

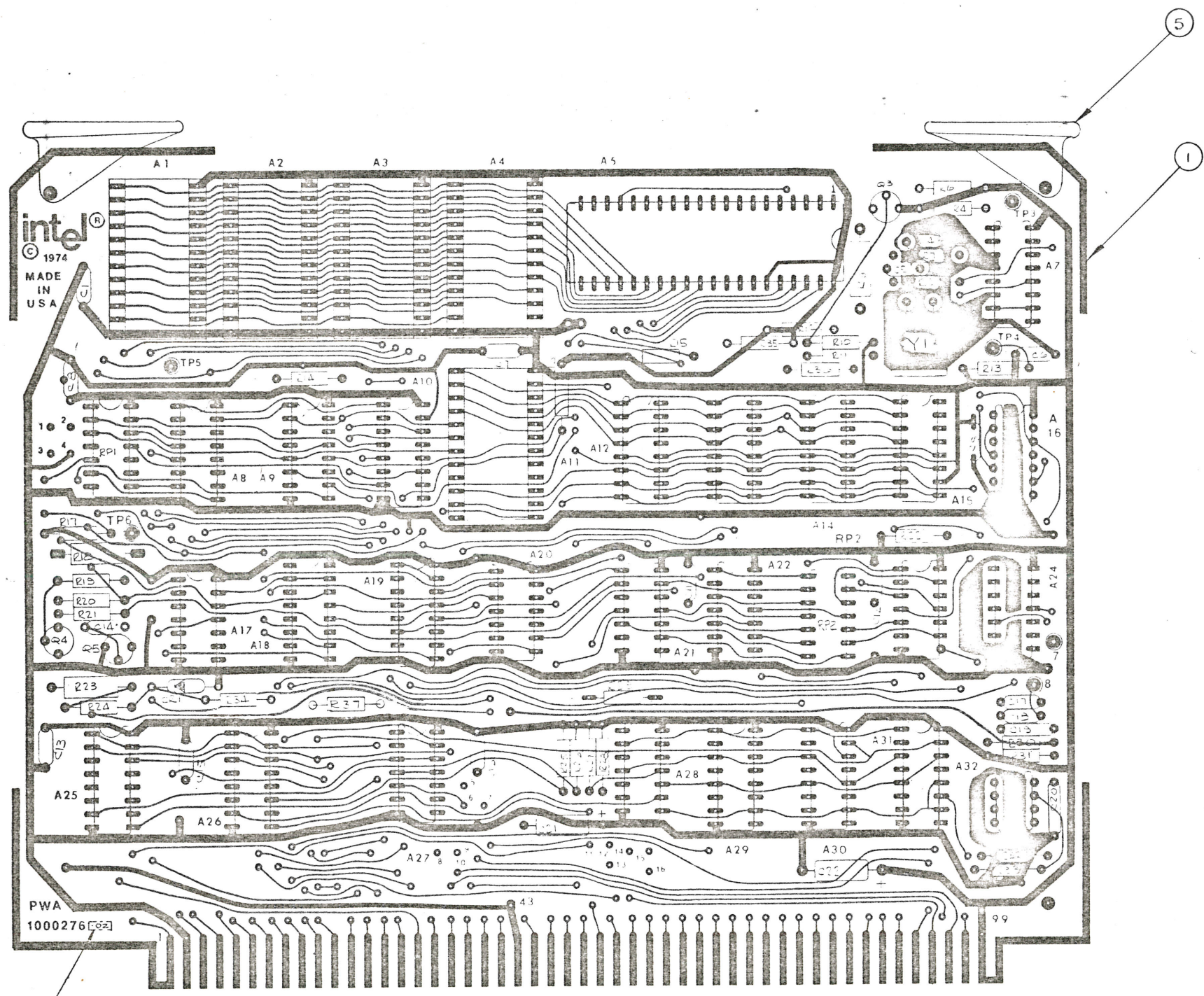
intellec<sup>T.M.</sup> 4  
MOD 40

Reference  
Schematic  
Drawings





REVISIONS		SIGNATURE AND DATE	
NO.	DESCRIPTION	BY	DATE
1	A RELEASE TO PRODUCTION	<i>[Signature]</i>	11/1/74

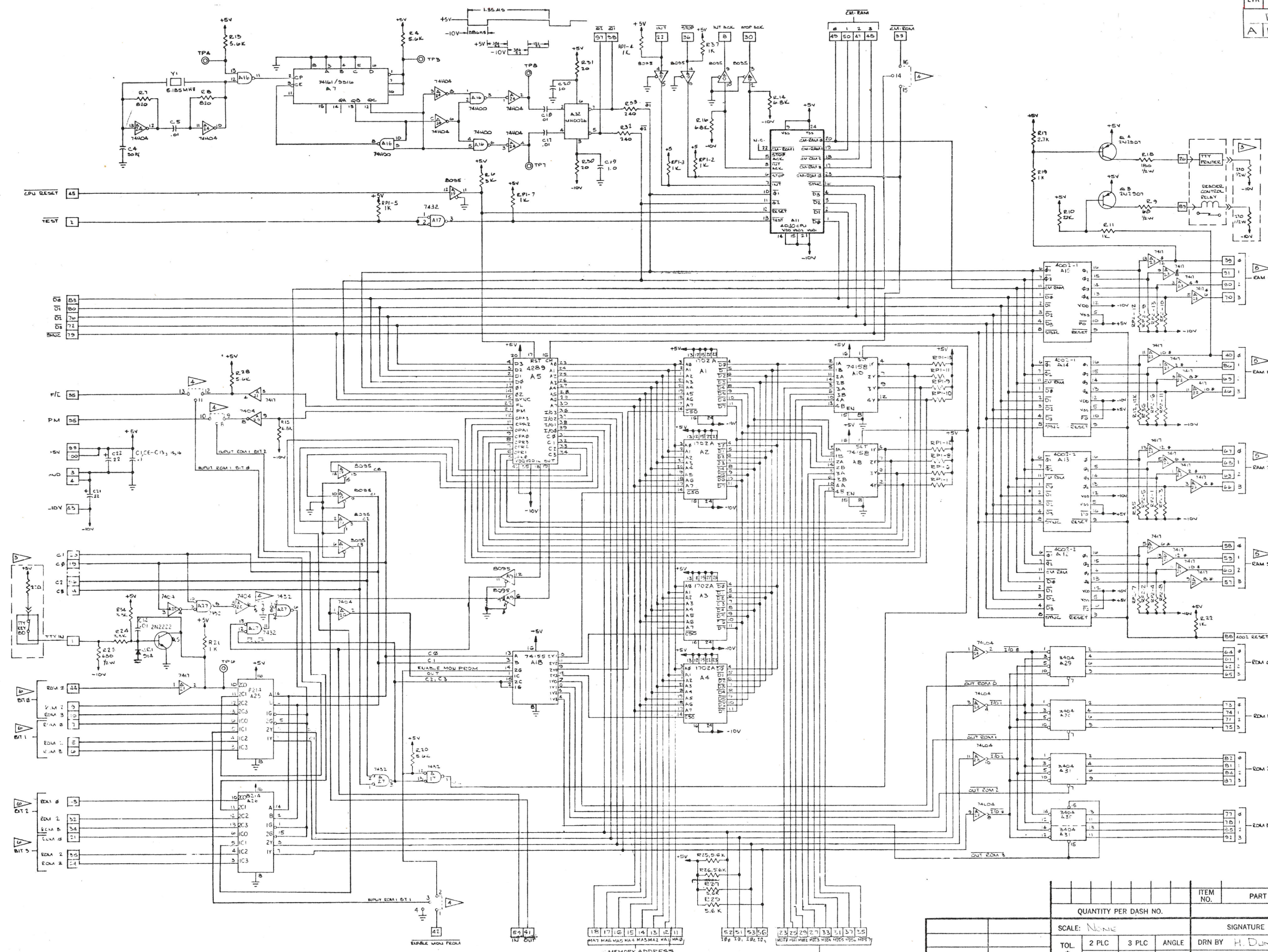


NOTES:  
 1. ASSY PART NO. IS 1000276-01  
 2. MARK DASH NO. IN POSITION SHOWN.

SCALE: 2:1		SIGNATURE		DATE	3065 BURNING WOOD SANTA CLAY © INTEL 1974 CALIF. U.S.A.
TOL	2 PLG	3 PLG	ANGLE	DRN BY <i>[Signature]</i>	
4000355	IMM4-43	MATERIAL:		CHK BY <i>[Signature]</i>	11/1/74
4000354	IMM4-88	SEE P/L		DFT APPD <i>[Signature]</i>	11/1/74
4000324	IMT4MOD40	FINISH:		ENGR APPD <i>[Signature]</i>	11/1/74
NEXT ASSY	USED ON	AUTH BY <i>[Signature]</i>		DATE	11/1/74
		CODE		SHEET	1 OF 1
				TITLE	
				PRINTED WIRING ASSY	
				CENTRAL PROCESSOR MOD	
				SIZE	D 410
				DEPT	1000276
				REV	A



REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK ENGR
FOR PREVIOUS REVISIONS SEE HISTORY			
A REDRAWN NO CHANGE			



QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE				
TOL. ±	2 PLC	3 PLC	ANGLE	
MATERIAL:				
FINISH:				
NEXT ASSY	1000270	INT4/M804C	USED ON	
SIGNATURE		DATE	PARTS LIST	
DRN BY H. DUMLAD		4/8/74	intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051	
CHK BY P. PARKS		7/3/74	TITLE	
DFT APPD T. TOOMEY		7/1/74	SCHEMATIC	
ENGR APPD E. P. WALKER		7/1/74	CENTRAL PROCESSOR MODULE	
AUTH BY S. HOW		7/1/74	SIZE	DEPT
CODE:		SHEET 1 OF 1	D 410	DRAWING NO. 2000318
				REV A

8 7 6 5 4 3 2 1

CPU RESET 45

TEST 1

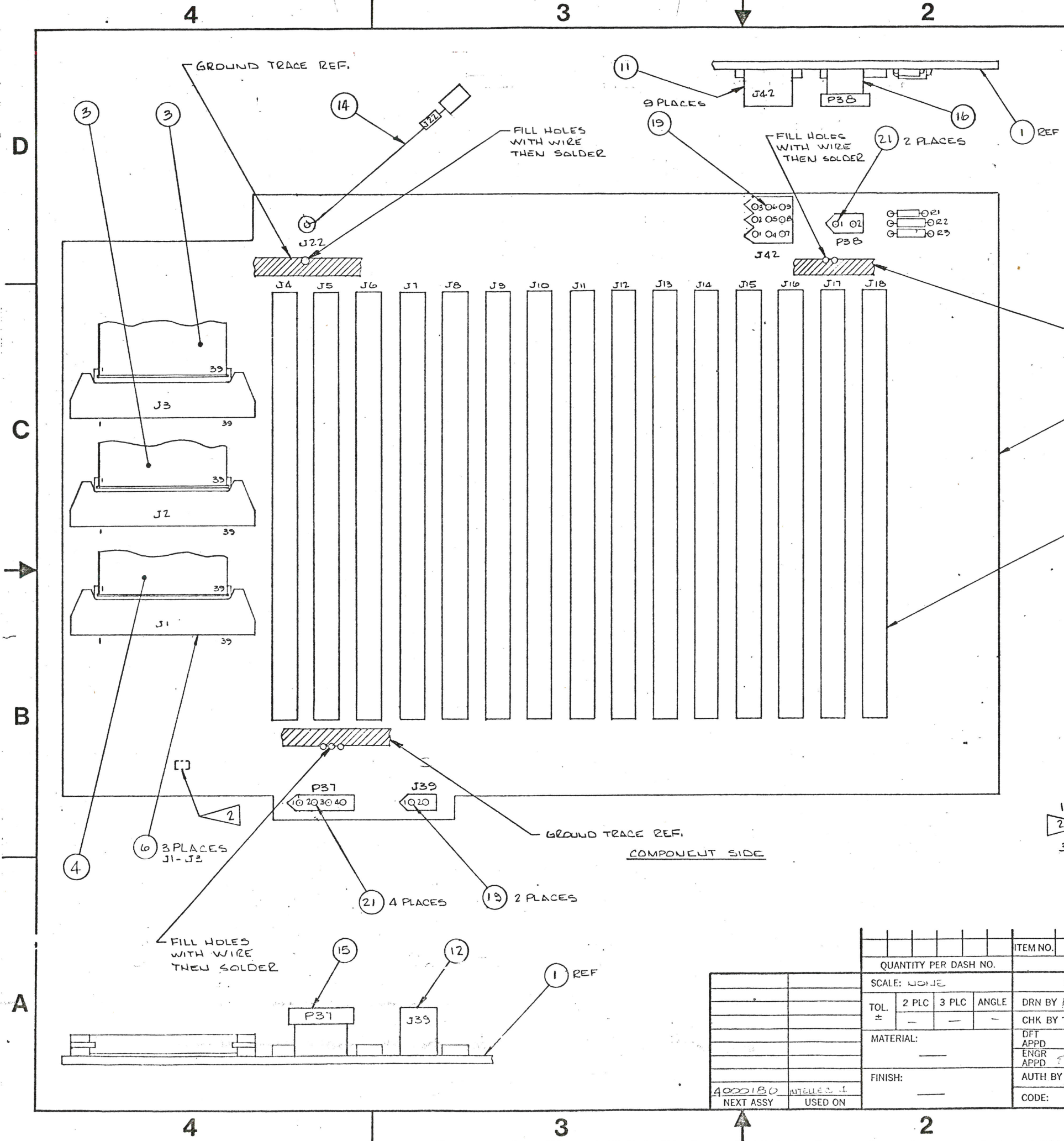
DATA BUS

MEMORY ADDRESS

MEMORY DATA IN

8 7 6 5 4 3 2 1

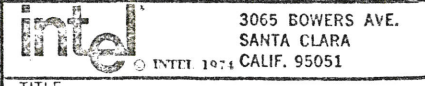




REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
I	ENGRS RELEASE			
