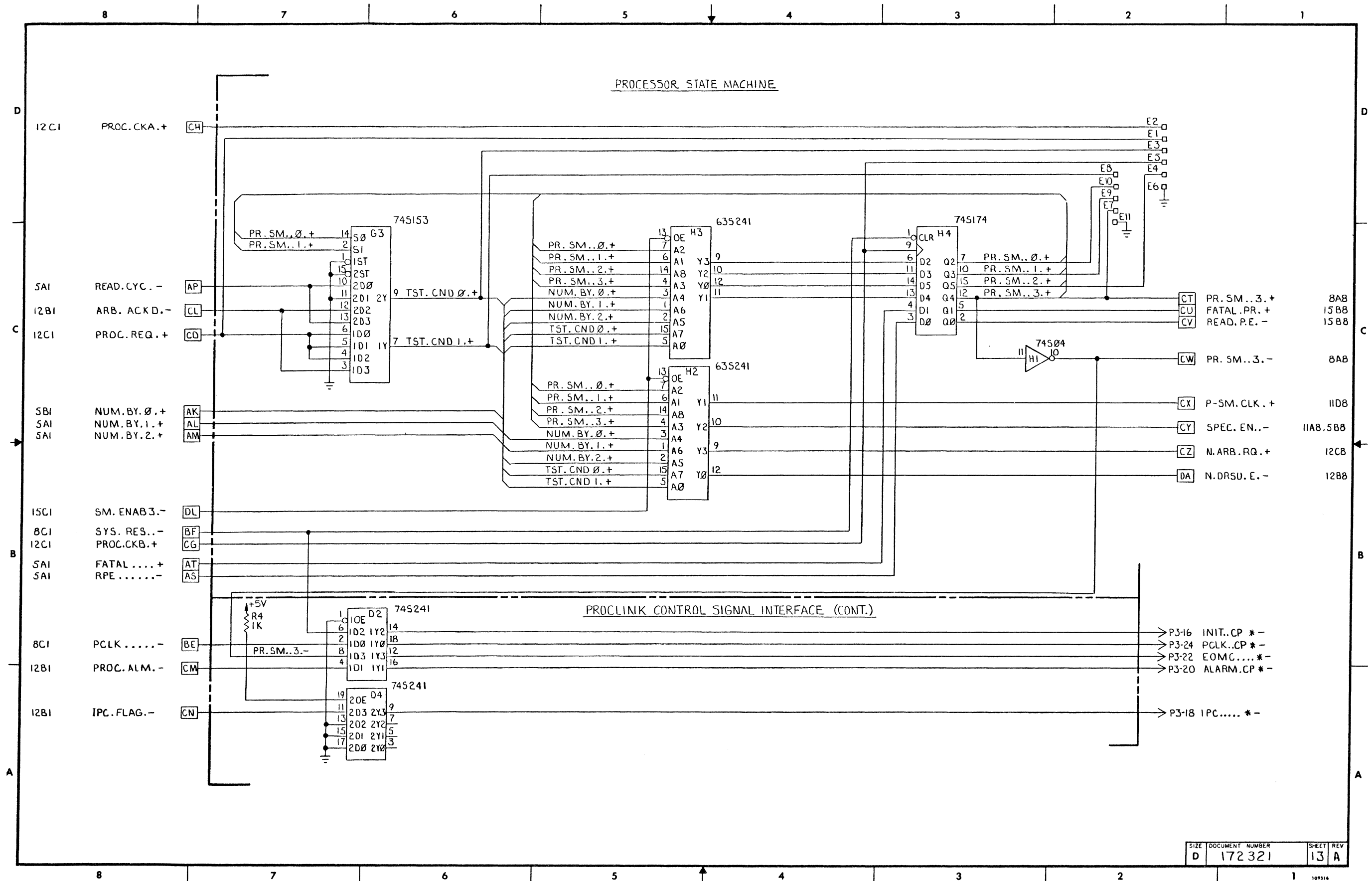


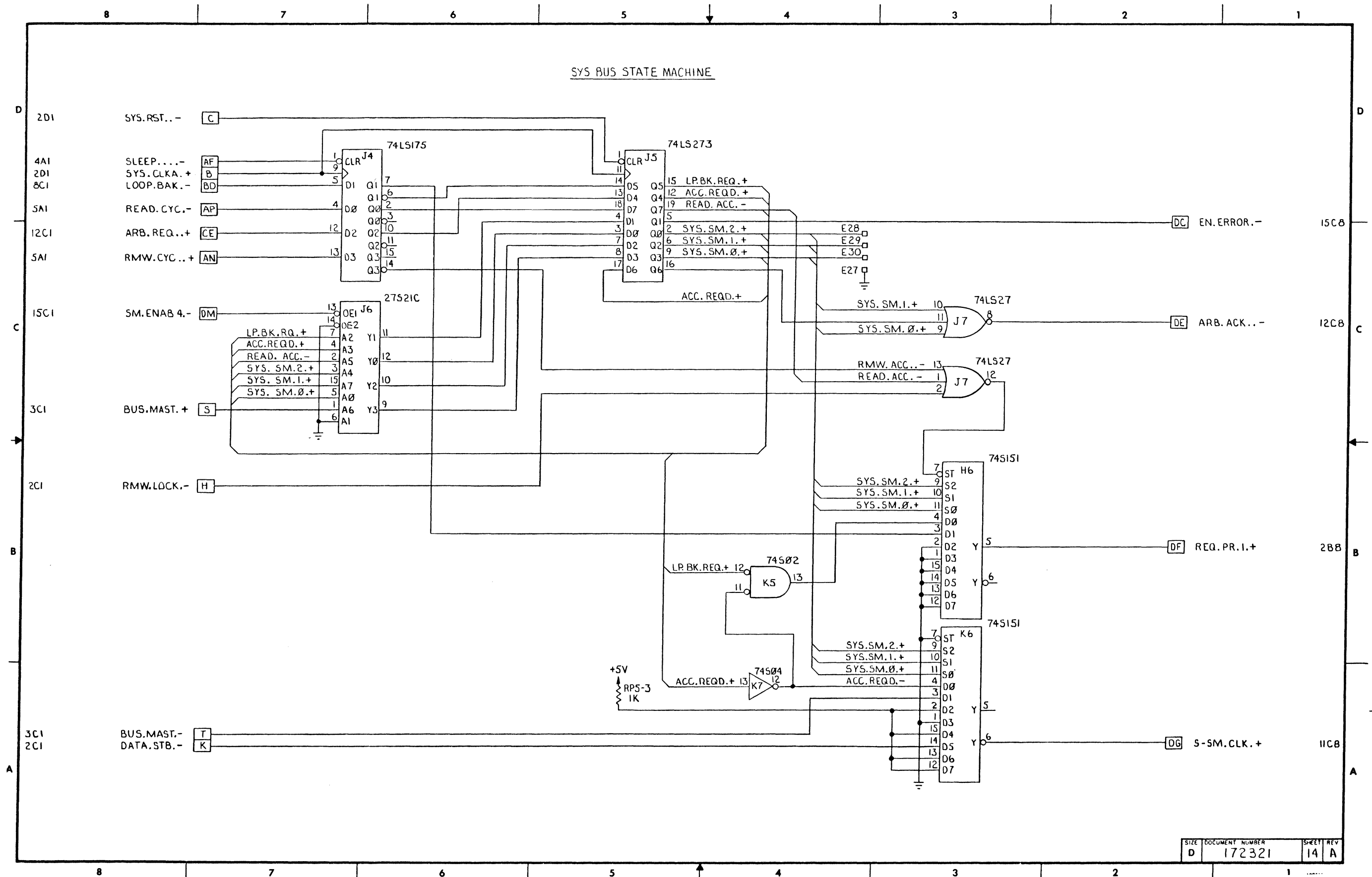
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	10	A



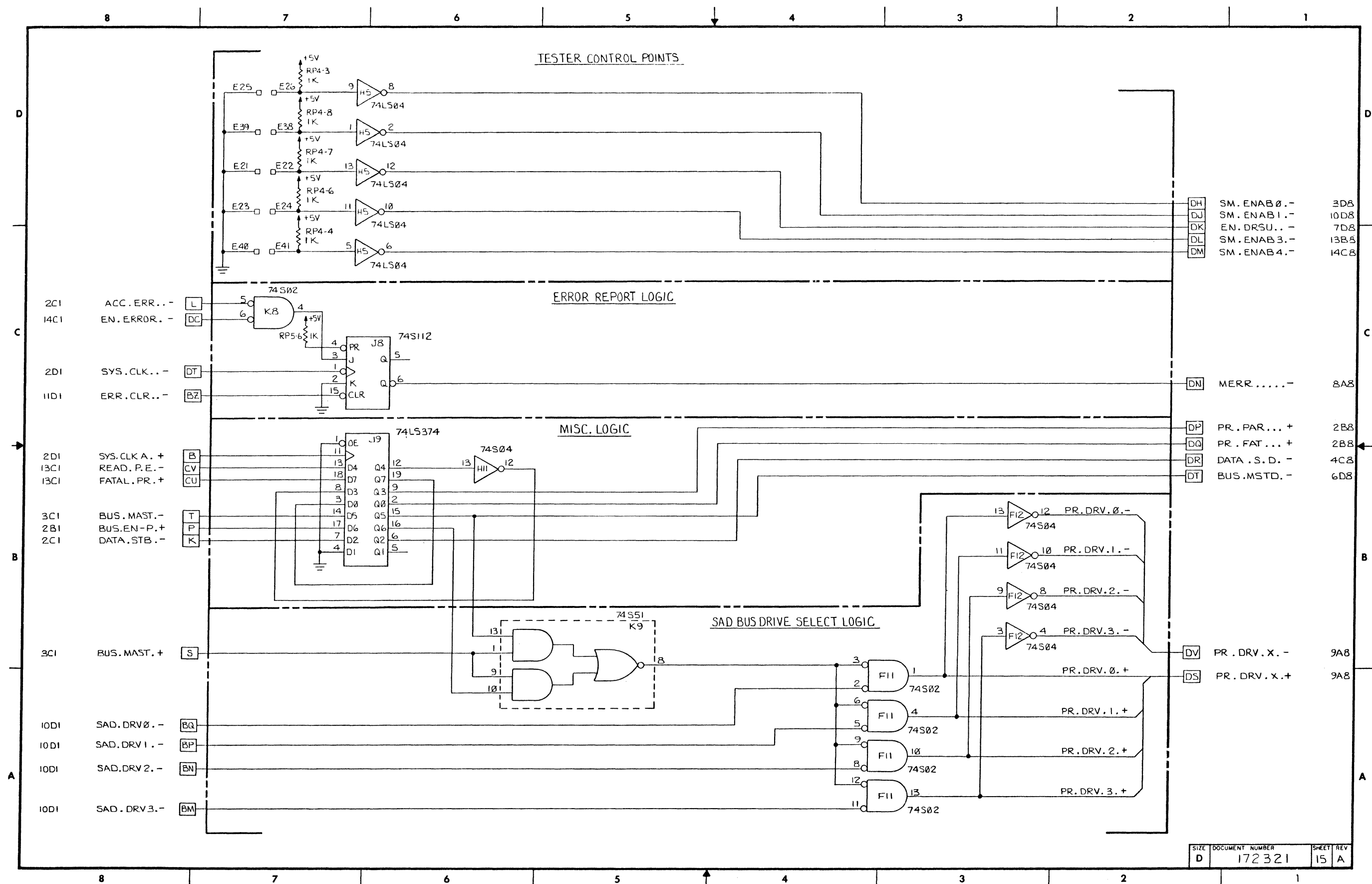
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	11	A







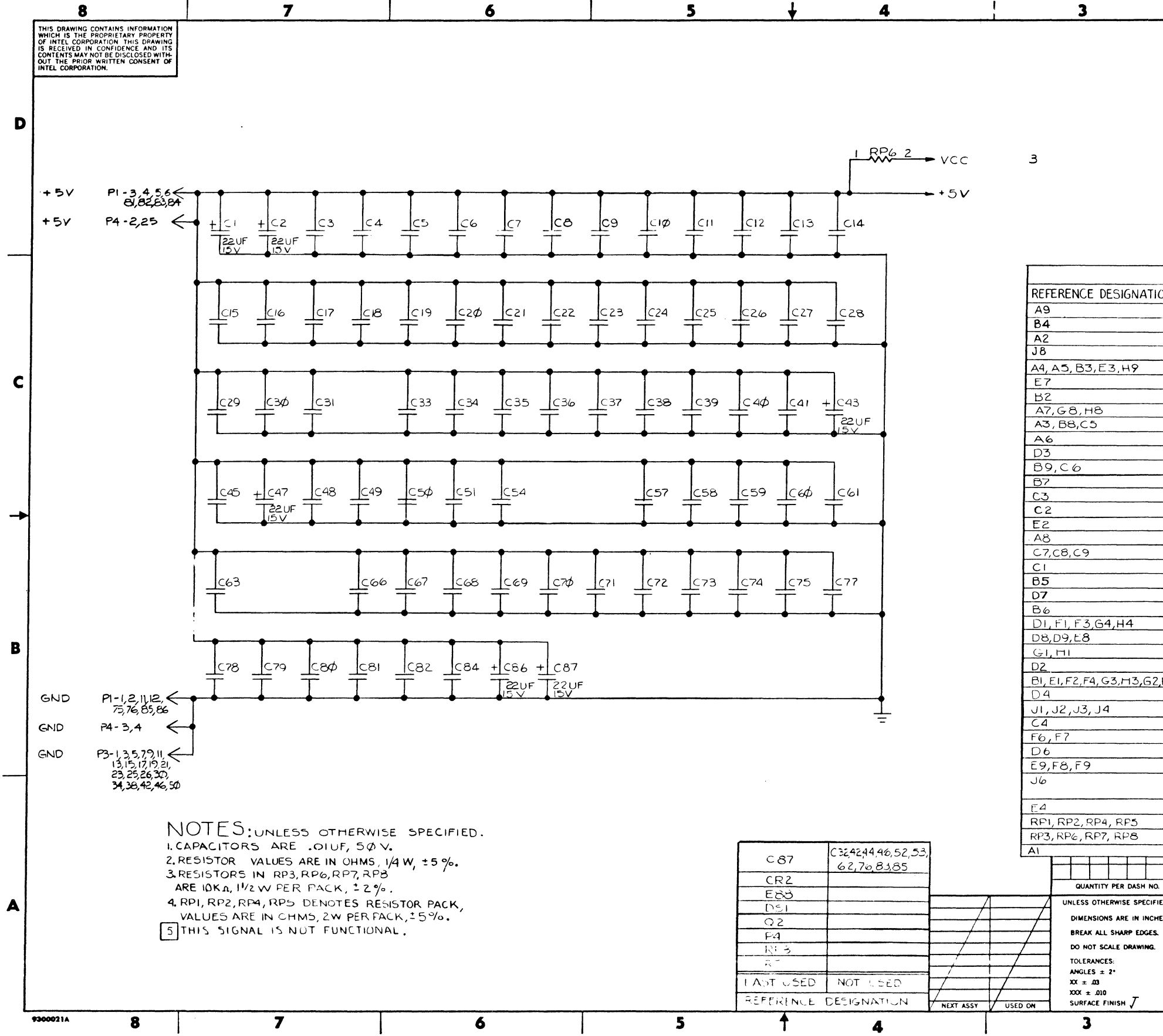
SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	14	A



SIZE	DOCUMENT NUMBER	SHEET	REV
D	172321	15	A

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DWG NO. 172910		SH 1	REV ..
REVISIONS			
ZONE	REV	DESCRIPTION	DFT
A	PER ECO	17-0413	V.T
			CHK DATE APPROVED
			✓ 8/23 ✓



REFERENCE DESIGNATION	DEVICE TYPE	GND PIN	+5V PIN	+12V PIN	-12V PIN	UNUSED OUTPUT PINS
A9	8289	10	20			
B4	74S174	8	16			
A2	74S10	7	14			
J8	74LS38	7	14			J8-3,6,8
A4, A5, B3, E3, H9	74LS00	7	14			
E7	74LS02	7	14			E7-1
B2	74S04	7	14			
A7, G8, H8	74LS04	7	14			G8-4,10, H8-2,12
A3, B8, C5	74LS08	7	14			
A6	74LS10	7	14			
D3	74S11	7	14			
B9, C6	74S32	7	14			
B7	7438	7	14			
C3	74LS51	7	14			
C2	74S64	7	14			
E2	74S74	7	14			
A8	74LS74	7	14			
C7, C8, C9	74LS138	8	16			
C1	74S140	7	14			
B5	74LS151	8	16			
D7	74LS174	8	16			
B6	74LS175	8	16			
D1, F1, F3, G4, H4	74S240	10	20			
D8, D9, E8	74LS240	10	20			
G1, H1	74S280	7	14			
D2	74S374	10	20			
B1, E1, F2, F4, G3, H3, G2, H2	74LS374	10	20			
D4	74LS379	8	16			
J1, J2, J3, J4	74LS670	8	16			
C4	27S13C	8	16			
F6, F7	82S5A-5	7	20			
D6	82S9A	14	28			
E9, F8, F9	8287	10	20			
J6	43203	5,24,15,36, 33,47	56			
F4	MK1100A	7	14			
RP1, RP2, RP4, RP5	121/195	8	1			
RP3, RP6, RP7, RP8	10K	-	1			
A1	74LS164	7	14			

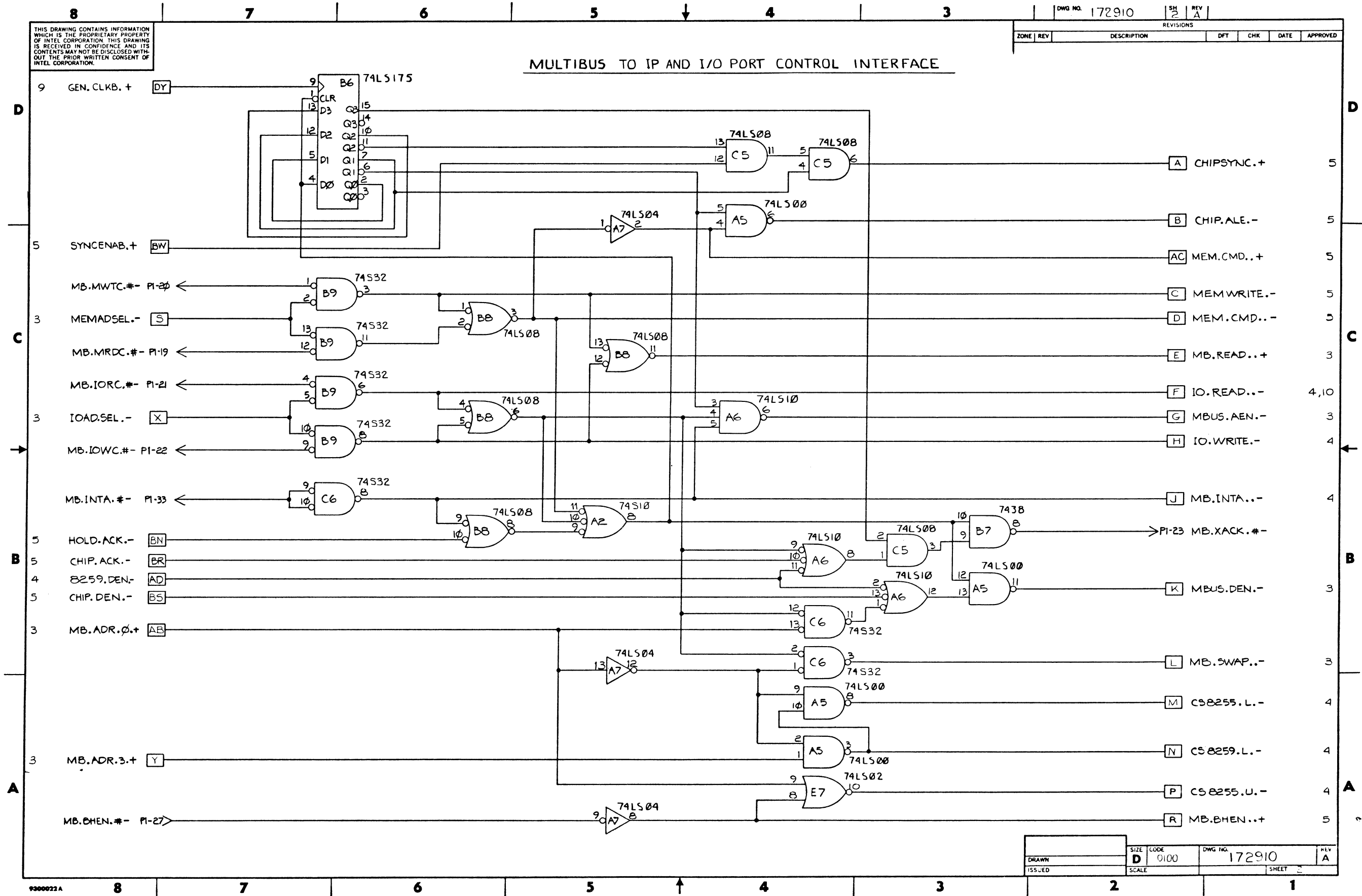
NOTES: UNLESS OTHERWISE SPECIFIED.
 1. CAPACITORS ARE .01UF, 50V.
 2. RESISTOR VALUES ARE IN OHMS, 1/4 W, ±5%.
 3. RESISTORS IN RP3, RP6, RP7, RP8 ARE 10KΩ, 1/2 W PER PACK, ±2%.
 4. RP1, RP2, RP4, RP5 DENOTES RESISTOR PACK, VALUES ARE IN OHMS, 2W PER PACK, ±5%.
 5. THIS SIGNAL IS NOT FUNCTIONAL.