A	PROD. RELEASE ADDED MOLEX CONN			
B	SEE ECO # 00075 FOR CHANGE			
B	ADDED ITEM 14, REMOVED ITEM 13 & 18 SEE ECO # 00120-1			
C	SCHEMATIC & ARTWORK CHG ONLY SEE ECO # 00134			
D	ECO# 00186-6			
E	ECO# 00209 P/L ONLY			

- NOTES:
1. ASSY PART NO. IS 1000075-01
  2. MARK DASH NO. IN POSITION SHOWN
  3. AFTER INSTALLING CONNECTORS J4-J18 TRIM LEADS FLUSH ON CIRCUIT SIDE OF P.C. BOARD.

ITEM NO.	PART NUMBER	DESCRIPTION
QUANTITY PER DASH NO.		
SCALE: NONE		SIGNATURE
TOL. # 2 PLC 3 PLC ANGLE		
MATERIAL:		DATE
FINISH:		DRN BY <i>H. Lumbard</i> 11/2/73
4000180 INTELLED 11		CHK BY <i>T. MORGAN</i> 11/2/73
NEXT ASSY USED ON		DFT APPD
		ENGR APPD <i>T. Morgan</i> 11/1/73
		AUTH BY <i>T. Morgan</i> 11/1/73
CODE:	SHEET 1 OF 1	SIZE DEPT DRAWING NO. REV
		C 410 1000075 E



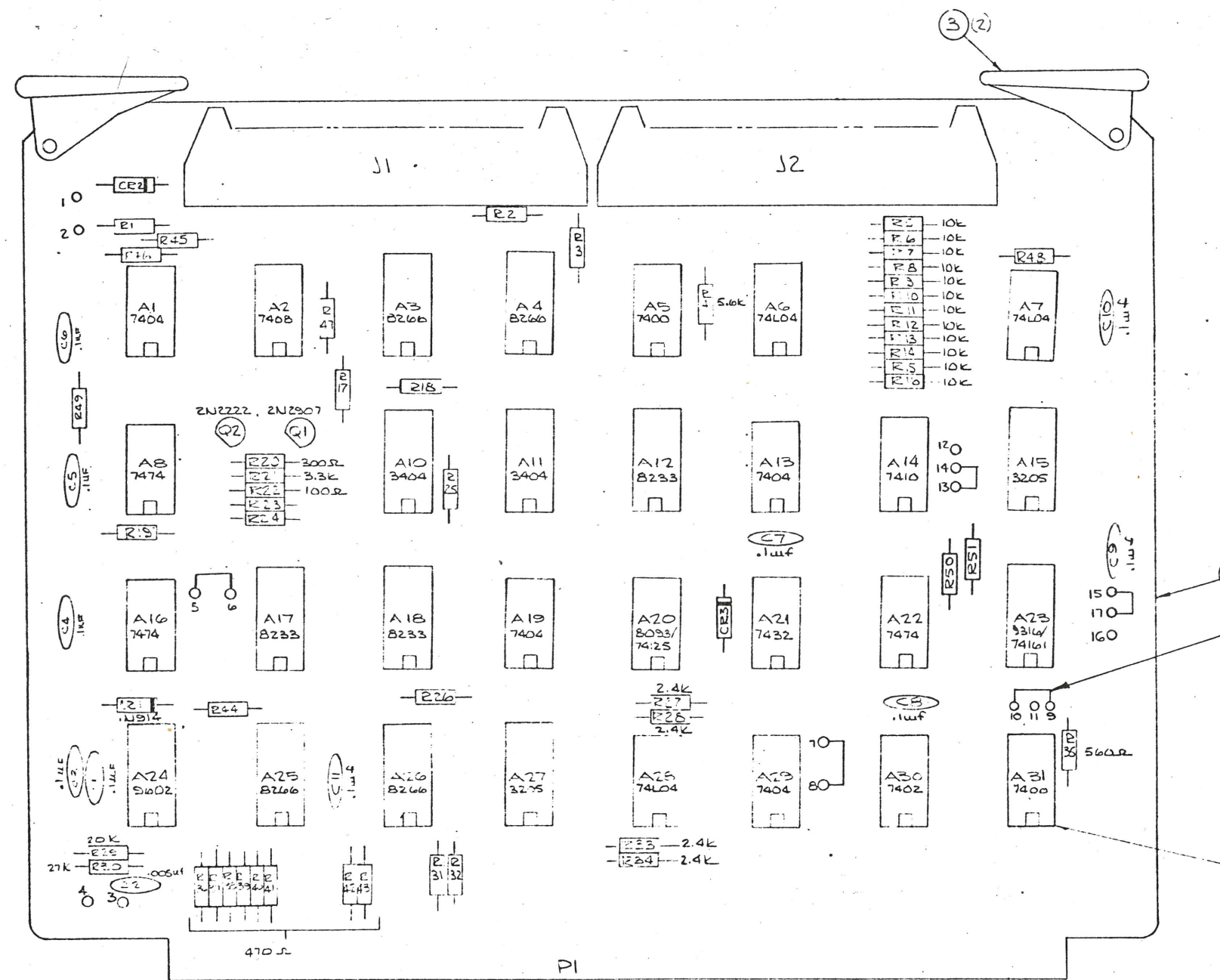
TITLE  
PRINTED WIRING ASSEMBLY  
MOTHER BOARD