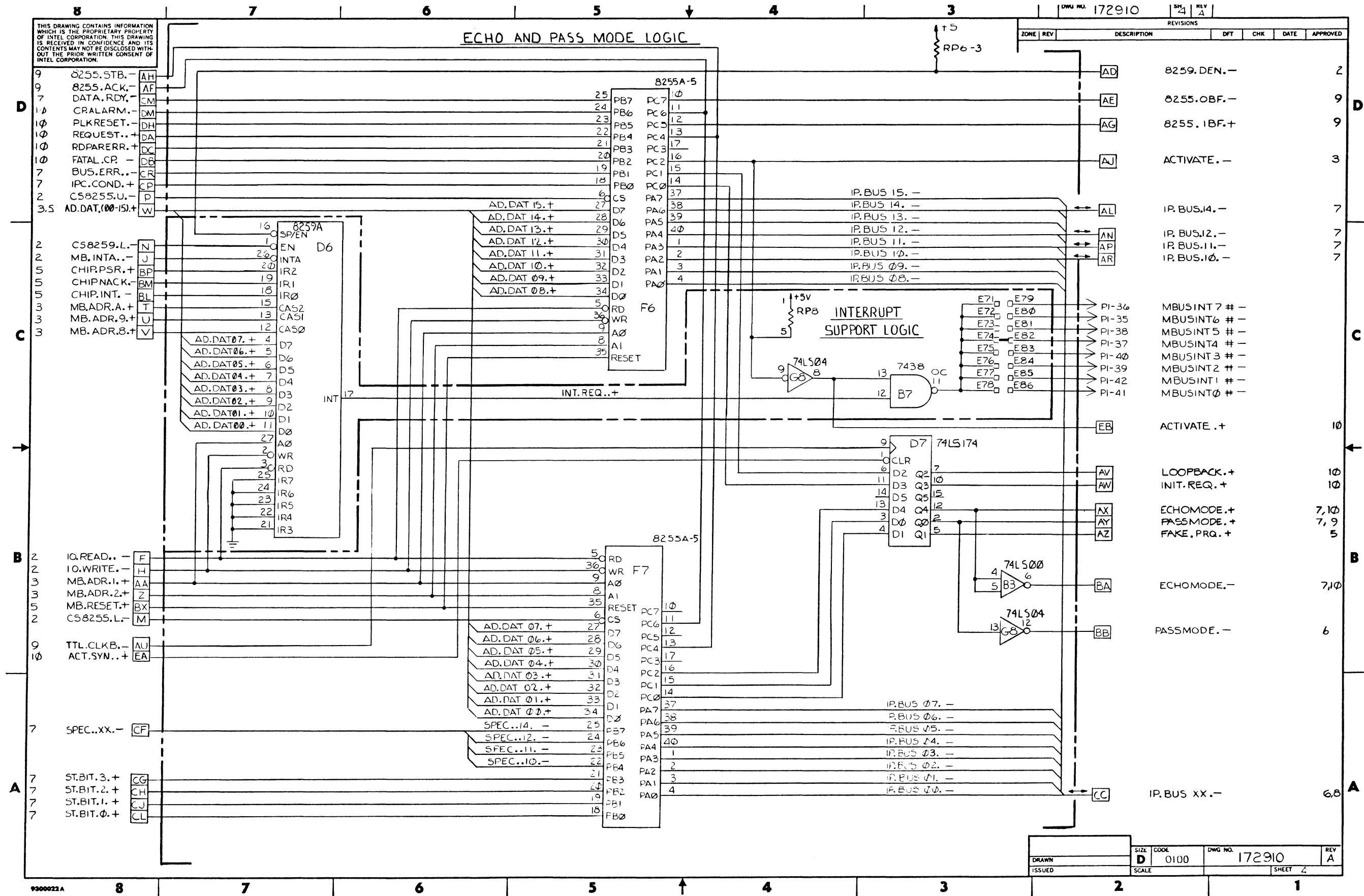
C87	C32,42,44,46,52,53, 62,70,83,85
CR2	
E83	
D51	
Q2	
F4	
RP3	
RP	
LAST USED	NOT USED
REFERENCE DESIGNATION	

NEXT ASSY	
USED ON	

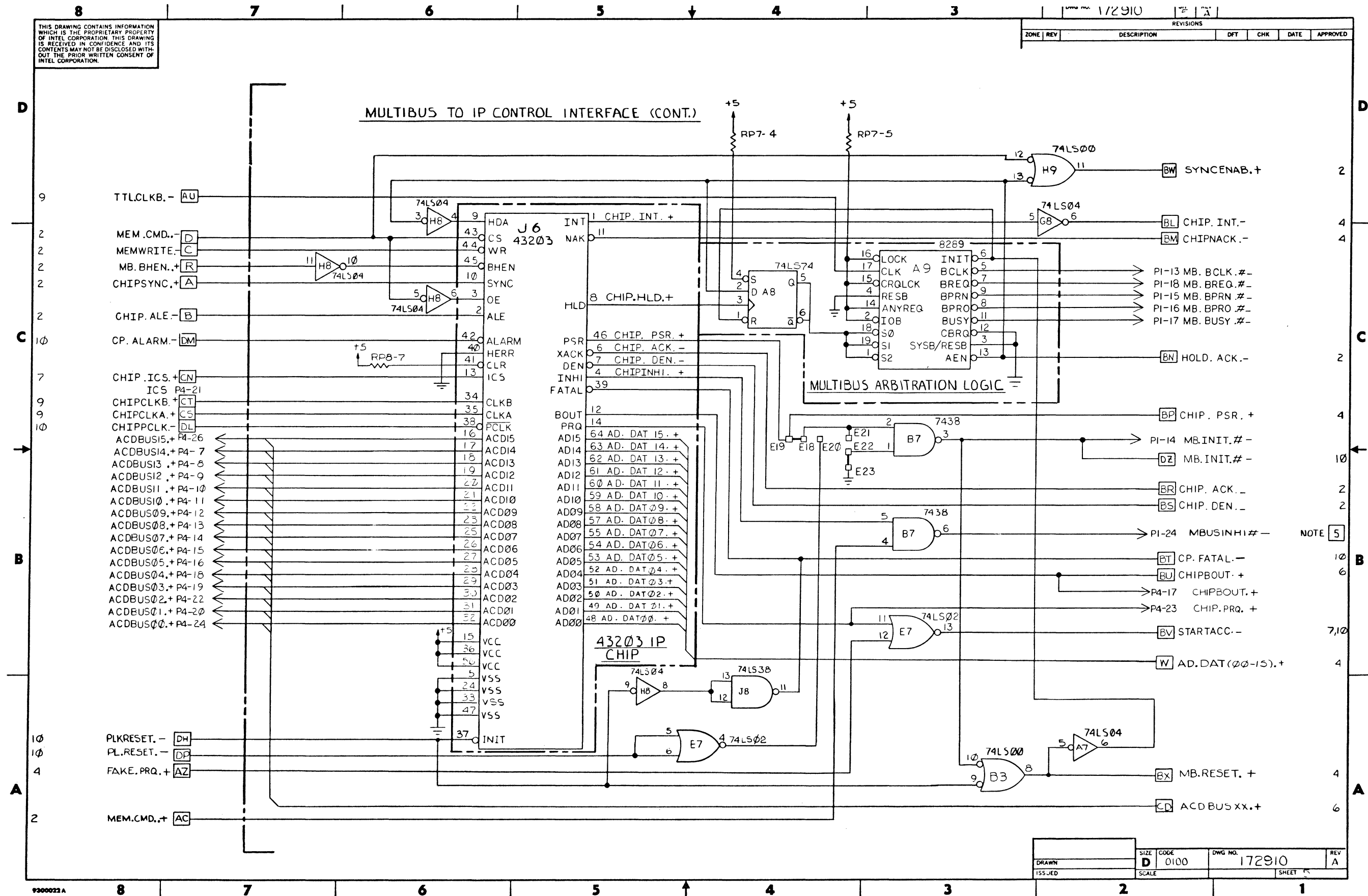
QUANTITY PER DASH NO.	ITEM NO.	PART NUMBER	DESCRIPTION
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES. DO NOT SCALE DRAWING. TOLERANCES: ANGLES ± 2° XX ± .03 XXX ± .010 SURFACE FINISH J			
SIGNATURE		DATE	3065 BOWERS AVE. SANTA CLARA, CALIF. 95051
DRN BY: V. TRIN		2/2/77	
CHK BY: LANKETT		2/2/77	
TITLE			LOGIC DIAGRAM, PWA,
APVD			158C 432/602, 1P
APVD			
APVD			
SIZE	CODE	DWG. NO.	REV
D	0100	172910	A
SCALE NONE			SHEET 1 OF 10

9300021A





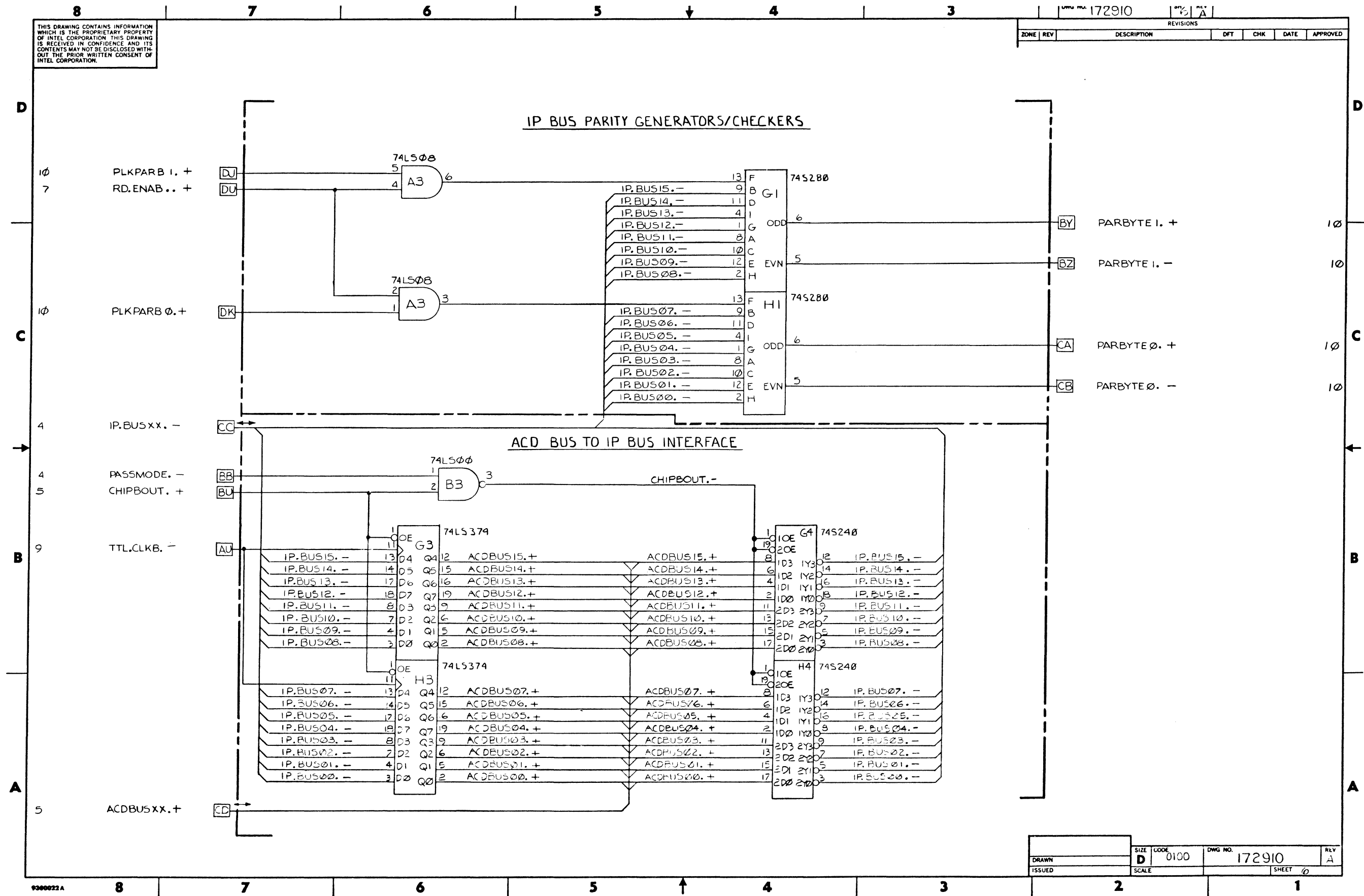
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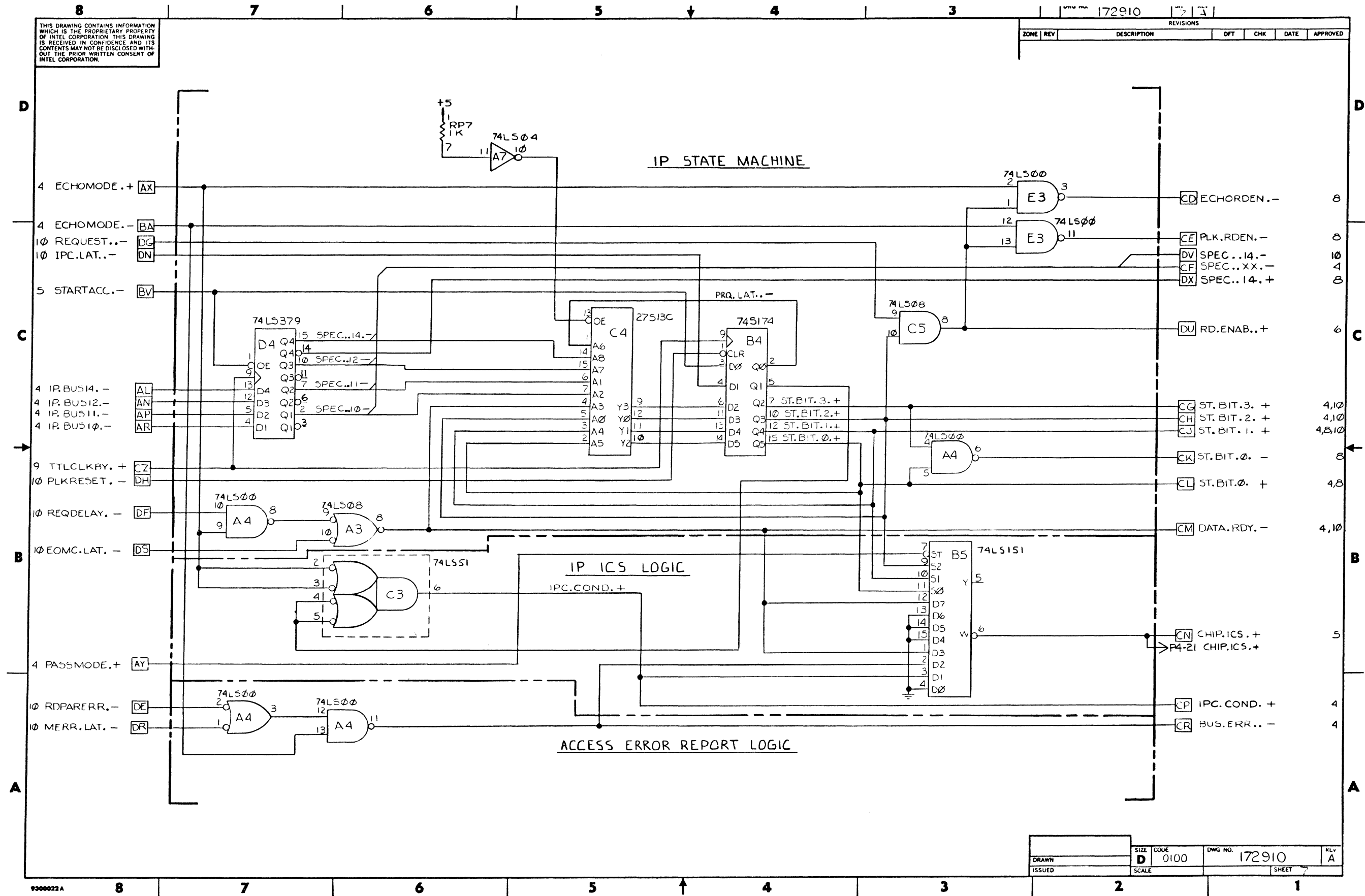
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REVISIONS						
ZONE	REV	DESCRIPTION	DFT	CHK	DATE	APPROVED

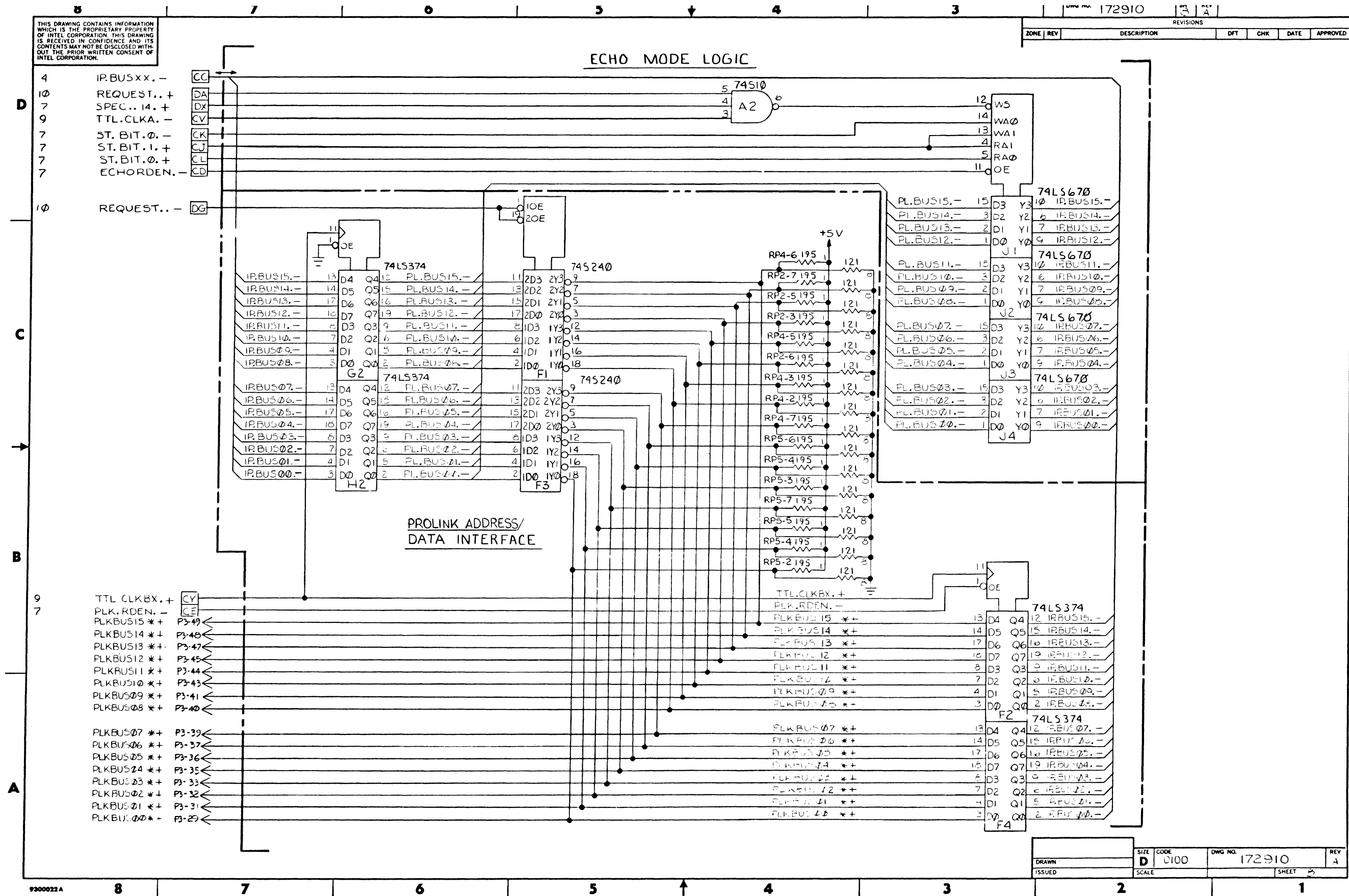
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9380022A

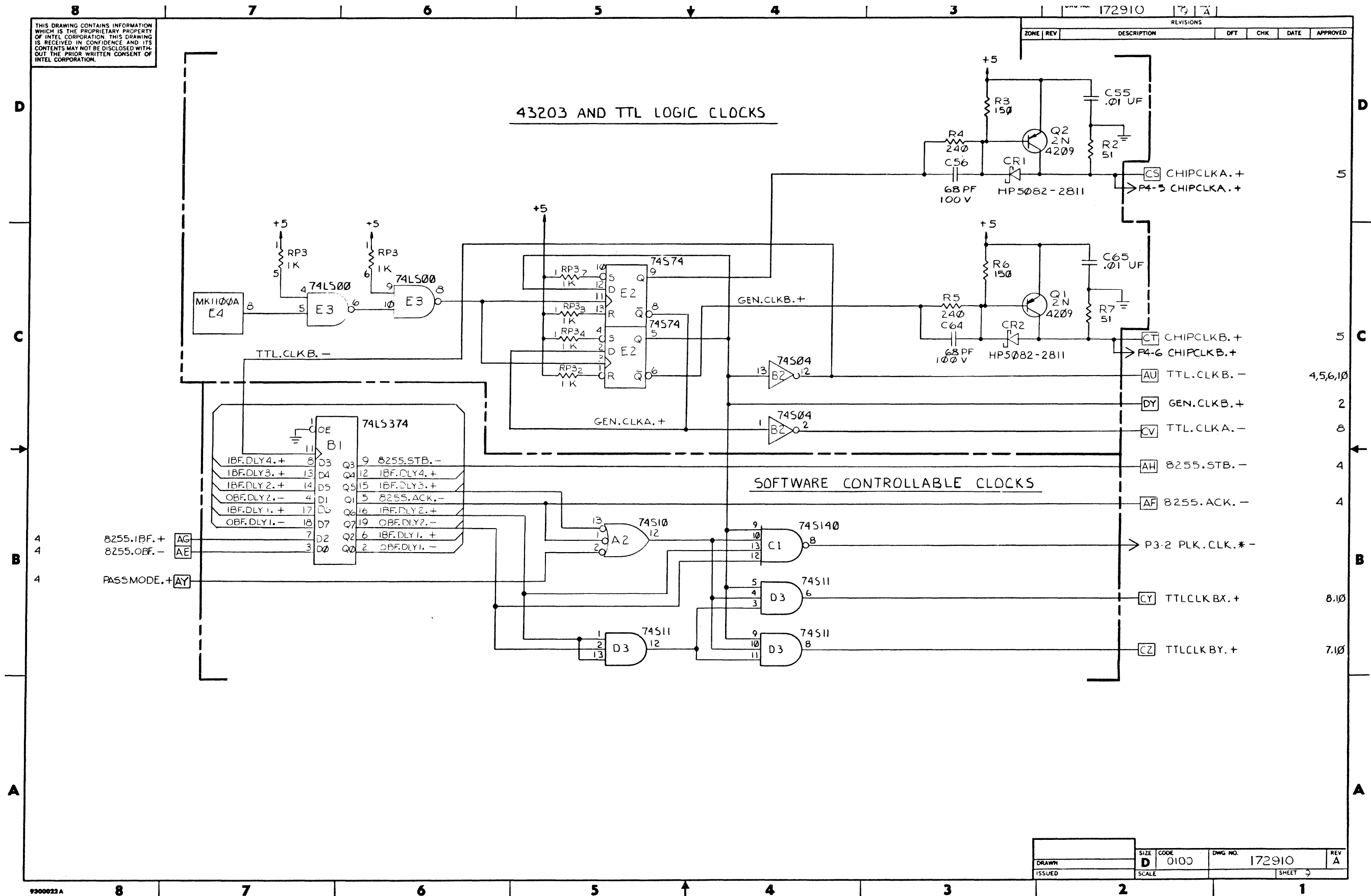


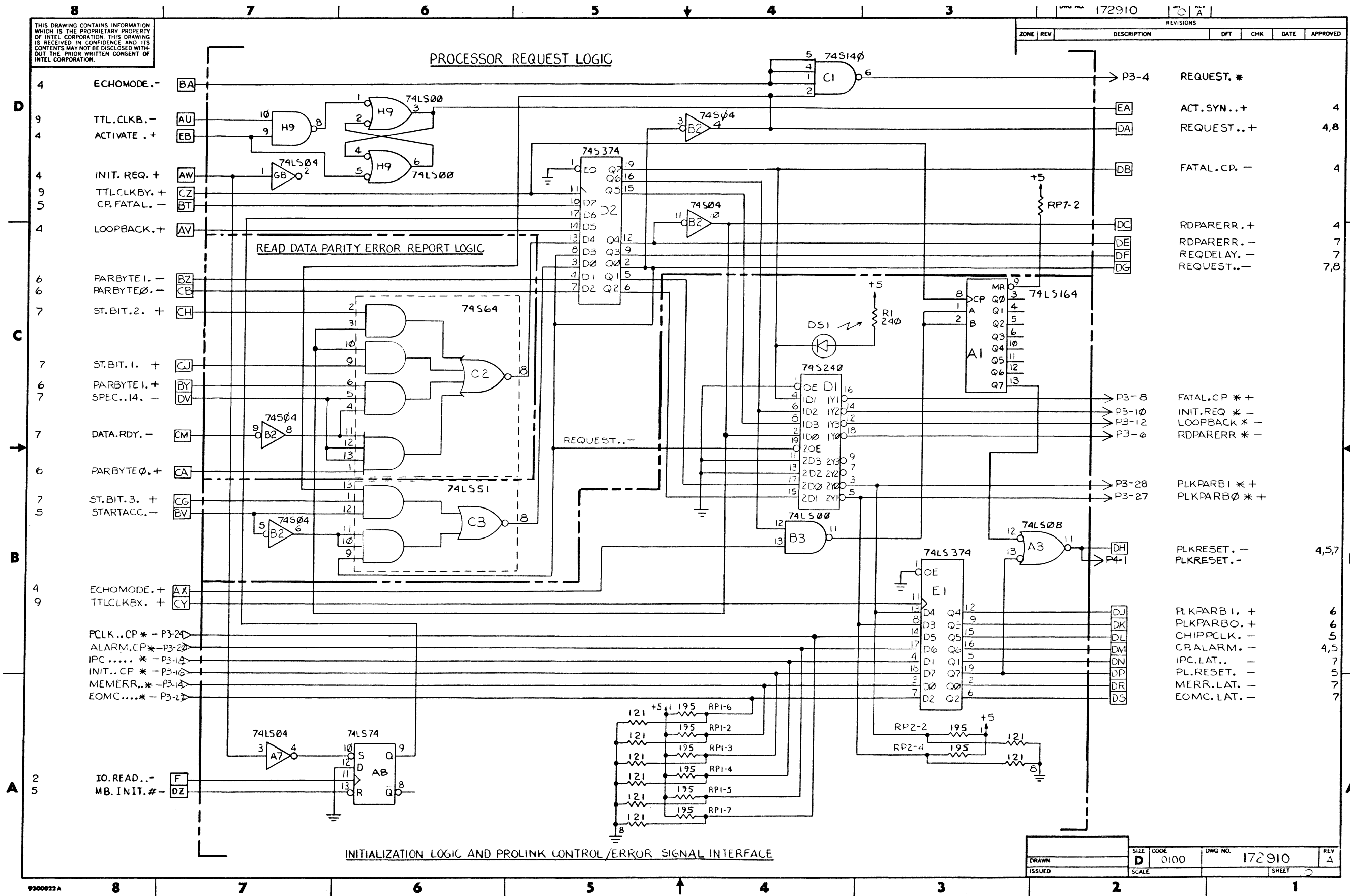
SIZE	CODE	DWG. NO.	REV.
D	0100	172910	A
ISSUED	SCALE	SHEET	



DRAWN	SIZE D	CODE 0100	DWG NO. 172910	REV A
ISSUED	SCALE		SHEET	

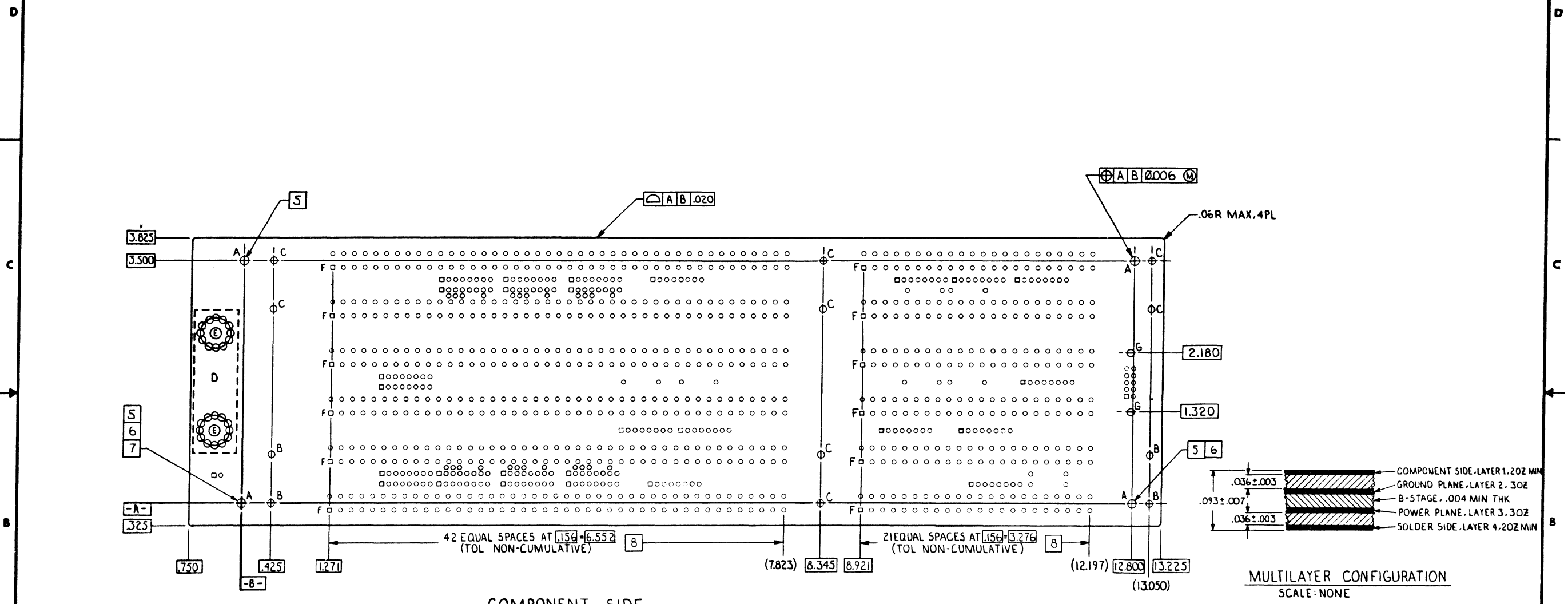
9300022A





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REVISIONS						
REV	DESCRIPTION	DFT	DATE	CHK	DATE	APVD
A	PER ECO 17-0160	D	9-28-81	C.H.G.	7/29/81	R.S.



COMPONENT SIDE

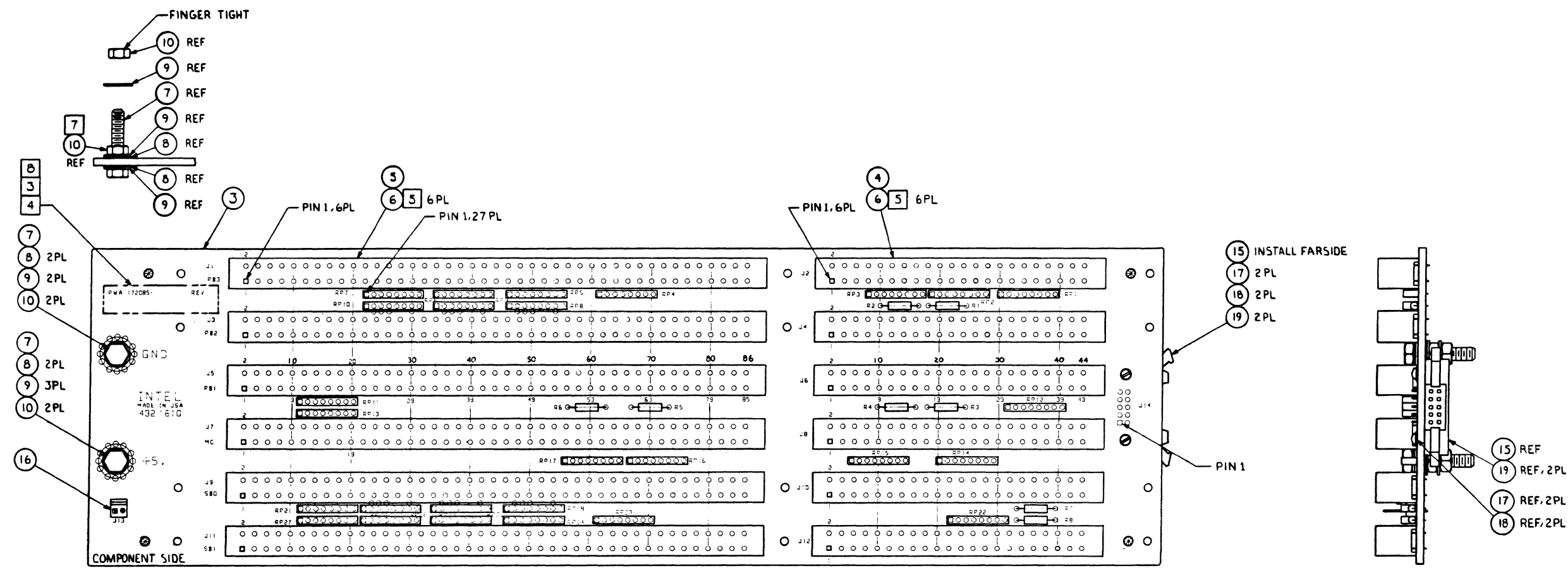
MULTILAYER CONFIGURATION
SCALE: NONE

- NOTES: UNLESS OTHERWISE SPECIFIED:
- PART NUMBER IS: 172083-001, THIS DOCUMENT, ARTMASTER, AND PARTS LIST ARE TRACKING DOCUMENTS.
 - FABRICATE AND SILKSCREEN PER 9400001.
 - DIMENSIONING PER ANSI Y14.5-1973.
 - ALL HOLES SHALL BE LOCATED AT INTERSECTIONS OF A .025 PITCH GRID ESTABLISHED BY DATUMS-A AND-B WITHIN .008 DIAMETER MMC.
 - THE CENTER OF THIS HOLE SHALL BE LOCATED WITHIN .006 DIA RFS OF THE CENTER OF ITS PAD.
 - THE CENTERS OF THESE TWO HOLES ESTABLISH DATUM-A-.
 - DATUM-B- IS ESTABLISHED PERPENDICULAR TO DATUM-A- THROUGH THE CENTER OF THIS HOLE.
 - B6 144 PIN CONNECTORS ARE NOT ON .025 GRID.