REVISIONS		
LTR	DESCRIPTION	SIGNATURE AND DATE
	SEE SHT # 1	DFT: [Signature] / [Date] CHK: [Signature] / [Date] ENGR: [Signature] / [Date]



-02VERSION

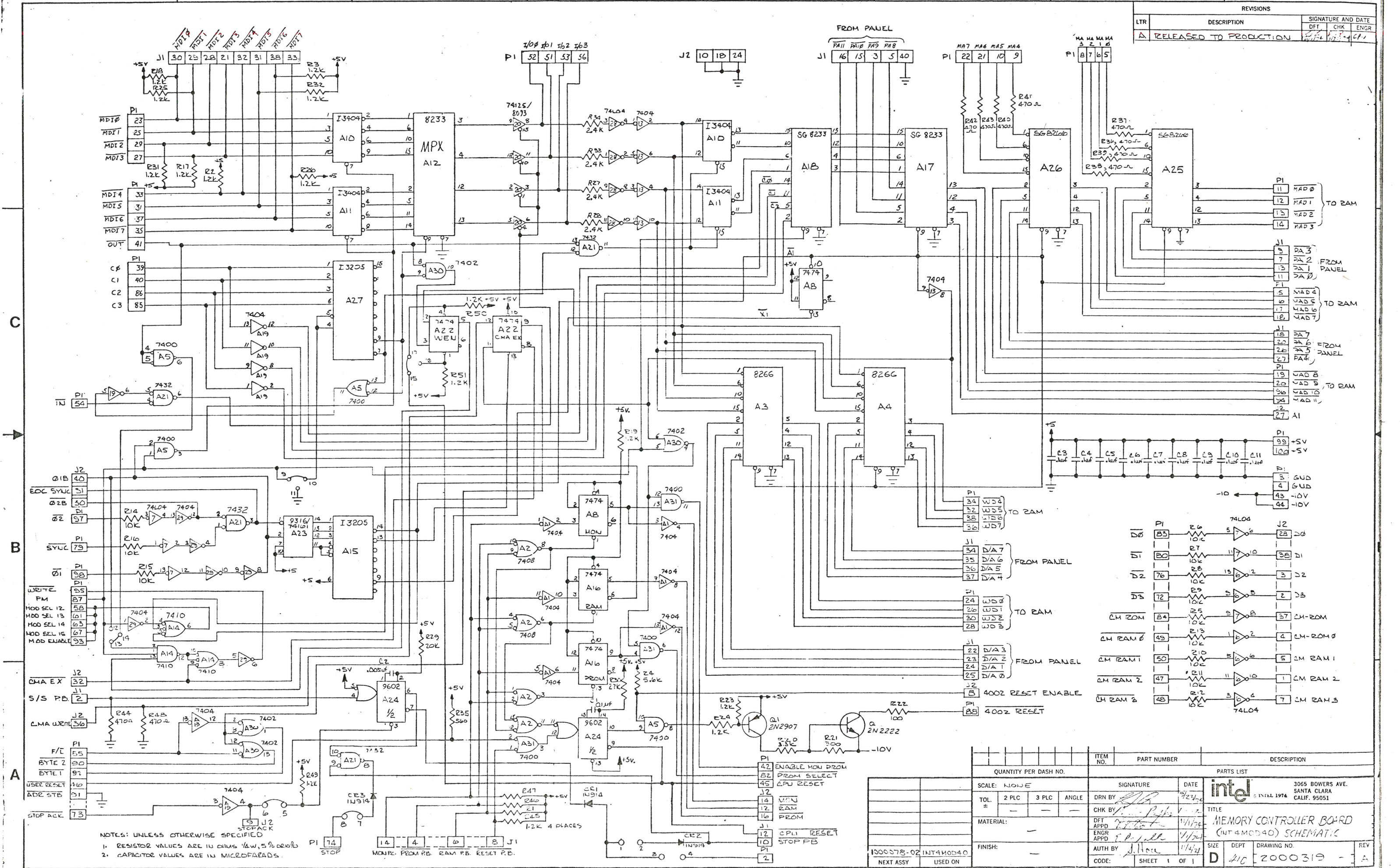
- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTORS ARE 1/2W, 1/4W, 5% OR 10%
  2. AS IS NOT USED.