HOLE CHART		
SYM	DIAMETER	QTY
NONE	PLATED THRU .042 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	AR
A	NOT PLATED THRU .109 $\begin{matrix} +.002 \\ -.001 \end{matrix}$	4
B	NOT PLATED THRU .141 $\begin{matrix} +.002 \\ -.001 \end{matrix}$	4
C	NOT PLATED THRU .147 $\begin{matrix} +.002 \\ -.001 \end{matrix}$	8
D	PLATED THRU .055 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	24
E	PLATED THRU .212 $\pm .005$	2
F	PLATED THRU .032 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	12
G	NOT PLATED THRU .109 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	2

QUANTITY PER DASH NO		PARTS LIST	
ITEM NO	DESCRIPTION	SIGNATURE	DATE
UNLESS OTHERWISE SPECIFIED		intel® 3065 BOWERS AVE SANTA CLARA CALIF 95051	7 28 81
1 DIMENSIONS ARE IN INCHES			
2 BREAK ALL SHARP EDGES			
3 DO NOT SCALE DRAWING			
4 TOLERANCES ANGLES $\pm 2^\circ$ XX $\pm .01$ XXX $\pm .005$		TITLE PRINTED WIRING BOARD 158C 432/610 .BP6 .5-BUS	
		SIZE D	SCALE 1.5 / 1

<p>THIS DRAWING CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF INTEL CORPORATION. THIS DRAWING IS RECEIVED IN CONFIDENCE AND ITS CONTENTS MAY NOT BE DISCLOSED WITH OUT THE PRIOR WRITTEN CONSENT OF INTEL CORPORATION.</p>						
REVISIONS						
REV	DESCRIPTION	DFT	DATE	CHK	DATE	APVD
A	PER ECO17-0160		3 5 81	CMS	4/19/81	



COMPONENT SIDE

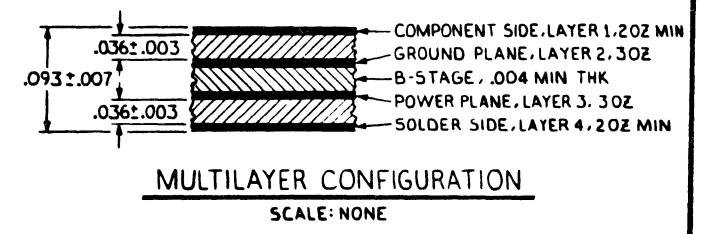
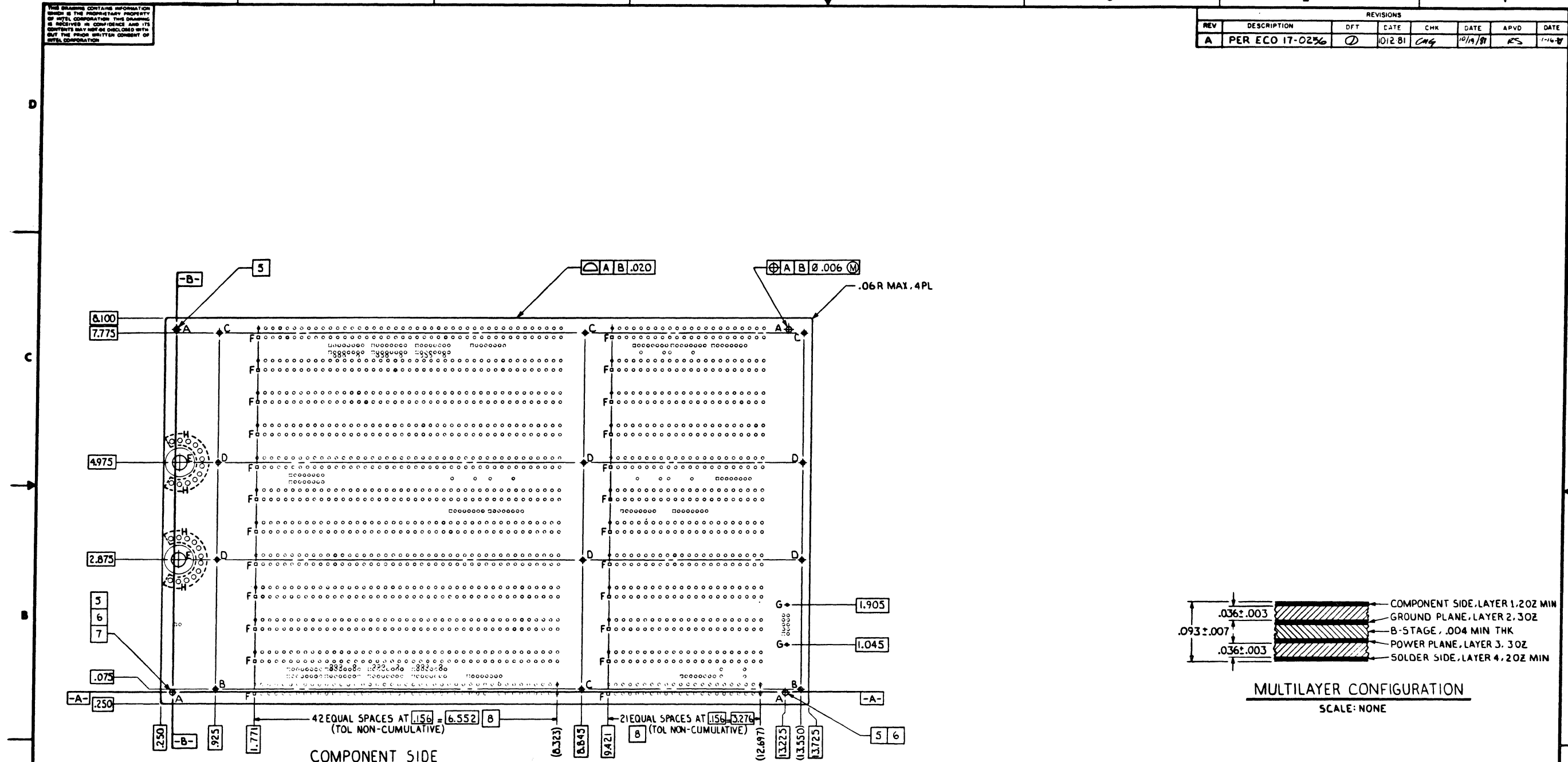
- NOTES: UNLESS OTHERWISE SPECIFIED:
- 1. ASSEMBLY PART NUMBER IS: 172085-001 THIS DOCUMENT AND PARTS LIST ARE TRACKING DOCUMENTS.
 - 2. WORKMANSHIP PER 99-0007-001.
 - 3. MARK ASSEMBLY DASH NUMBER AND REVISION LEVEL WITH CONTRASTING PERM. COLOR, NON-CONDUCTIVE, .12 HIGH, APPROXIMATELY WHERE SHOWN.
 - 4. MARK ASSEMBLY VENDOR ID WITH CONTRASTING PERM. COLOR, NON-CONDUCTIVE, .12 HIGH, APPROXIMATELY WHERE SHOWN.
 - 5. INSTALL POLARIZING KEYS, ITEM 6, BETWEEN PINS PER POLARIZATION KEY LOCATION CHART.
 - 6. ITEMS SHOWN ARE TO BE USED ONLY IF SPECIFIED ON PARTS LIST.
 - 7. TORQUE TO 20 IN. LBS. 2 PLACES.
- 5 MARK SERIAL NUMBER WITH PERMANENT CONTRASTING COLOR APPROX WHERE SHOWN, FAR SIDE.

POLARIZING KEY LOCATION		ITEM NO.	DESCRIPTION
CONNECTOR NUMBER	POLARIZING KEY POSITION	QUANTITY PER DASH NO.	PARTS LIST
J1, J3, J5	5 151617,18	UNLESS OTHERWISE SPECIFIED:	SIGNATURE DATE
J7	5 29,30,31,32	1 DIMENSIONS ARE IN INCHES	DRN BY: DHR/WALTER 10/81
J9, J11	5 71,72,73,74	2 BREAK ALL SHARP EDGES	CHK BY: C. GINSBY 10/81
J2, J4, J6	4 5,6,7,8	3 DO NOT SCALE DRAWING	ENGR APVD E. SMITH 4/21
J8	4 13,14,15,16	4 TOLERANCES ANGLES ± 2°	APVD
J10, J12	4 37,38,39,40	XX ± .01	APVD
		XXX ± .005	

INTEL		3065 BOWERS AVE SANTA CLARA CALIF 95051	
TITLE PRINTED WIRING ASSEMBLY			
ISBC 432/610, BP6, S-BUS			
SIZE	DCLC	CL CODE	ALSE LVL
D		0502	
DOCUMENT NUMBER	REV	SHEET 1 OF 1	
172085	A		

REVISIONS						
REV	DESCRIPTION	DFT	DATE	CHK	APVD	DATE
A	PER ECO 17-0236	D	10/2/81	CHG	RS	11/14/81

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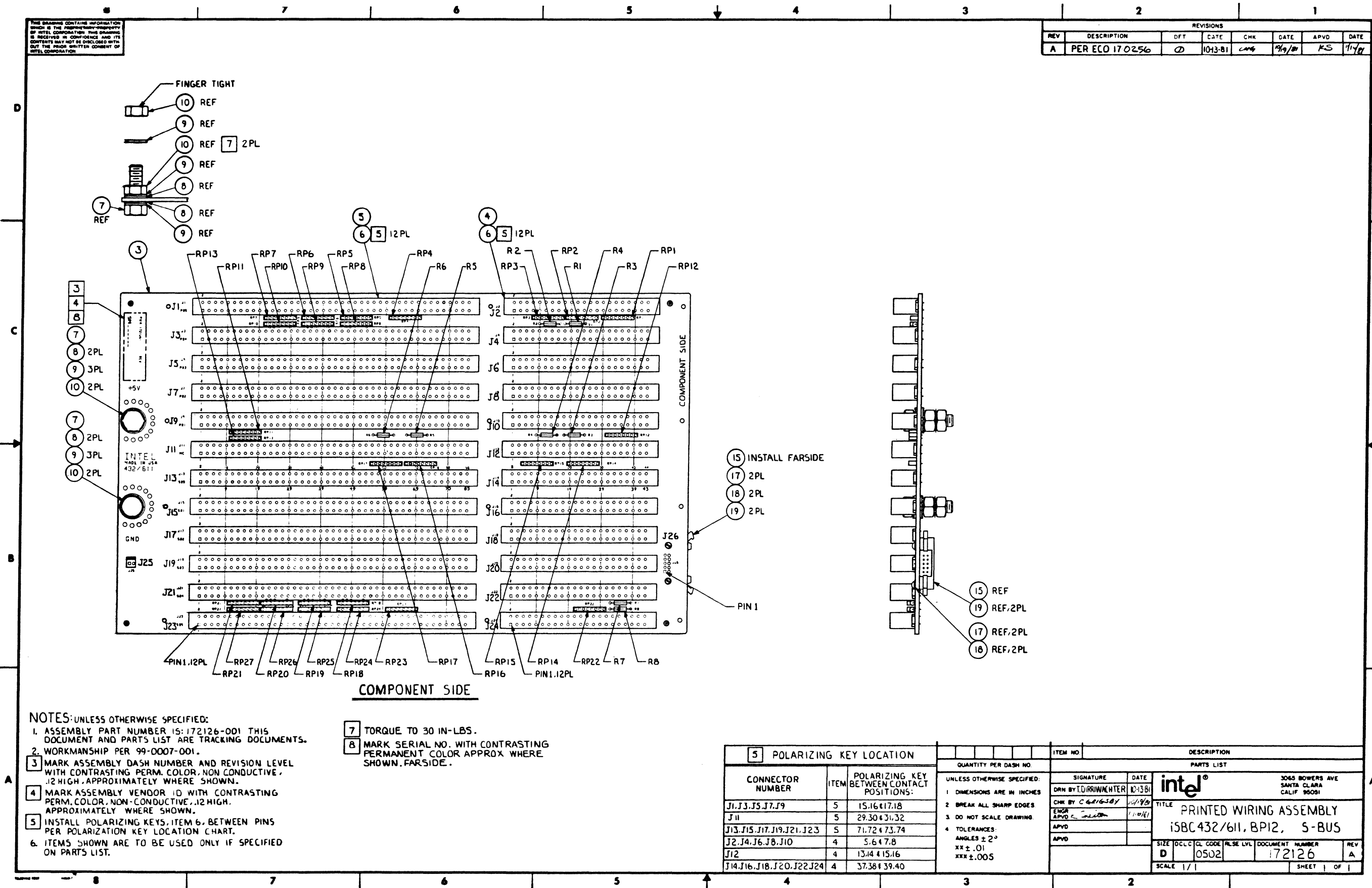
- NOTES: UNLESS OTHERWISE SPECIFIED:
- PART NUMBER IS: 172206-001. THIS DOCUMENT: ARTMASTER. AND PARTS LIST ARE TRACKING DOCUMENTS.
 - FABRICATE AND SILKSCREEN PER 9400001.
 - DIMENSIONING PER ANSI Y14.5-1973.
 - ALL HOLES SHALL BE LOCATED AT INTERSECTIONS OF A .025 PITCH GRID ESTABLISHED BY DATUMS -A- AND -B- WITHIN .008 DIAMETER MMC.
 - THE CENTER OF THIS HOLE SHALL BE LOCATED WITHIN .006 DIA RFS OF THE CENTER OF ITS PAD.
 - THE CENTERS OF THESE TWO HOLES ESTABLISH DATUM -A-.
 - DATUM -B- IS ESTABLISHED PERPENDICULAR TO DATUM -A- THROUGH THE CENTER OF THIS HOLE.
 - 86144 PIN CONNECTORS ARE NOT ON .025 GRID.

HOLE CHART		
SYM	DIAMETER	QTY
NONE	PLATED THRU .042 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	AR
A	NOT PLATED THRU .109 $\begin{matrix} +.002 \\ -.001 \end{matrix}$	4
B	NOT PLATED THRU .141 $\begin{matrix} +.002 \\ -.001 \end{matrix}$	2
C	NOT PLATED THRU .147 $\begin{matrix} +.002 \\ -.001 \end{matrix}$	4
D	NOT PLATED THRU .156 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	6
E	PLATED THRU .325 $\pm .010$	2
F	PLATED THRU .032 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	24
G	NOT PLATED THRU .109 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	2
H	PLATED THRU .055 $\begin{matrix} +.004 \\ -.002 \end{matrix}$	24

ITEM NO	DESCRIPTION
1	UNLESS OTHERWISE SPECIFIED:
2	1 DIMENSIONS ARE IN INCHES
3	2 BREAK ALL SHARP EDGES
4	3 DO NOT SCALE DRAWING
	4 TOLERANCES: ANGLES $\pm 2^\circ$, XX $\pm .01$, XXX $\pm .005$

SIGNATURE	DATE	DESCRIPTION
DRN BY: CORRIN WACHTER	10/2/81	DESIGN
CHK BY: C. G. ...	10/2/81	APPROVED
ENGR APVD: ...		
APVD:		

TITLE	3045 BOWERS AVE
PRINTED WIRING BOARD	SANTA CLARA CALIF 95051
ISBC 432/611, BP12, S-BUS	
SIZE: DCLC	FILE LVL: 0403
DOCUMENT NUMBER: 172206	REV: A
SCALE: 1/1	SHEET: OF 1



REVISIONS						
REV	DESCRIPTION	DFT	DATE	CHK	APVD	DATE
A	PER ECO 170256	D	10-13-81	CMG	RS	11/81

- NOTES: UNLESS OTHERWISE SPECIFIED:
- ASSEMBLY PART NUMBER IS: 172126-001 THIS DOCUMENT AND PARTS LIST ARE TRACKING DOCUMENTS.
 - WORKMANSHIP PER 99-0007-001.
 - MARK ASSEMBLY DASH NUMBER AND REVISION LEVEL WITH CONTRASTING PERM. COLOR, NON CONDUCTIVE, .12 HIGH, APPROXIMATELY WHERE SHOWN.
 - MARK ASSEMBLY VENDOR ID WITH CONTRASTING PERM. COLOR, NON-CONDUCTIVE, .12 HIGH, APPROXIMATELY WHERE SHOWN.
 - INSTALL POLARIZING KEYS, ITEM 6, BETWEEN PINS PER POLARIZATION KEY LOCATION CHART.
 - ITEMS SHOWN ARE TO BE USED ONLY IF SPECIFIED ON PARTS LIST.

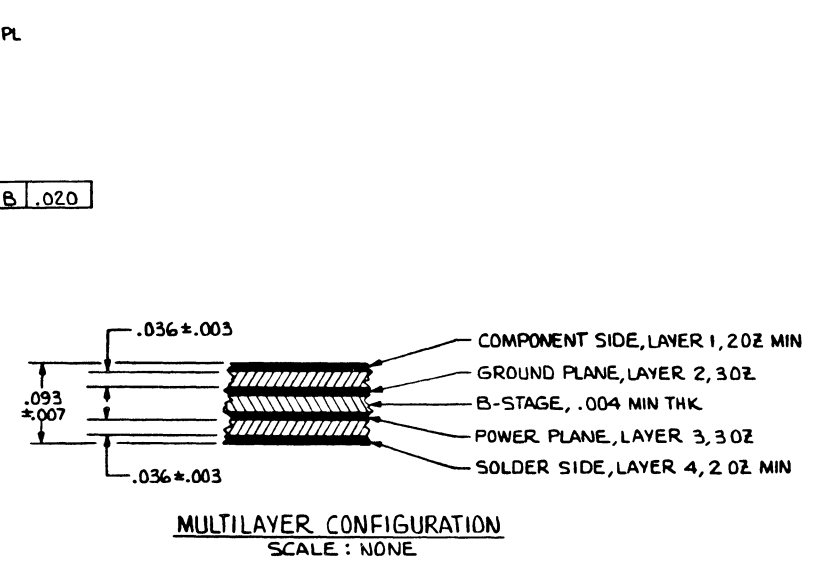
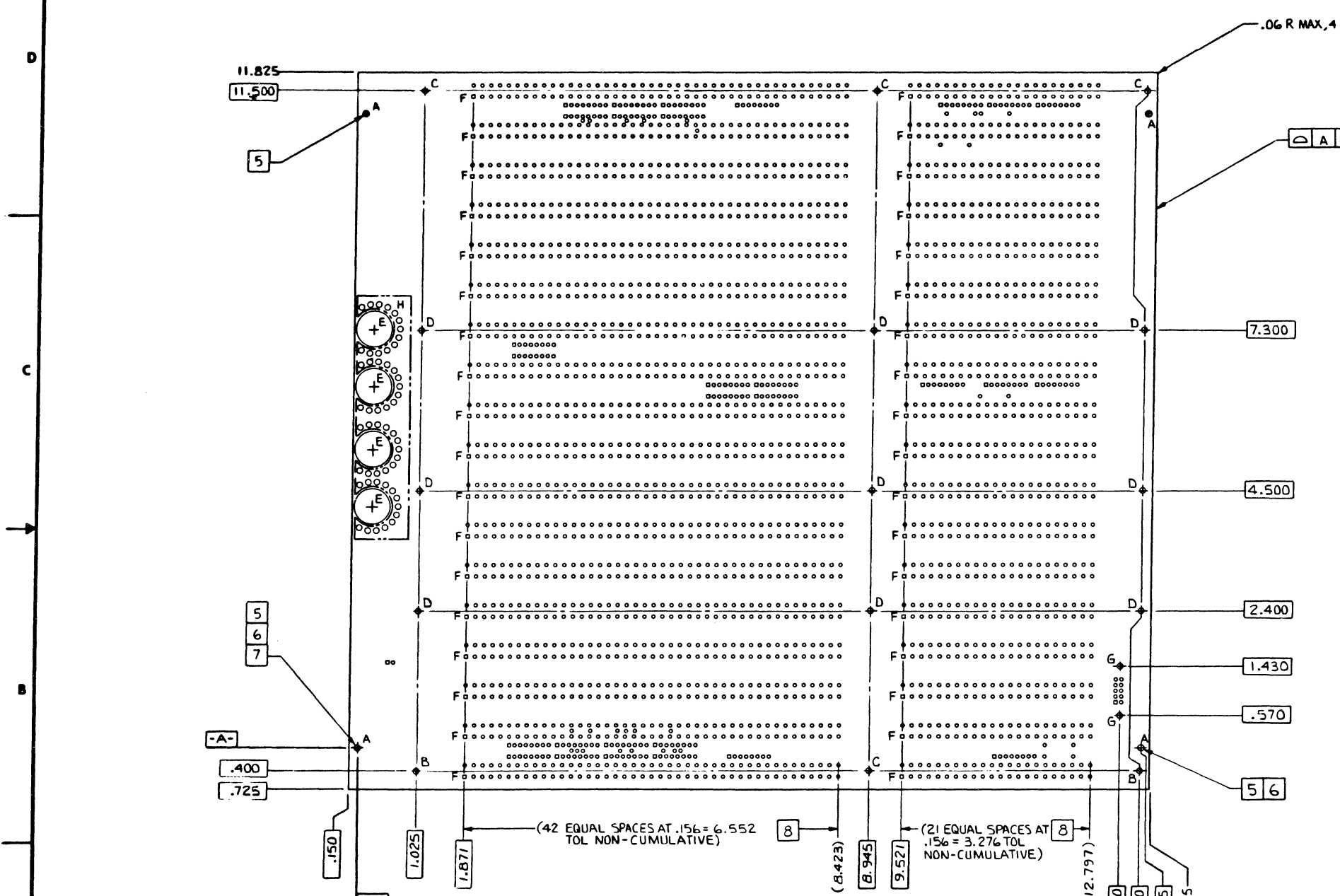
- 7 TORQUE TO 30 IN-LBS.
- 8 MARK SERIAL NO. WITH CONTRASTING PERMANENT COLOR APPROX WHERE SHOWN, FAR SIDE.

POLARIZING KEY LOCATION		
CONNECTOR NUMBER	ITEM	POLARIZING KEY BETWEEN CONTACT POSITIONS:
J1, J3, J5, J7, J9	5	15.16 & 17.18
J11	5	29.30 & 31.32
J13, J15, J17, J19, J21, J23	5	71.72 & 73.74
J2, J4, J6, J8, J10	4	5.6 & 7.8
J12	4	13.14 & 15.16
J14, J16, J18, J20, J22, J24	4	37.38 & 39.40

QUANTITY PER DASH NO.		ITEM NO.		DESCRIPTION	
UNLESS OTHERWISE SPECIFIED:		SIGNATURE		DATE	
1 DIMENSIONS ARE IN INCHES	2 BREAK ALL SHARP EDGES	3 DO NOT SCALE DRAWING	4 TOLERANCES: ANGLES ± 2° XX ± .01 XXX ± .005	DRN BY: T.D. RIVKIN/HTER 10-13-81 ENGR: C. G. 16-587 10/19/81 APVD: [Signature] 11/01/81	
PARTS LIST				intel® 3065 BOWERS AVE SANTA CLARA CALIF 95051 TITLE: PRINTED WIRING ASSEMBLY iSBC 432/611, BPI2, S-BUS	
SIZE: D	DOC: 0502	CL CODE: 172126	DOCUMENT NUMBER: 172126	REV: A	SCALE: 1/1

REV		DESCRIPTION	DFY	DATE	CHK	DATE	APVD	DATE
B		PER ECO 17-0177	BVL	11-16-81	CAG	1/5/82	SH	1-6-82

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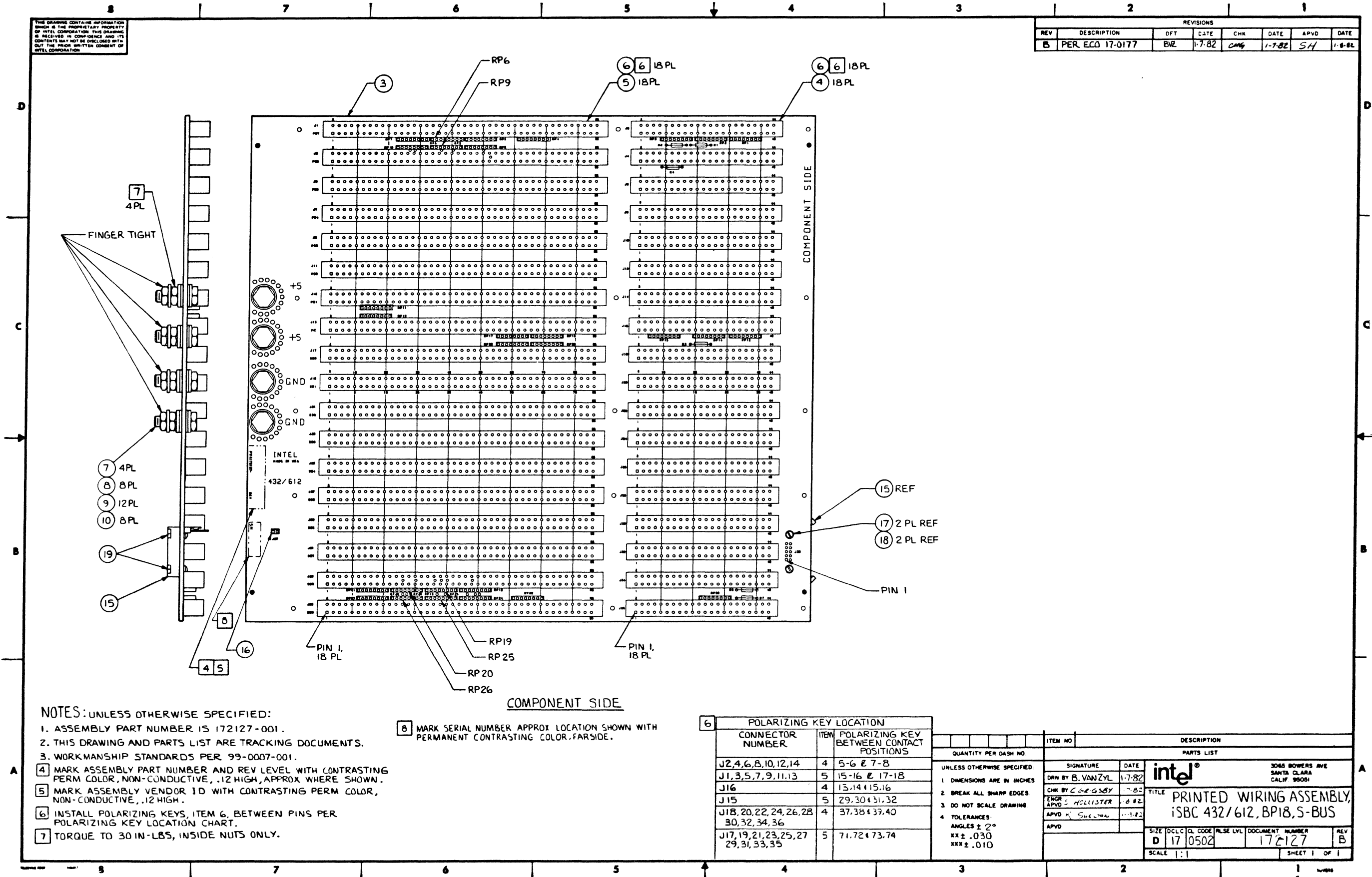


HOLE CHART			
SYM	DIAMETER		QTY
NONE	PLATED THRU	.042 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$	AR
A	NOT PLATED THRU	.109 $\begin{smallmatrix} +.002 \\ -.001 \end{smallmatrix}$	4
B	NOT PLATED THRU	.141 $\begin{smallmatrix} +.002 \\ -.001 \end{smallmatrix}$	2
C	NOT PLATED THRU	.147 $\begin{smallmatrix} +.002 \\ -.001 \end{smallmatrix}$	4
D	NOT PLATED THRU	.156 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$	9
E	PLATED THRU	.325 $\pm .010$	4
F	PLATED THRU	.032 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$	36
G	NOT PLATED THRU	.106 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$	2
H	PLATED THRU	.055 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$	52

- NOTES: UNLESS OTHERWISE SPECIFIED:
- PART NUMBER IS 172281-001. THIS DRAWING, ARTMASTER AND PARTS LIST ARE TRACKING DOCUMENTS.
 - FABRICATE AND SILKSCREEN PER SPEC 9400001.
 - DIMENSIONING PER ANSI Y14.5-1973.
 - ALL HOLES SHALL BE LOCATED AT INTERSECTIONS OF A .025 PITCH GRID ESTABLISHED BY DATUMS -A- AND -B- WITHIN .009 DIA MMC.
 - THE CENTER OF THIS HOLE SHALL BE LOCATED WITHIN .006 DIA RFS OF THE CENTER OF ITS PAD.
 - THE CENTERS OF THESE TWO HOLES ESTABLISH DATUM -A-.

- DATUM -B- IS ESTABLISHED PERPENDICULAR TO DATUM -A- THRU THE CENTER OF THIS HOLE.
- 86 AND 44 PIN CONNECTORS ARE NOT ON .025 GRID.

QUANTITY PER DASH NO	ITEM NO	DESCRIPTION
PARTS LIST		
UNLESS OTHERWISE SPECIFIED:		
1. DIMENSIONS ARE IN INCHES	SIGNATURE	DATE
2. BREAK ALL SHARP EDGES	DRN BY B. VAN ZYL	11-16-81
3. DO NOT SCALE DRAWING	CHK BY C. H. GUNDSY	5/82
4. TOLERANCES:	ENGR APVD S. HOLLISTER	1-6-82
ANGLES $\pm 2^\circ$	APVD	
XX $\pm .01$	APVD	
XXX $\pm .005$		
intel		3045 BOWERS AVE SANTA CLARA CALIF 95051
TITLE PRINTED WIRING BOARD, ISBC 432/612, BP18, S-BUS		
SIZE	DOC C	CL CODE
D	17	0403
SCALE	1:1	
DOCUMENT NUMBER	172281	REV B
SHEET 1 OF 1		



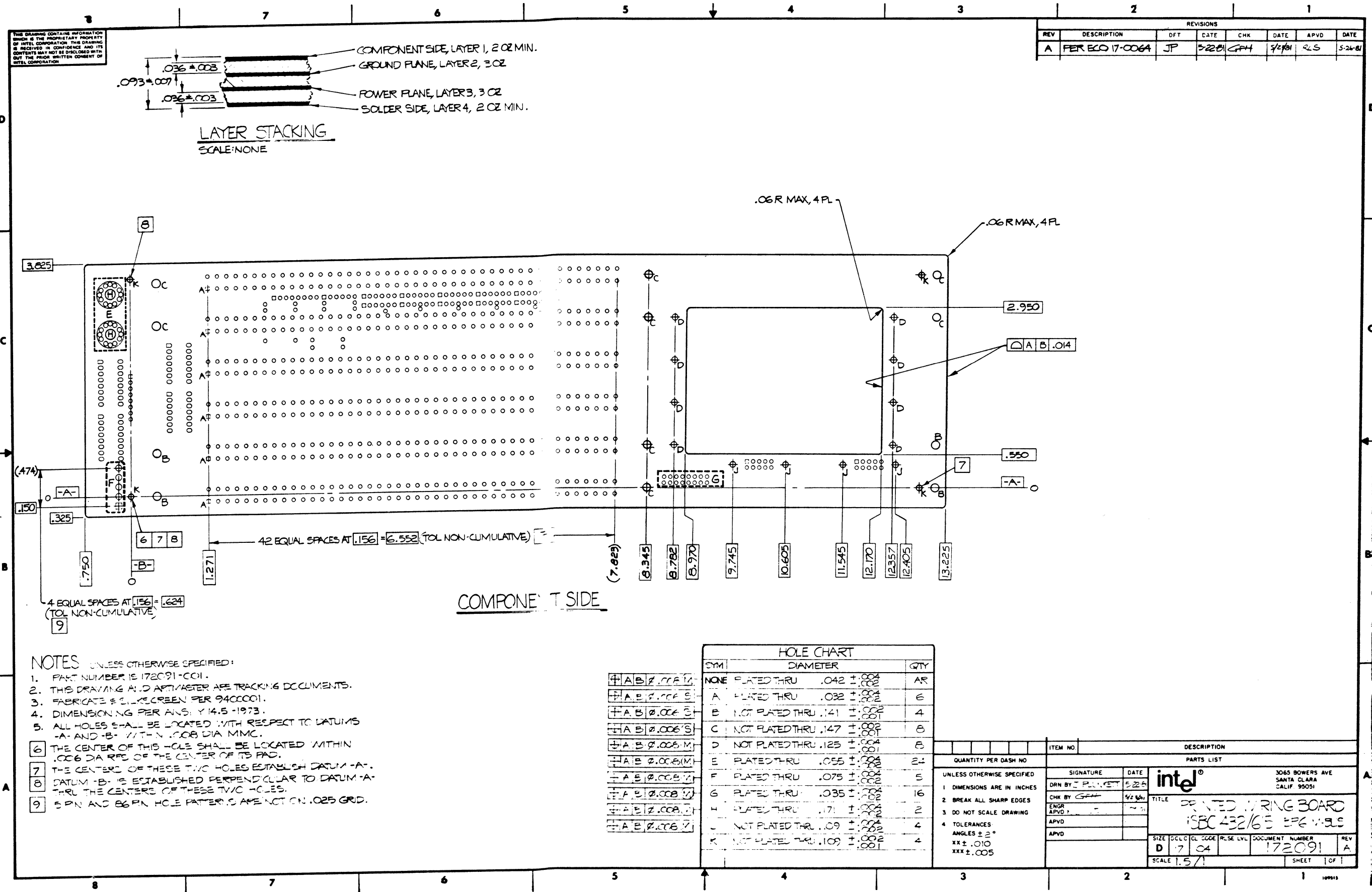
REVISIONS						
REV	DESCRIPTION	DFT	DATE	CHK	DATE	APVD
B	PER ECO 17-0177	BVL	1-7-82	CAG	1-7-82	SH

NOTES: UNLESS OTHERWISE SPECIFIED:

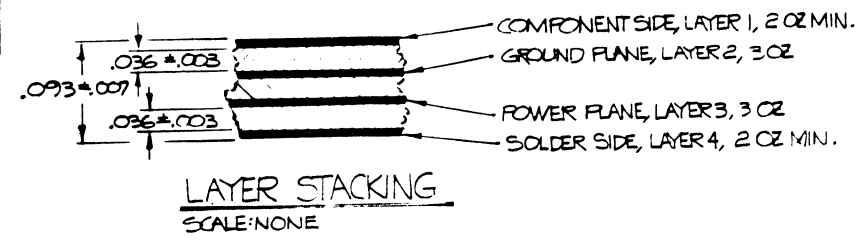
1. ASSEMBLY PART NUMBER IS 172127-001.
2. THIS DRAWING AND PARTS LIST ARE TRACKING DOCUMENTS.
3. WORKMANSHIP STANDARDS PER 99-0007-001.
4. MARK ASSEMBLY PART NUMBER AND REV LEVEL WITH CONTRASTING PERM COLOR, NON-CONDUCTIVE, .12 HIGH, APPROX WHERE SHOWN.
5. MARK ASSEMBLY VENDOR ID WITH CONTRASTING PERM COLOR, NON-CONDUCTIVE, .12 HIGH.
6. INSTALL POLARIZING KEYS, ITEM 6, BETWEEN PINS PER POLARIZING KEY LOCATION CHART.
7. TORQUE TO 30 IN-LBS, INSIDE NUTS ONLY.
8. MARK SERIAL NUMBER APPROX LOCATION SHOWN WITH PERMANENT CONTRASTING COLOR, FAR SIDE.

POLARIZING KEY LOCATION		
CONNECTOR NUMBER	ITEM	POLARIZING KEY BETWEEN CONTACT POSITIONS
J2,4,6,8,10,12,14	4	5-6 & 7-8
J1,3,5,7,9,11,13	5	15-16 & 17-18
J16	4	13,14 & 15,16
J15	5	29,30 & 31,32
J18, 20,22,24,26,28, 30,32,34,36	4	37,38 & 39,40
J17,19,21,23,25,27, 29,31,33,35	5	71,72 & 73,74

QUANTITY PER DASH NO		SIGNATURE		DATE	
PARTS LIST					
UNLESS OTHERWISE SPECIFIED:					
1. DIMENSIONS ARE IN INCHES					
2. BREAK ALL SHARP EDGES					
3. DO NOT SCALE DRAWING					
4. TOLERANCES:					
ANGLES ± 2°					
XX ± .030					
XXX ± .010					
INTEL		3065 BOWERS AVE		SANTA CLARA CALIF. 95051	
DRN BY B. VAN ZYL		1-7-82		TITLE	
CHK BY C. G. G. S. B.		1-7-82		PRINTED WIRING ASSEMBLY,	
ENGR APVD S. HOLLISTER		1-8-82		ISBC 432/612, BP18, S-BUS	
APVD M. S. S. S.		1-1-82		SIZE DCLC CL CODE PLSE LVL DOCUMENT NUMBER REV	
APVD				D 17 0502 172127 B	
SCALE 1:1		SHEET 1 OF 1			