QUANTITY PER DASH NO		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 2/1		SIGNATURE		DATE
TOL. ±		DRN BY [Signature]		10/73
2 PLC 3 PLC ANGLE		CHK BY T. MORGAN		11/17
MATERIAL:		DFT APPD [Signature]		11/73
FINISH:		ENGR APPD [Signature]		11/73
AUTH BY [Signature]		AUTH BY [Signature]		11/73
CODE:		SHEET 2 OF 2		
NEXT ASSY USED ON		SIZE DEPT DRAWING NO		REV
		D 810 1000078		E

8 7 6 5 4 3 2 1



REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DRN	CHK
A	RELEASED TO PRODUCTION	CHK	ENGR



NOTES: UNLESS OTHERWISE SPECIFIED  
 1. RESISTOR VALUES ARE IN OHMS (%W, 5% 02010)  
 2. CAPACITOR VALUES ARE IN MICROFARADS.

QUANTITY PER DASH NO.		PARTS LIST	
SCALE: NONE	SIGNATURE	DATE	3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL. ±	DRN BY	9/24/74	intel
2 PLC	CHK BY	11/17/74	
3 PLC	ENGR APPD	1/1/74	TITLE
ANGLE	ENGR APPD	1/1/74	
MATERIAL:	AUTH BY	1/1/74	SIZE DEPT DRAWING NO. REV
FINISH:	CODE:	SHEET 1 OF 1	D 410 2000319 - A

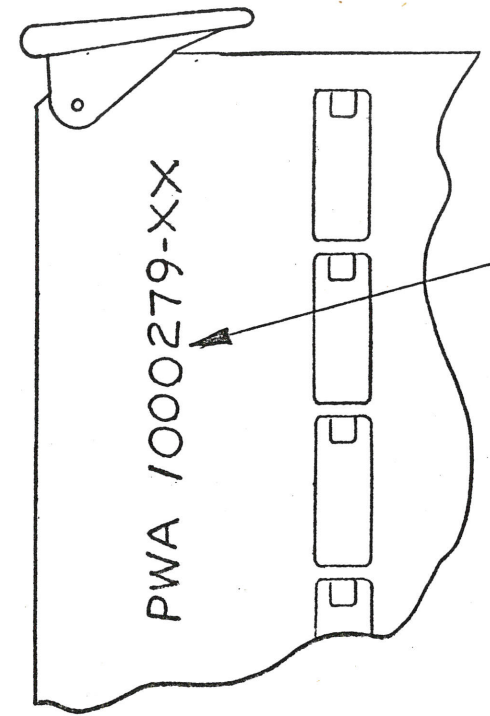


REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
-	PRODUCTION RELEASE	8/8/74	5/8/74	5/8/74
A	ADDED NEXT ASSY 4000324 NO ECO	10/14/74	9/7/74	5/8/74
B	SEE ECO 00244	4/23/75	Y.P.P.	C.N.

PRINTED WIRING ASSEMBLY RAM MEMORY MODULE  
 MANUFACTURERS PART NO. 05-0042-XX  
 SUPPLIER : INTEL MEMORY SYSTEMS

PRINTED WIRING ASSEMBLY TO BE SUPPLIED  
 WITH CURRENT PRINT OF SCHEMATIC 01-0136-XX  
 AND ASSEMBLY DRAWING 05-0042-XX

-XX IS THE CURRENT ISSUE NUMBER.