REVISIONS							
REV	DESCRIPTION	DFT	DATE	CHK	DATE	APVD	DATE
A	PER ECO 17-0064	JP	5-22-81	GPH	5/27/81	RS	5-24-81



.06R MAX, 4 FL

COMPONENT SIDE

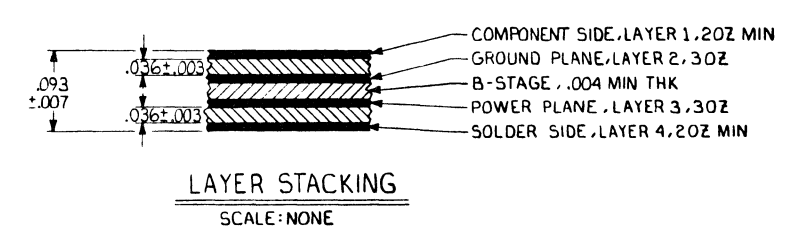
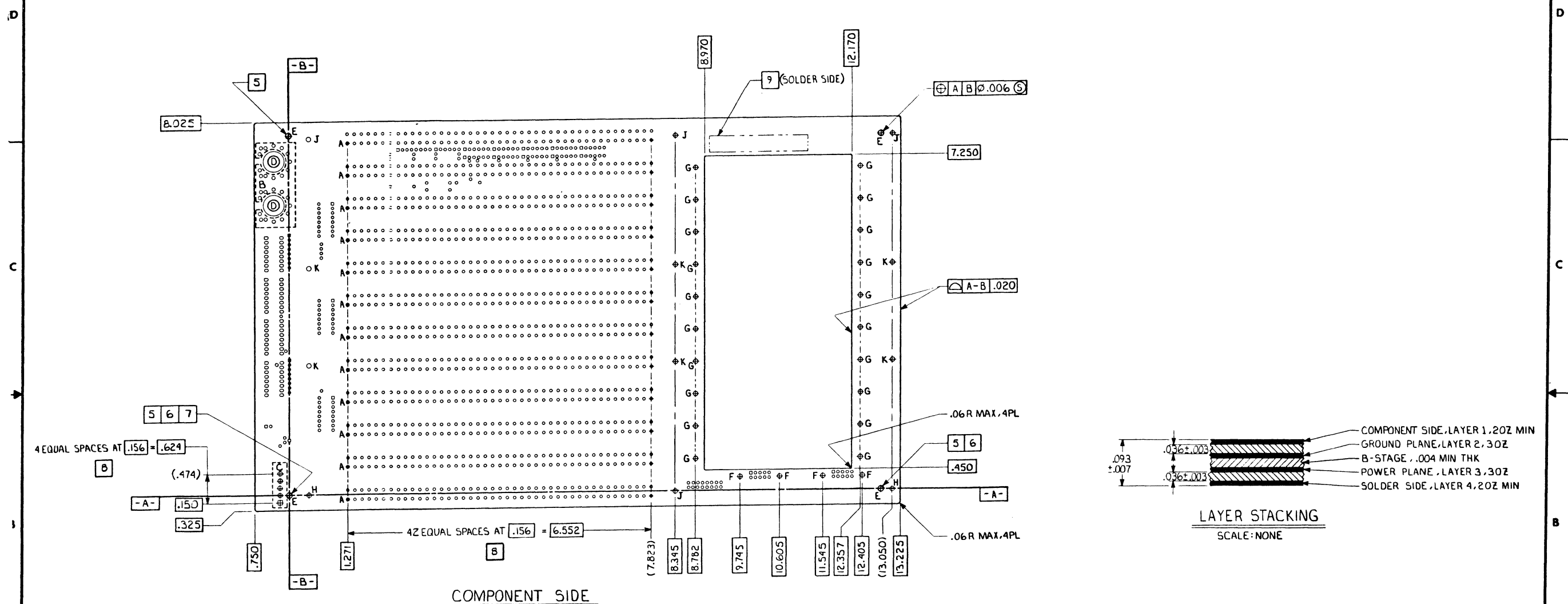
HOLE CHART			
SYM		DIAMETER	QTY
+	A B Z	NOT PLATED THRU .042 ± .004	AR
+	A B Z	PLATED THRU .032 ± .004	6
+	A B Z	NOT PLATED THRU .141 ± .002	4
+	A B Z	NOT PLATED THRU .147 ± .002	8
+	A B Z	NOT PLATED THRU .125 ± .004	8
+	A B Z	PLATED THRU .055 ± .004	24
+	A B Z	PLATED THRU .075 ± .004	8
+	A B Z	PLATED THRU .035 ± .004	16
+	A B Z	PLATED THRU .171 ± .004	2
+	A B Z	NOT PLATED THRU .109 ± .002	4
+	A B Z	NOT PLATED THRU .109 ± .002	4

- NOTES** UNLESS OTHERWISE SPECIFIED:
1. PART NUMBER IS 172091-001.
 2. THIS DRAWING AND APMASTER ARE TRACKING DOCUMENTS.
 3. FABRICATE & SILKSCREEN PER 9400001.
 4. DIMENSIONING PER ANSI Y14.5-1973.
 5. ALL HOLES SHALL BE LOCATED WITH RESPECT TO DATUMS -A- AND -B- 1/16" DIA MMC.
 6. THE CENTER OF THIS HOLE SHALL BE LOCATED WITHIN .006 DIA REF OF THE CENTER OF ITS PAD.
 7. THE CENTERS OF THESE TWO HOLES ESTABLISH DATUM -A-.
 8. DATUM -B- IS ESTABLISHED PERPENDICULAR TO DATUM -A- THRU THE CENTERS OF THESE TWO HOLES.
 9. 5 PIN AND 86 PIN HOLE PATTERNS ARE NOT ON .025 GRID.

QUANTITY PER DASH NO		SIGNATURE		DATE		DESCRIPTION	
UNLESS OTHERWISE SPECIFIED		DRN BY J. PLUMMET		5-22-81		PARTS LIST	
1. DIMENSIONS ARE IN INCHES		CHK BY GPH		5/27/81		TITLE	
2. BREAK ALL SHARP EDGES		ENGR				3065 BOWERS AVE SANTA CLARA CALIF 95051	
3. DO NOT SCALE DRAWING		APVD				PRINTED WIRING BOARD	
4. TOLERANCES		APVD				ISBC 432/600 EP6 H-9LS	
ANGLES ± 2°						SIZE DCLC CL CODE PLSE LVL DOCUMENT NUMBER	
XX ± .010						D 7 04 172091	
XXX ± .005						SCALE 1.5/1 SHEET 1 OF 1	

REVISIONS						
REV	DESCRIPTION	OFF	DATE	CHK	DATE	APVD
C	PER ECO		4-26-82	GA	4/26/82	GA

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- NOTES: UNLESS OTHERWISE SPECIFIED:
- PART NUMBER IS 172422-001. THIS DRAWING, PARTS LIST, AND ARTMASTER ARE TRACKING DOCUMENTS.
 - FABRICATE AND SILKSCREEN PER 9400001.
 - DIMENSIONING PER ANSI Y14.5-1973.
 - ALL HOLES SHALL BE LOCATED AT INTERSECTIONS OF A .025 PITCH GRID ESTABLISHED BY DATUMS -A- AND -B- WITHIN .008 DIA RFS.
 - THE CENTER OF THIS HOLE SHALL BE LOCATED WITHIN .006 DIA RFS OF THE CENTER OF ITS PAD.
 - THE CENTERS OF THESE TWO HOLES ESTABLISH DATUM -A-.
 - DATUM -B- IS ESTABLISHED PERPENDICULAR TO DATUM -A- THRU THE CENTER OF THIS HOLE.
 - 5 PIN AND 8 PIN HOLE PATTERNS ARE NOT ON .025 GRID. MARK VENDOR ID WITH CONTRASTING PERM COLOR, NON-CONDUCTIVE, .12 MIN HIGH, BELOW PB NUMBER ON SOLDER SIDE.
 - 9

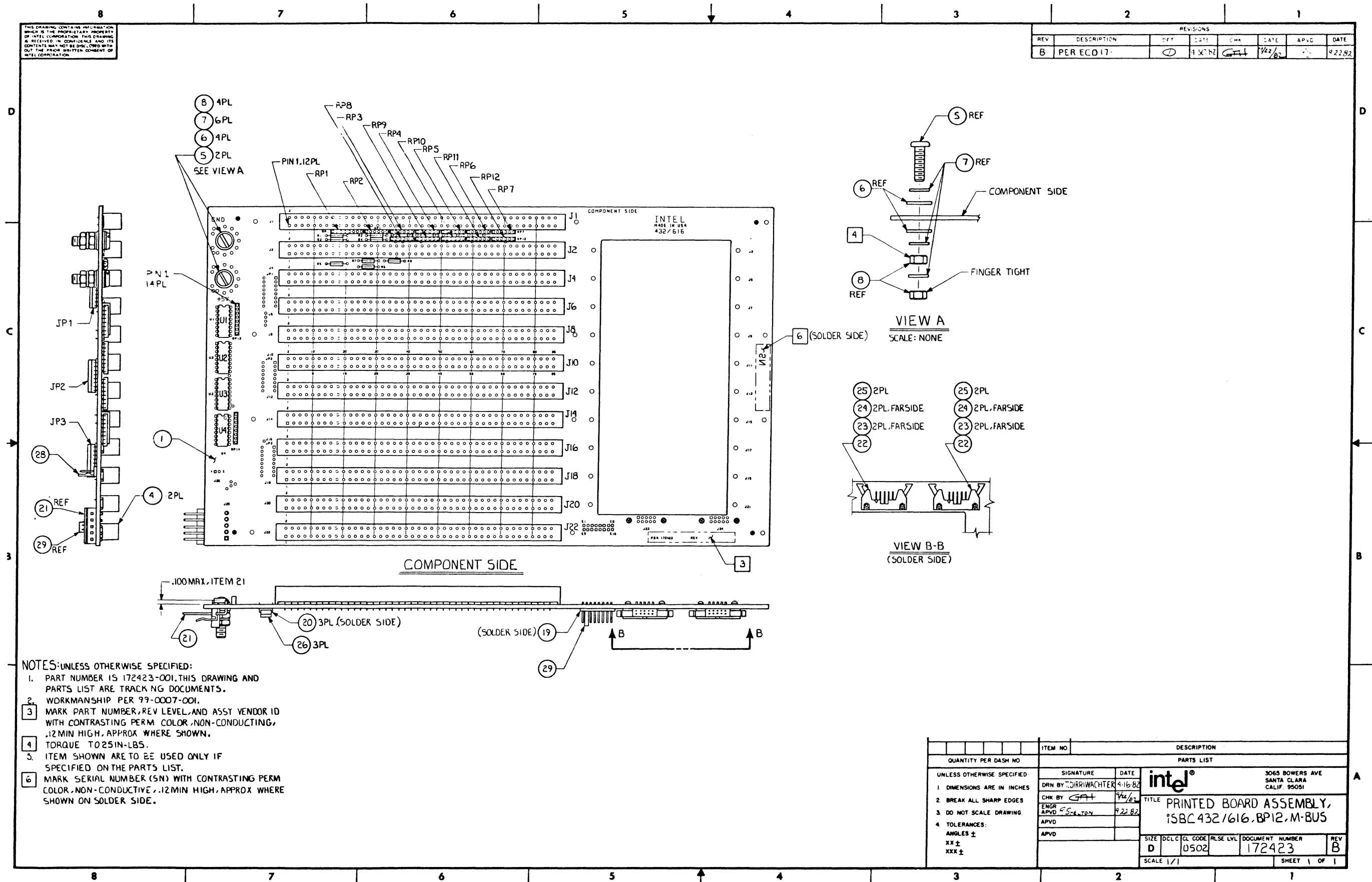
HOLE CHART		
SYM	FINISHED HOLE SIZE	QTY
NONE	PLATED THRU .042 ^{+0.004} / _{-.002} DIA	AR
A	PLATED THRU .032 ^{+0.004} / _{-.002} DIA	12
B	PLATED THRU .055 ^{+0.004} / _{-.002} DIA	26
C	PLATED THRU .075 ^{+0.004} / _{-.002} DIA	5
D	PLATED THRU .259 ±.005 DIA	2
E	NOT PLATED THRU .109 ^{+0.002} / _{-.001} DIA	4
F	NOT PLATED THRU .109 ^{+0.004} / _{-.002} DIA	4
G	NOT PLATED THRU .125 ^{+0.004} / _{-.001} DIA	20
H	NOT PLATED THRU .141 ^{+0.002} / _{-.001} DIA	2
J	NOT PLATED THRU .147 ^{+0.002} / _{-.001} DIA	4
K	NOT PLATED THRU .156 ^{+0.002} / _{-.001} DIA	6

ITEM NO		DESCRIPTION	
QUANTITY PER DASH NO		PARTS LIST	
UNLESS OTHERWISE SPECIFIED:		SIGNATURE	
1 DIMENSIONS ARE IN INCHES		DATE	
2 BREAK ALL SHARP EDGES		DRN BY DRAINWALTER 4/13/82	
3 DO NOT SCALE DRAWING		CHK BY GA 4/26/82	
4 TOLERANCES:		ENGR APVD S. HULL/1578 4/26/82	
ANGLES ±		APVD	
XXX ±		APVD	
XXX ±		APVD	
SCALE 1/1		SHEET 1 OF 1	

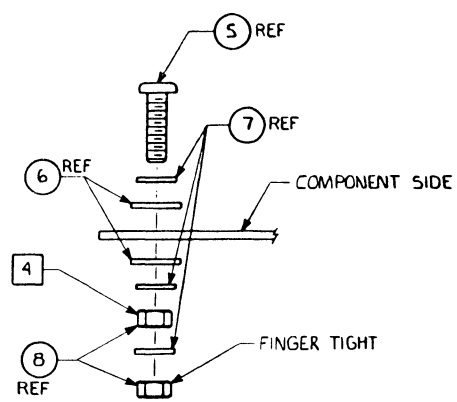
intel® 3065 BOWERS AVE
SANTA CLARA CALIF 95051

TITLE PRINTED BOARD,
15BC 432/616, BP12, M-BUS

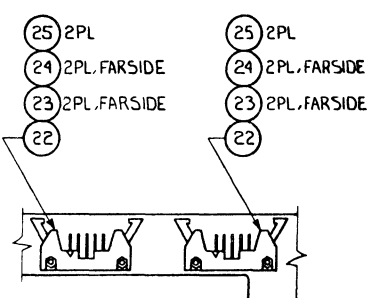
SIZE DCLC CL CODE RLSE LVL DOCUMENT NUMBER REV
D 0403 172422 C



REVISIONS							
REV	DESCRIPTION	DFT	DATE	CHK	DATE	APVD	DATE
B	PER ECD17		4/16/82	GAT	7/22/82		9/22/82



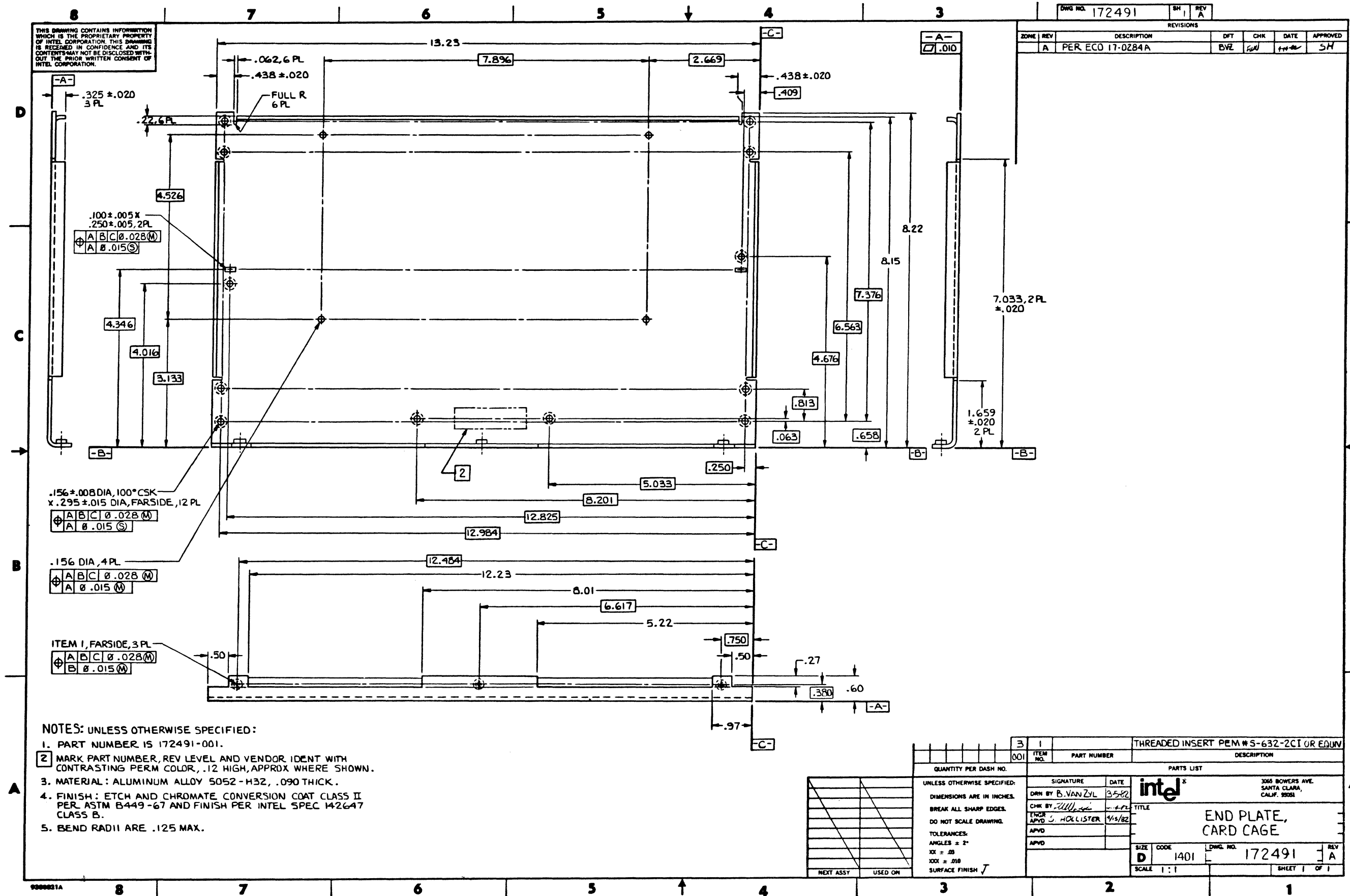
VIEW A
SCALE: NONE

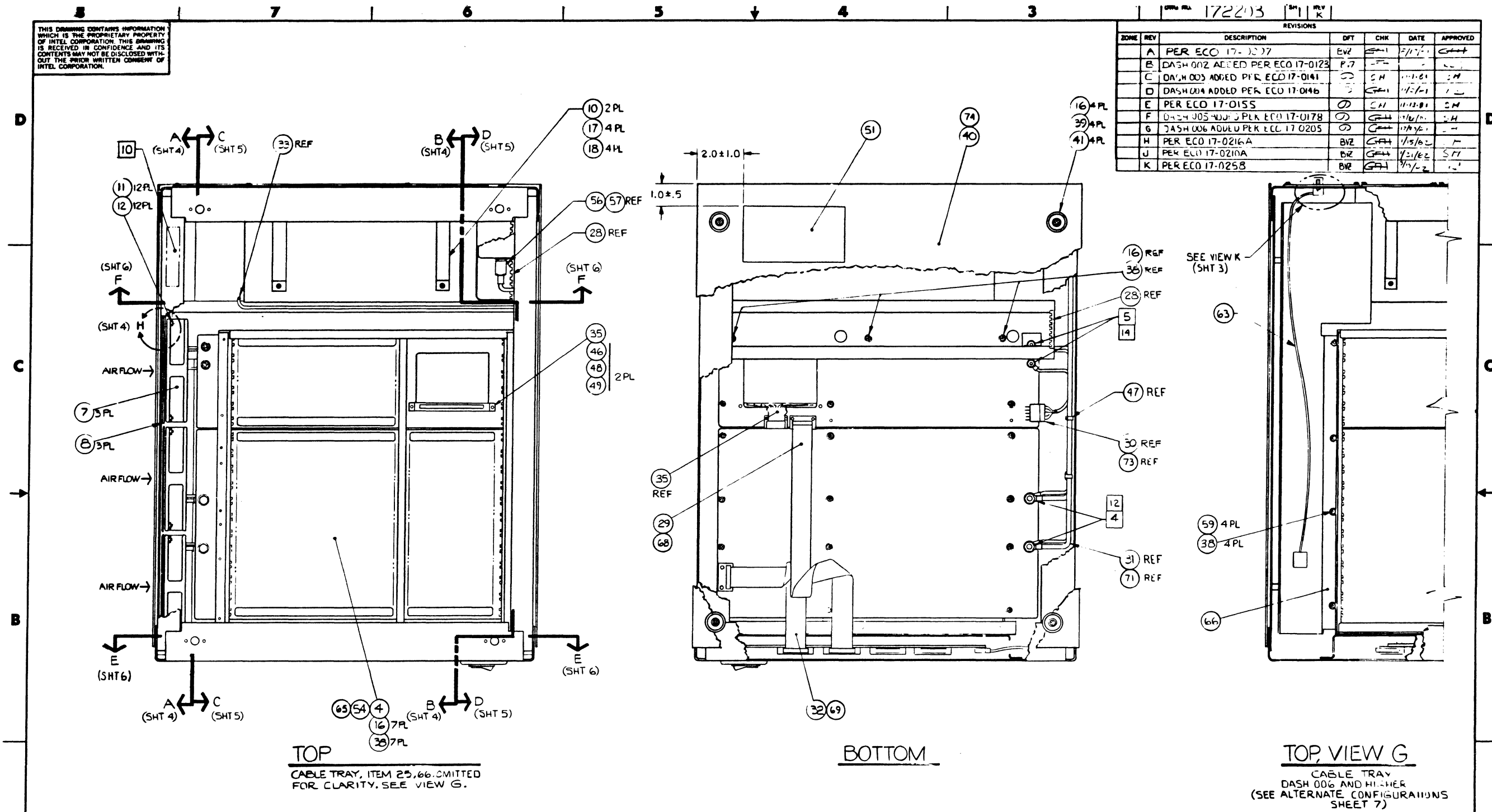


VIEW B-B
(SOLDER SIDE)

- NOTES: UNLESS OTHERWISE SPECIFIED:
- PART NUMBER IS 172423-001. THIS DRAWING AND PARTS LIST ARE TRACKING DOCUMENTS. WORKMANSHIP PER 99-0007-001.
 - MARK PART NUMBER, REV LEVEL, AND ASSY VENDOR ID WITH CONTRASTING PERM COLOR, NON-CONDUCTING, .12 MIN HIGH, APPROX WHERE SHOWN.
 - TORQUE TO 25 IN-LBS.
 - ITEM SHOWN ARE TO BE USED ONLY IF SPECIFIED ON THE PARTS LIST.
 - MARK SERIAL NUMBER (SN) WITH CONTRASTING PERM COLOR, NON-CONDUCTIVE, .12 MIN HIGH, APPROX WHERE SHOWN ON SOLDER SIDE.

QUANTITY PER DASH NO		SIGNATURE		DATE		DESCRIPTION	
UNLESS OTHERWISE SPECIFIED:		DRN BY: TORRIWACHTER		4-16-82		PARTS LIST	
1. DIMENSIONS ARE IN INCHES		CHK BY: GAT		7/22/82		intel® 3065 BOWERS AVE SANTA CLARA CALIF. 95051	
2. BREAK ALL SHARP EDGES		ENGR: F. S. J. J. J.		9/22/82		TITLE: PRINTED BOARD ASSEMBLY, ISBC 432/616, BP12, M-BUS	
3. DO NOT SCALE DRAWING		APVD:				SIZE: D DCL: 0502 CL CODE: RLS: LVL: DOCUMENT NUMBER: 172423 REV: B	
4. TOLERANCES:		APVD:				SCALE: 1/1 SHEET 1 OF 1	
ANGLES ±							
XX ±							
XXX ±							





NOTES UNLESS OTHERWISE SPECIFIED:

- ASSEMBLY PART NUMBER IS 172203-XXX.
- THIS DRAWING AND PART LIST ARE TRACKING DOCUMENTS.
- WORKMANSHIP PER 99-0007-001.
- TORQUE TOP NUT TO 25 IN-LBS. BOTTOM NUT TO 30 IN-LBS. DASH 001 THRU 005 ONLY.
- TORQUE TOP NUT TO 10 IN-LBS. BOTTOM NUT TO 15 IN-LBS. DASH 006 THRU 005 ONLY.
- CABLE INTERCONNECT PER INTERCONNECTION DIAGRAM, ITEM 78.
- ITEMS SHOWN ARE TO BE USED ONLY IF SPECIFIED ON PARTS LIST.

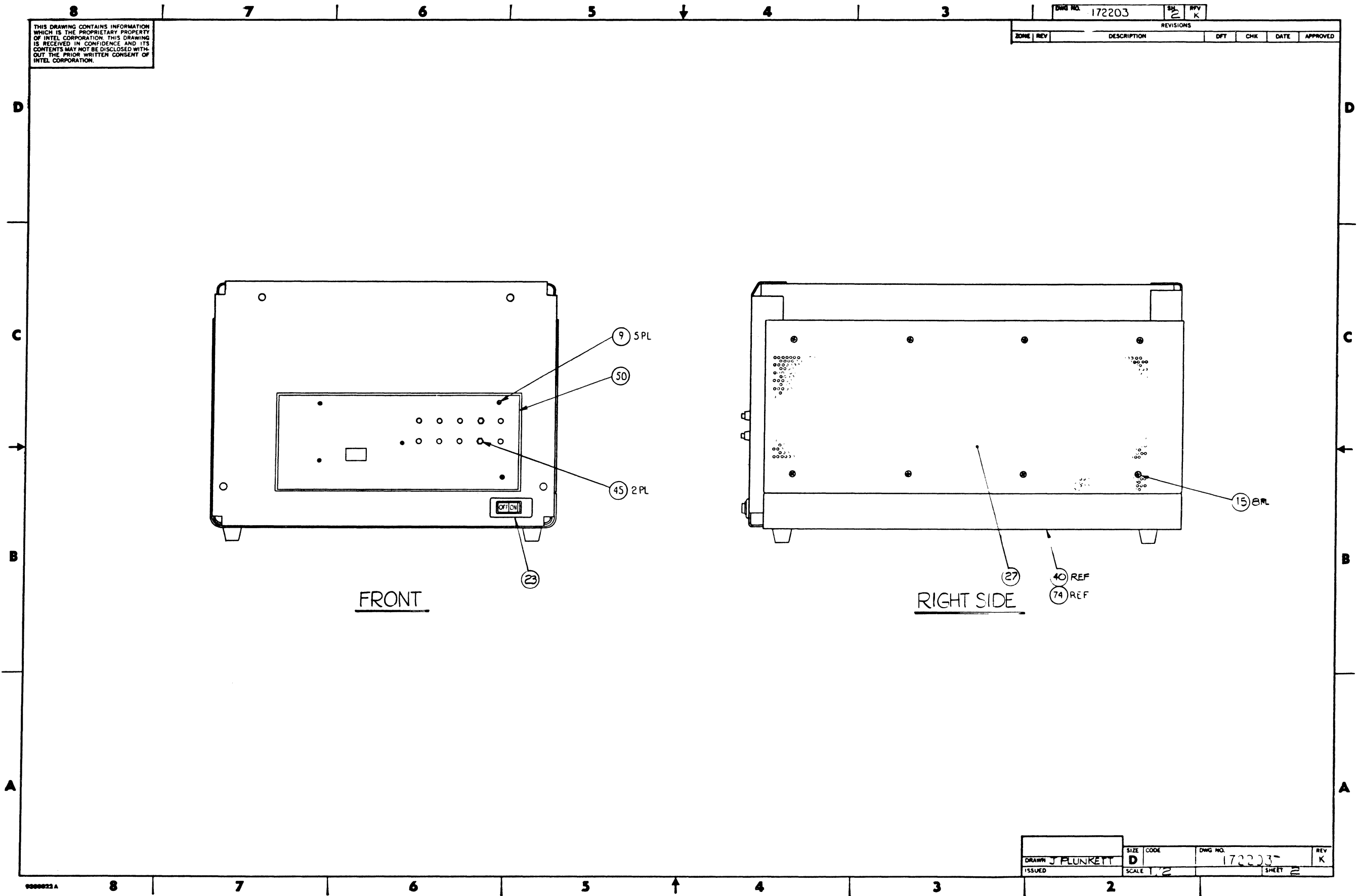
- 8 BOND ITEM 28 TO ITEM 24, ITEM 28 TO ITEM 25, ITEM 28 TO ITEM 3 AND ITEM 28 TO ITEM 79 USING ITEM 61.
- 9 INSTALL INSULATION ITEM 57 AROUND CAPACITOR ITEM 56 THEN SHRINK WITH HEAT. DASH 003 THRU 005 ONLY.
- 10 MARK PART NUMBER AND REV LEVEL WITH CONTRASTING PERM COLOR. 12 HIGH. APPROX WHERE SHOWN.
- 11 REMOVE AND DISCARD HARDWARE SUPPLIED ON GND STUD OF ITEM 14.
- 12 TORQUE TOP NUT TO 25 IN-LBS. DASH 006 AND HIGHER.
- 13 DISCARD FLAT WASHERS INCLUDED IN ITEM 64.
- 14 TORQUE TOP NUT TO 10 IN-LBS. DASH 006 AND HIGHER.
- 15 MARK MODEL, VOLTS & AMPS WITH PEN IN CONTRASTING COLOR. APPROX .10 HIGH. APPROX WHERE SHOWN.

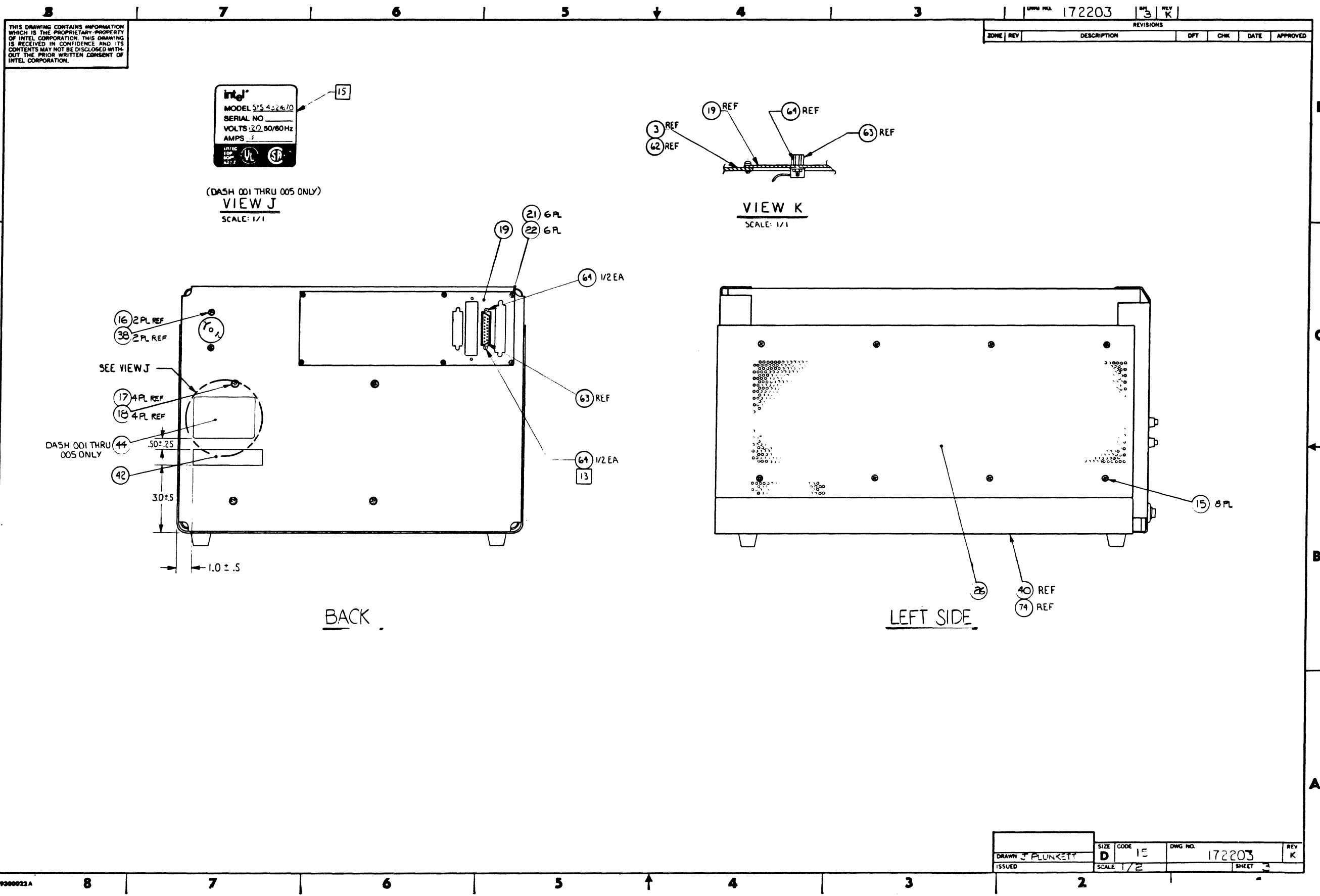
ITEM NO.	PART NUMBER	DESCRIPTION
QUANTITY PER DASH NO.		
UNLESS OTHERWISE SPECIFIED:		
DIMENSIONS ARE IN INCHES.		
BREAK ALL SHARP EDGES.		
DO NOT SCALE DRAWING.		
TOLERANCES:		
ANGLES = 2°		
XX ± .03		
XXX ± .010		
SURFACE FINISH 7		