INK STAMP IN AREA SHOWN  
 PART NO. PWA 1000279-XX

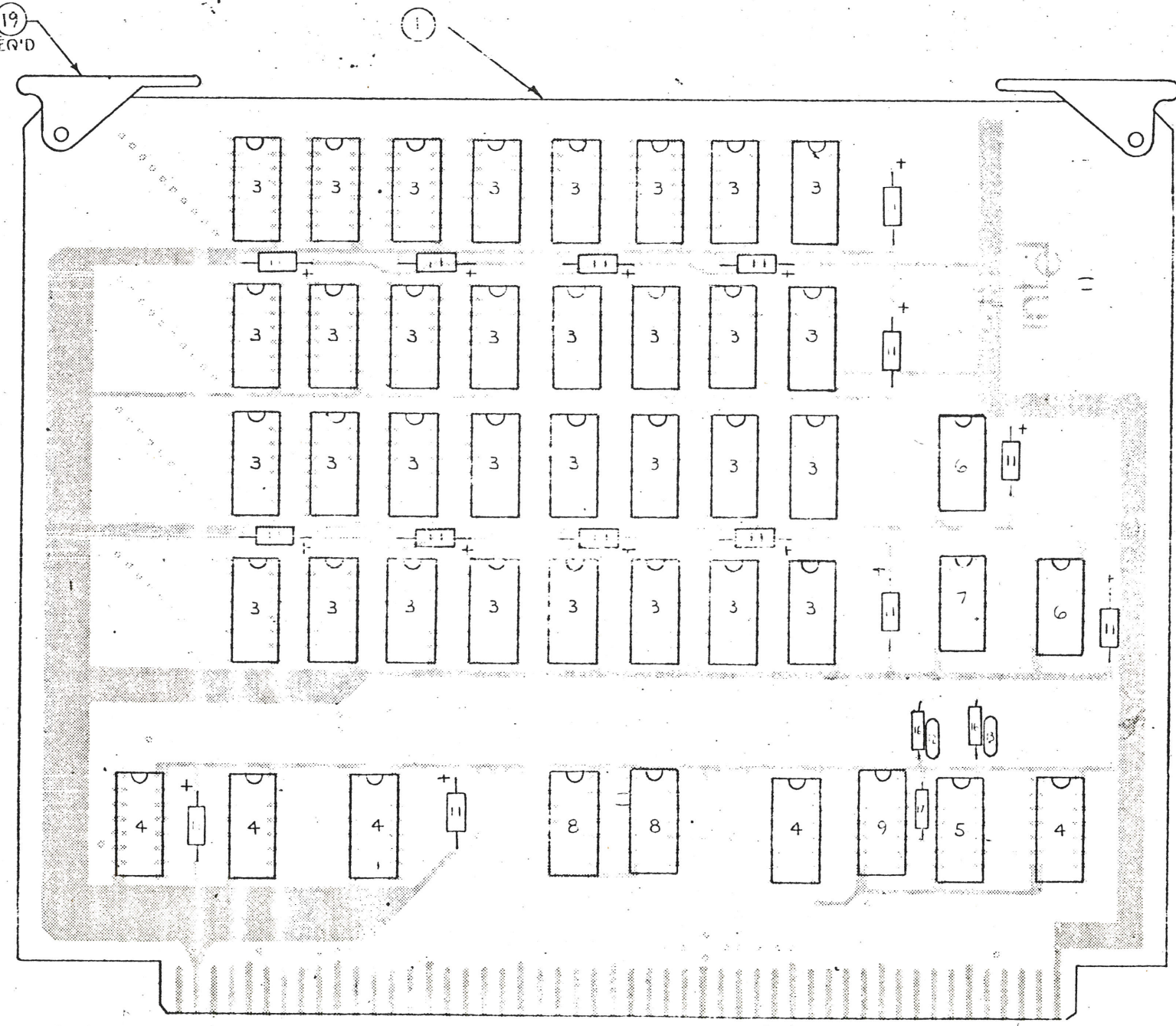
VERSION	DESCRIPTION
-01	4K RAM
-02	1K RAM
-03	4K/2102A

		ITEM NO.	PART NUMBER	DESCRIPTION	
QUANTITY PER DASH NO.		PARTS LIST			
SCALE: _____		SIGNATURE		DATE	
TOL. ±	2 PLC	3 PLC	ANGLE	DRN BY L.R. FRESE	5/6/74
MATERIAL:		CHK BY H. [Signature]		5/8/74	
4000324	INT4MOD40	DFT APPD [Signature]			
4000283	INT8/MOD8	ENGR APPD [Signature]		5/9/74	
4000128	INT.8/MOD8	AUTH BY S. Hall		5/9/74	
4000100	INT. 4	CODE: —		SHEET 1 OF 1	
NEXT ASSY	USED ON				
		INTEL 3065 BOWERS AVE. SANTA CLARA CALIF. 95051		TITLE	
				PRINTED WIRING ASSY RAM MEMORY MODULE	
SIZE	DEPT	DRAWING NO.	REV		
B	410	1000279	B		