SIGNATURE	DATE	TITLE
DRN BY: E. JANZ		
CHK BY: GAH	1/1/62	CHASSIS ASSEMBLY, 432/670
ENGR APVD: GAH		
APVD: GAH		

SIZE	CODE	DWG. NO.	REV
D	1500	172203	K
SCALE	1/2		SHEET 1 OF 7

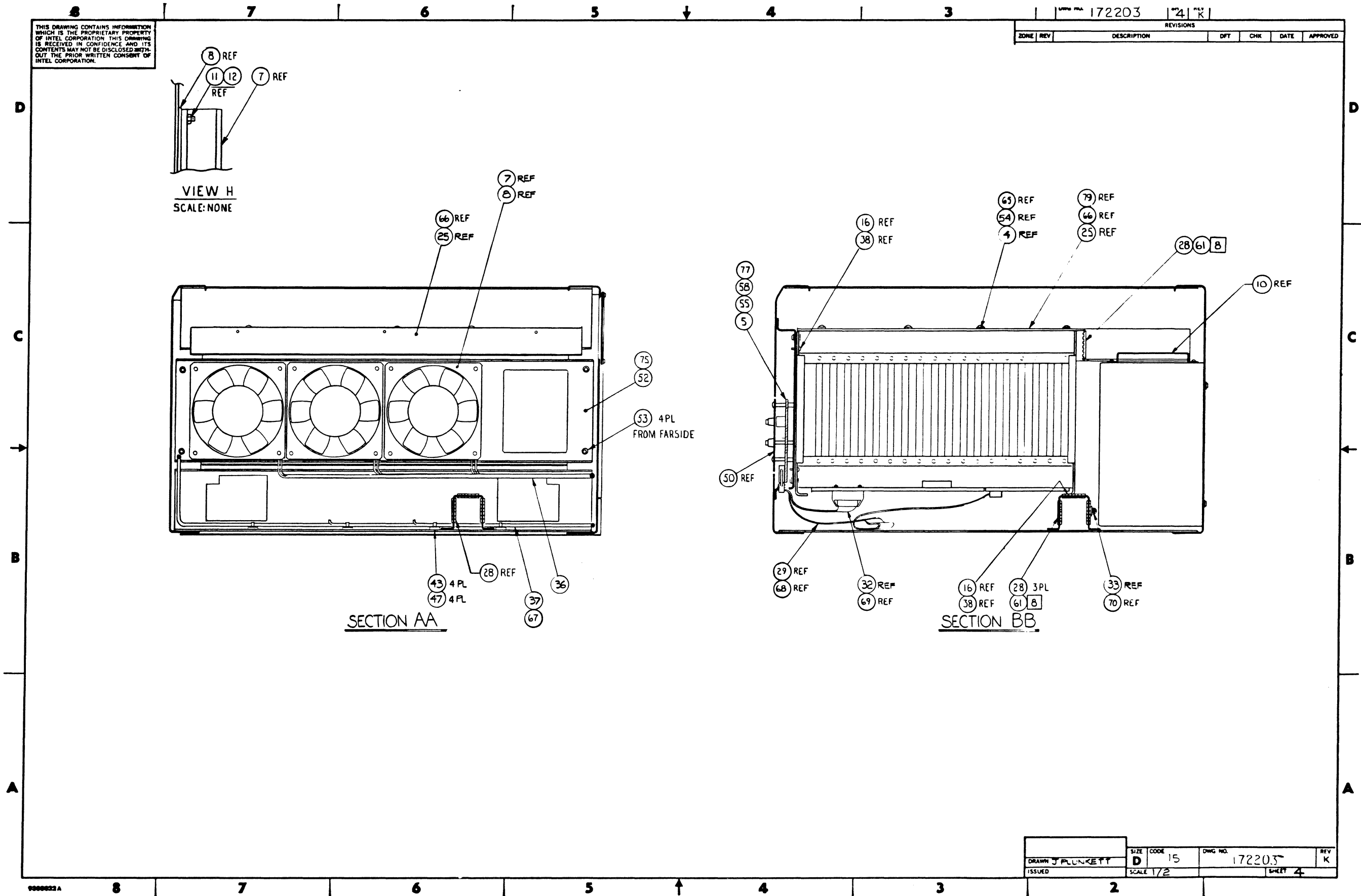
9300021A

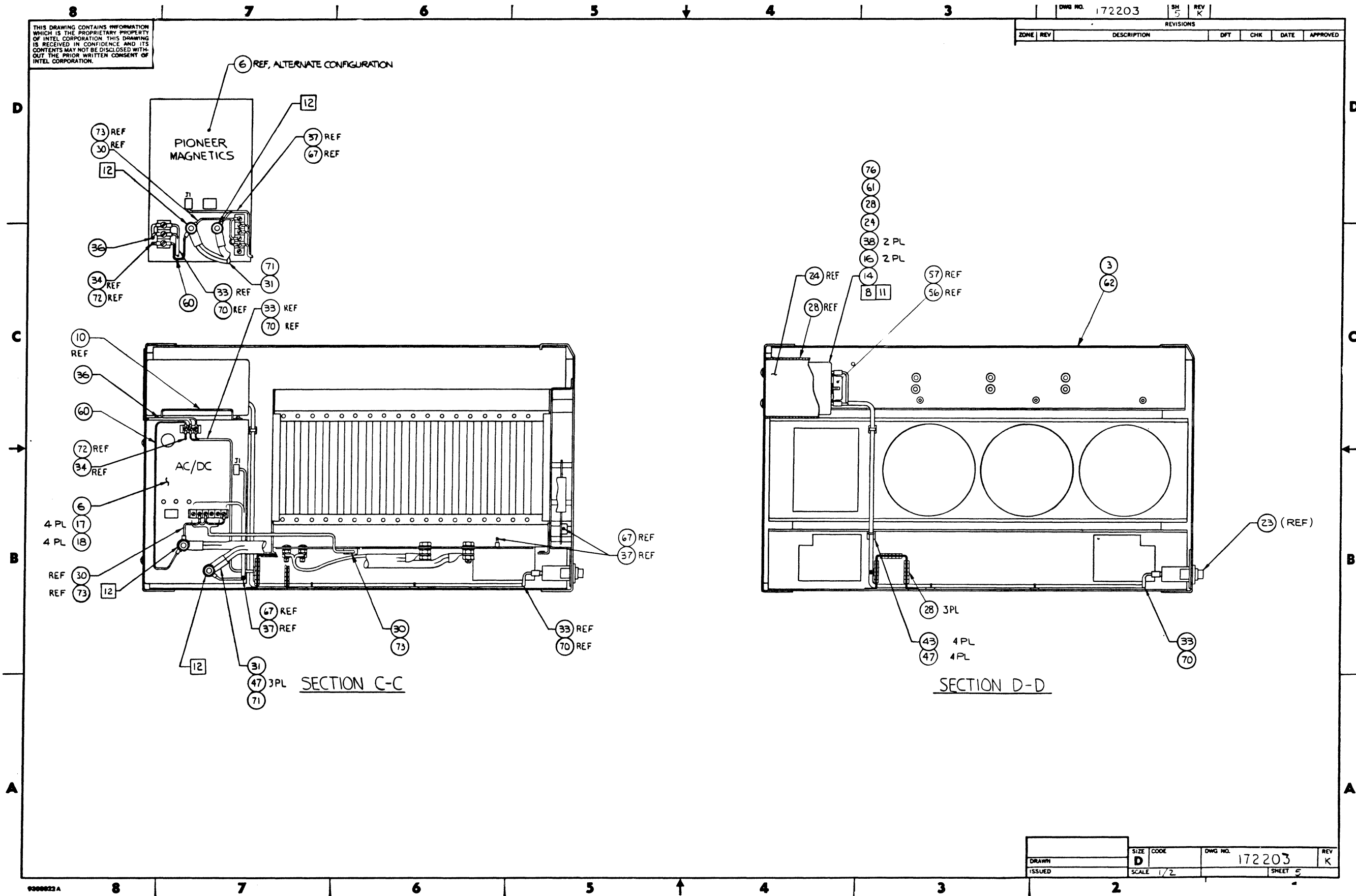




REVISE		REVISIONS			
DATE	BY	DESCRIPTION	CHK	APP	DATE

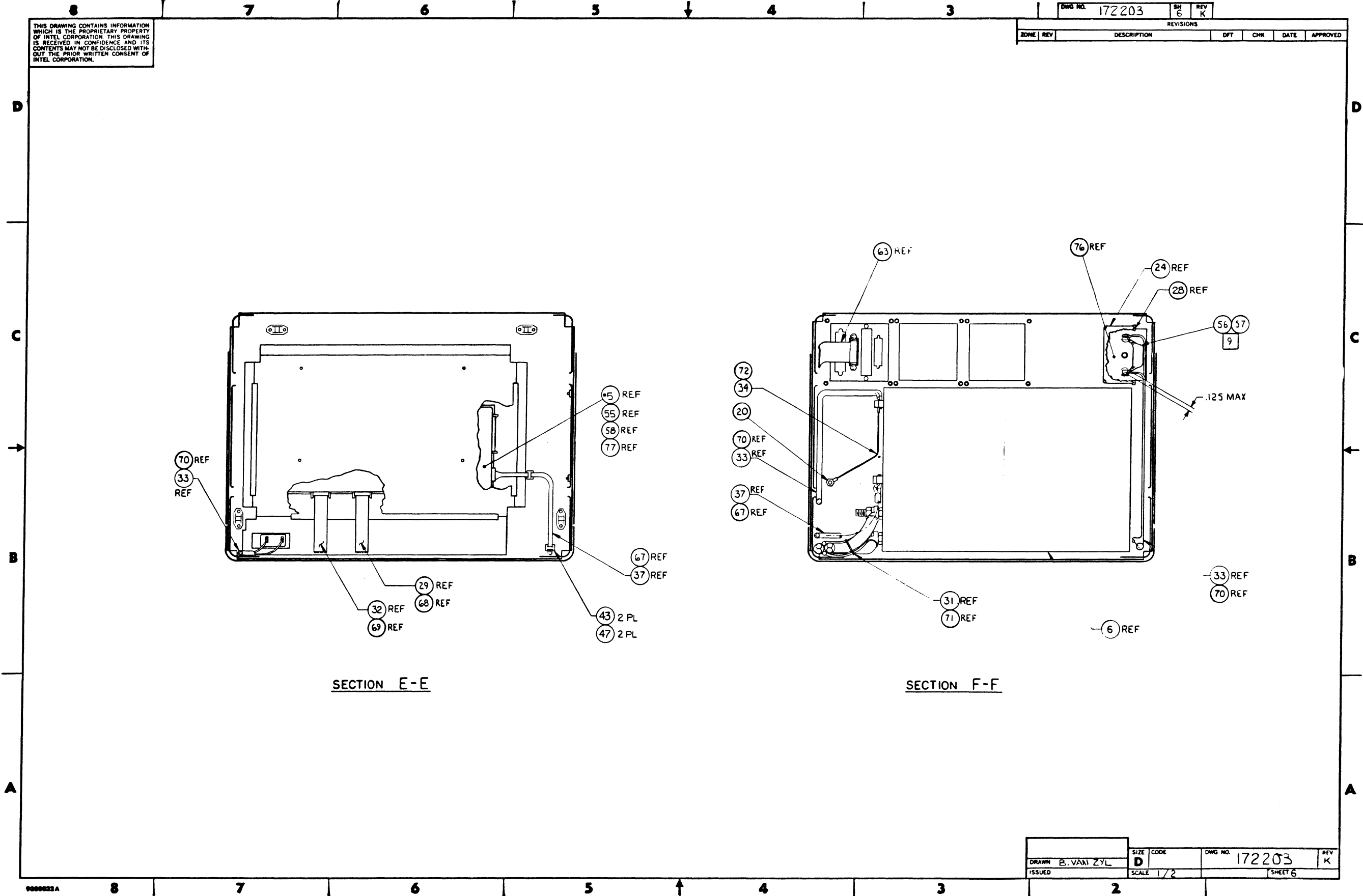
DRAWN J. PLUNKETT	SIZE D	CODE 15	DWG NO. 172203	REV K
ISSUED	SCALE 1/2		SHEET 3	



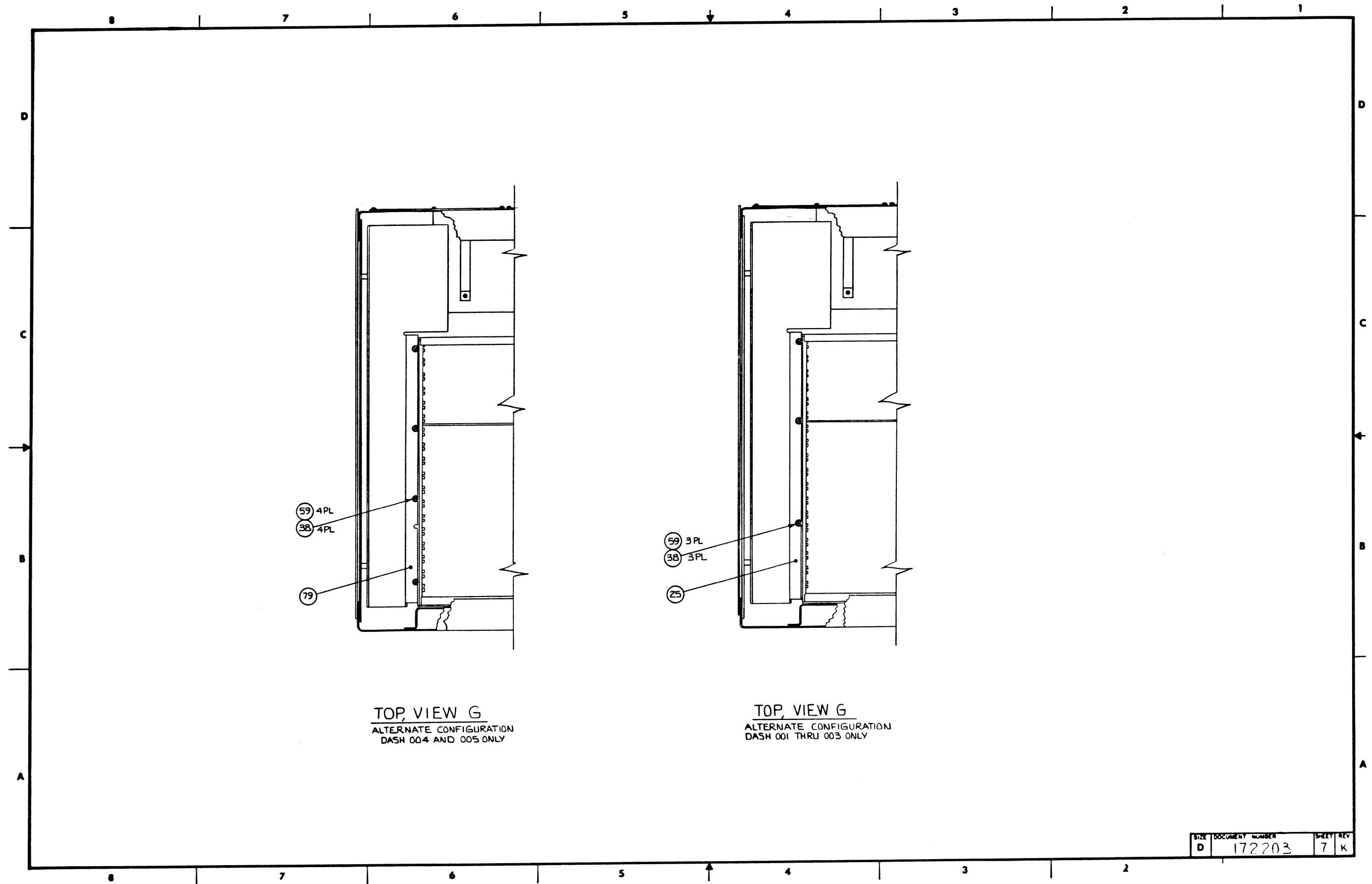


THIS DRAWING CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF INTEL CORPORATION. THIS DRAWING IS RECEIVED IN CONFIDENCE AND ITS CONTENTS MAY NOT BE DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF INTEL CORPORATION.

DWG NO. 172203		SH 6	REV K
REVISIONS			
ZONE	REV	DESCRIPTION	DATE



DRAWN B. VAN ZYL	SIZE CODE D	DWG NO. 172203	REV K
ISSUED	SCALE 1/2	SHEET 6	

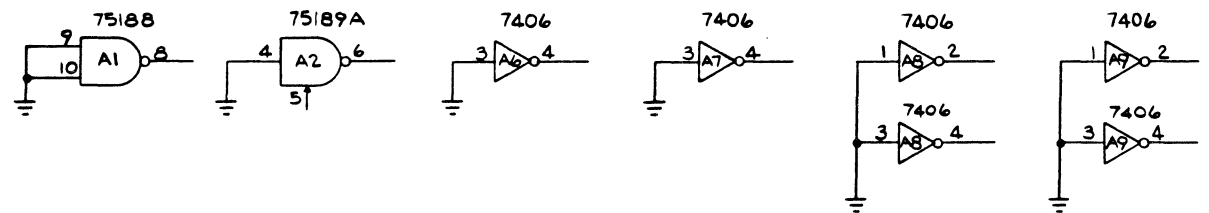
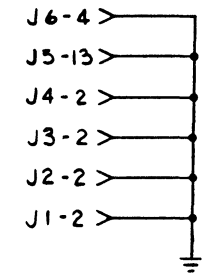
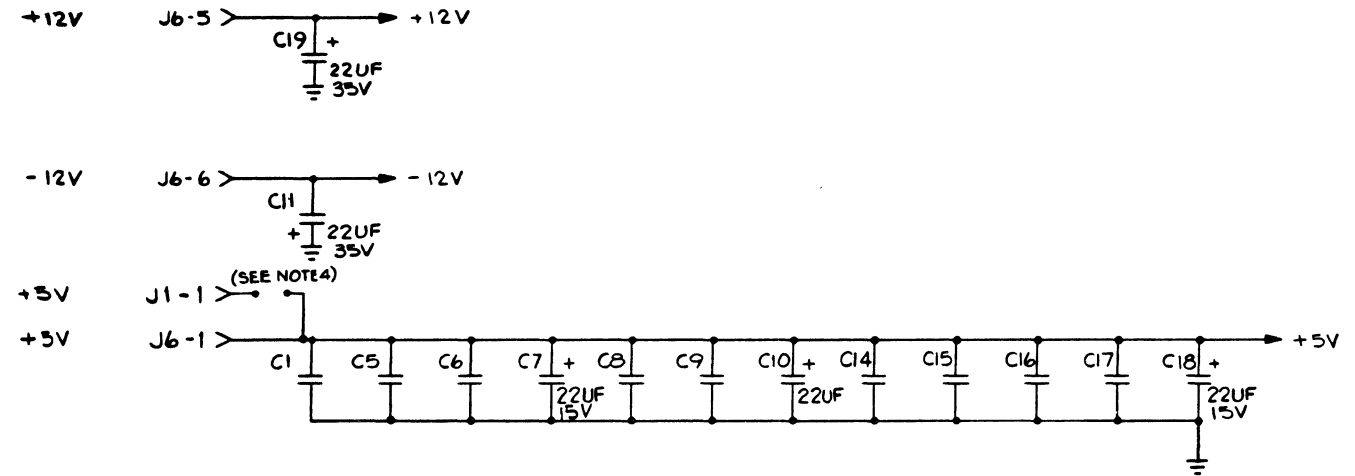


SIZE	DOCUMENT NUMBER	SHEET	REV
D	172203	7	K

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DWG NO. 172270 SH 1 REV A

ZONE	REV	DESCRIPTION	DFT	CHK	DATE	APPROVED
A	PER ECO	17-0147	BVE	GSM	10/21/81	RS



REFERENCE DESIGNATION	DEVICE TYPE	GRD PIN	+5V PIN	+12V PIN	-12V PIN	UNUSED OUTPUT PINS
A6, A7, A8, A9	7406	7	14			A6-3, A7-3, A8-2, 4, A9-2, 4
A1	75188	7	14	1		A1-8
A2	75189A	7	14			A2-6
A3, A5	8243	12	24			
A4	8748	20	26, 40			
RP1, RP2, RP3, RP4, RP5	R-PACK		1			

- NOTES UNLESS OTHERWISE SPECIFIED:
- CAPACITORS ARE .01UF, ±20%, 15V.
 - RESISTOR VALUES ARE IN OHMS, ±5%, 1/4W.
 - RESISTOR NETWORKS RP1 THRU RPS ARE ±5%, 1/4W.
 - OPTIONAL SOURCE FOR +5V.
 - ← DENOTES FLOW DIRECTION

REFERENCE DESIGNATION	LAST USED	NOT USED	NEXT ASSY	USED ON
Y1				
S2				
RP5				
R9				
J6				
E32				
DS8				
C19				
A9				

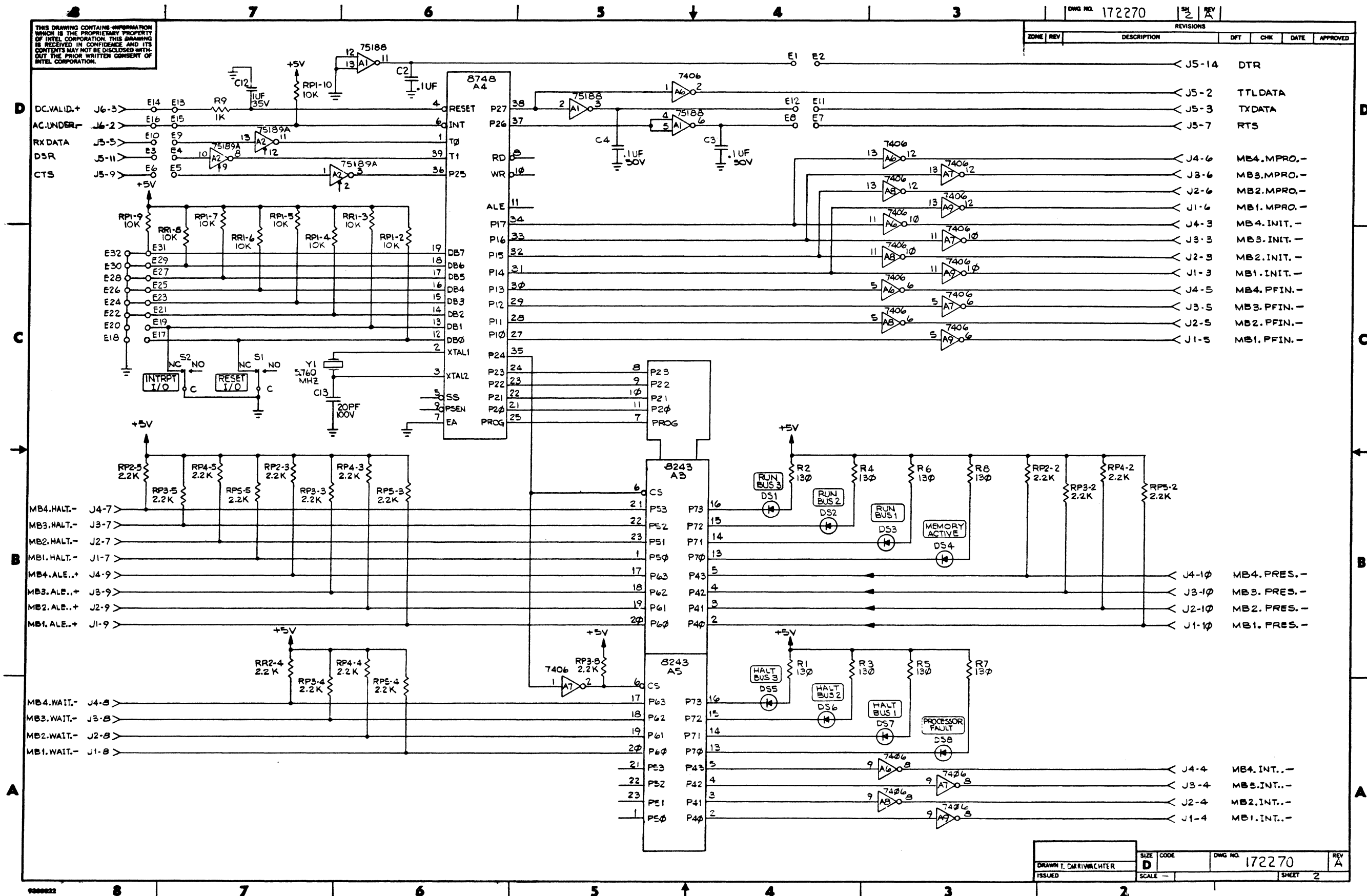
ITEM NO.	PART NUMBER	DESCRIPTION
QUANTITY PER DASH NO.		
UNLESS OTHERWISE SPECIFIED:		
DIMENSIONS ARE IN INCHES.		
BREAK ALL SHARP EDGES.		
DO NOT SCALE DRAWING.		
TOLERANCES:		
ANGLES ± 2°		
XX ± .005		
XXX ± .010		
SURFACE FINISH		

SIGNATURE	DATE	TITLE
DRN BY B. VANZYL	10/21/81	LOGIC DIAGRAM, PWA, SL
CHK BY	10/21/81	
ENGR APVD	10/21/81	
APVD		

SIZE	CODE	DWG. NO.	REV
D		172270	A

SCALE	SHEET	OF
NONE	1	2

9000021A



DRAWN T. CARWILCHTER	SIZE D	CODE	DWG NO. 172270	REV A
ISSUED	SCALE		SHEET 2	