REVISIONS				
REV	DATE	DESCRIPTION	BY	APPROVAL
00	6-19-73	RELEASE TO MFG EC 164	Kelly R	EL
01	10-9-73	EC # 188		CP
02	12-17-73	EC # 283	JMM	CP
03	2/25/74	EC 277	G.P.	CP

19  
Z REQ'D



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		<b>ASSEMBLY DRAWING</b> <b>IN-28</b>	
DESIGNED BY Kelly R 6-19-73	CHECKED BY G.P. 2-25-74	DRAWN BY D	PART NUMBER 05-0042-000 03



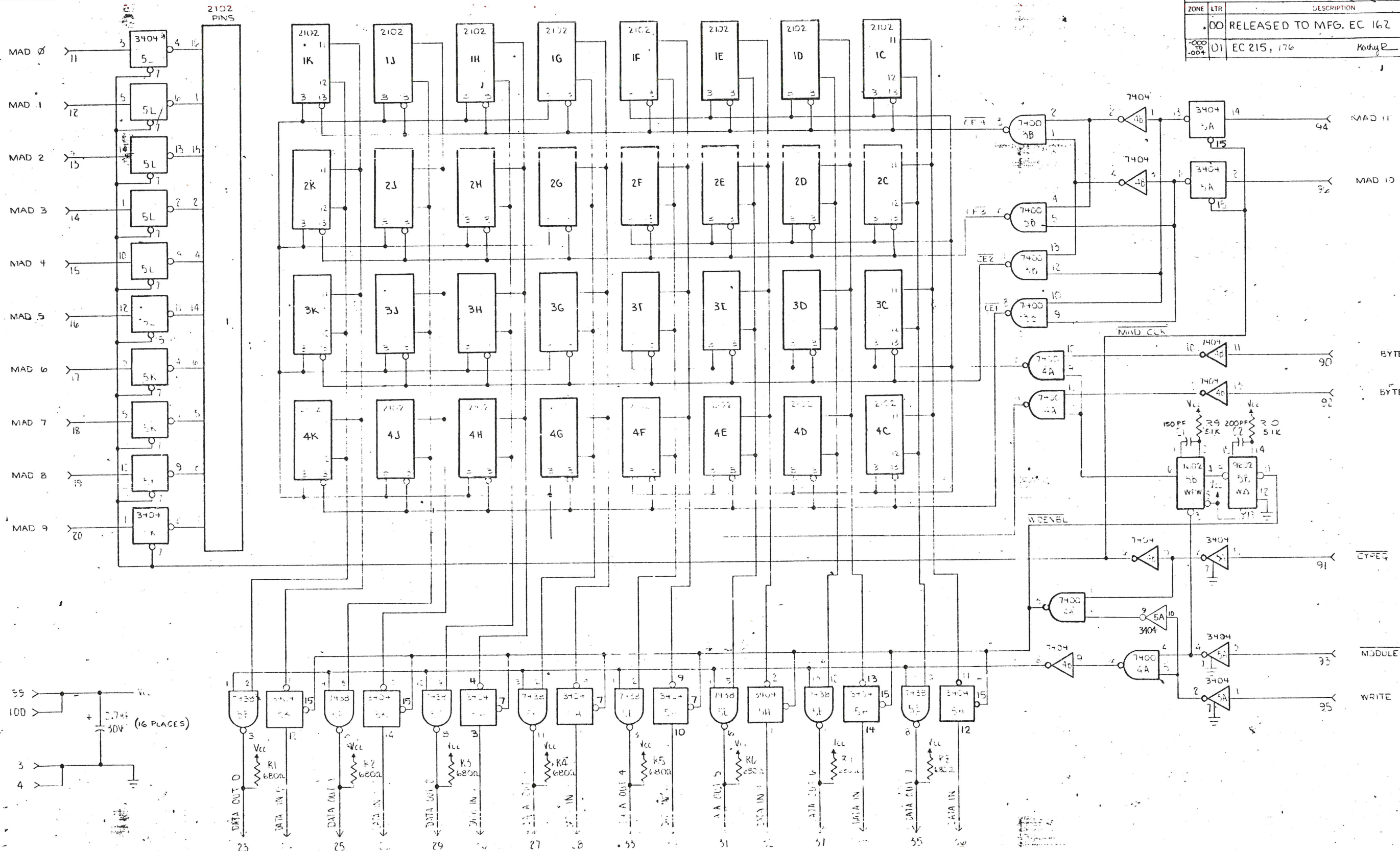
4

3

2

1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVAL
		.00 RELEASED TO MFG. EC 162	Kelly 6-18-73	
	01	EC 215, 176	Kathy 7-7-73	CQ



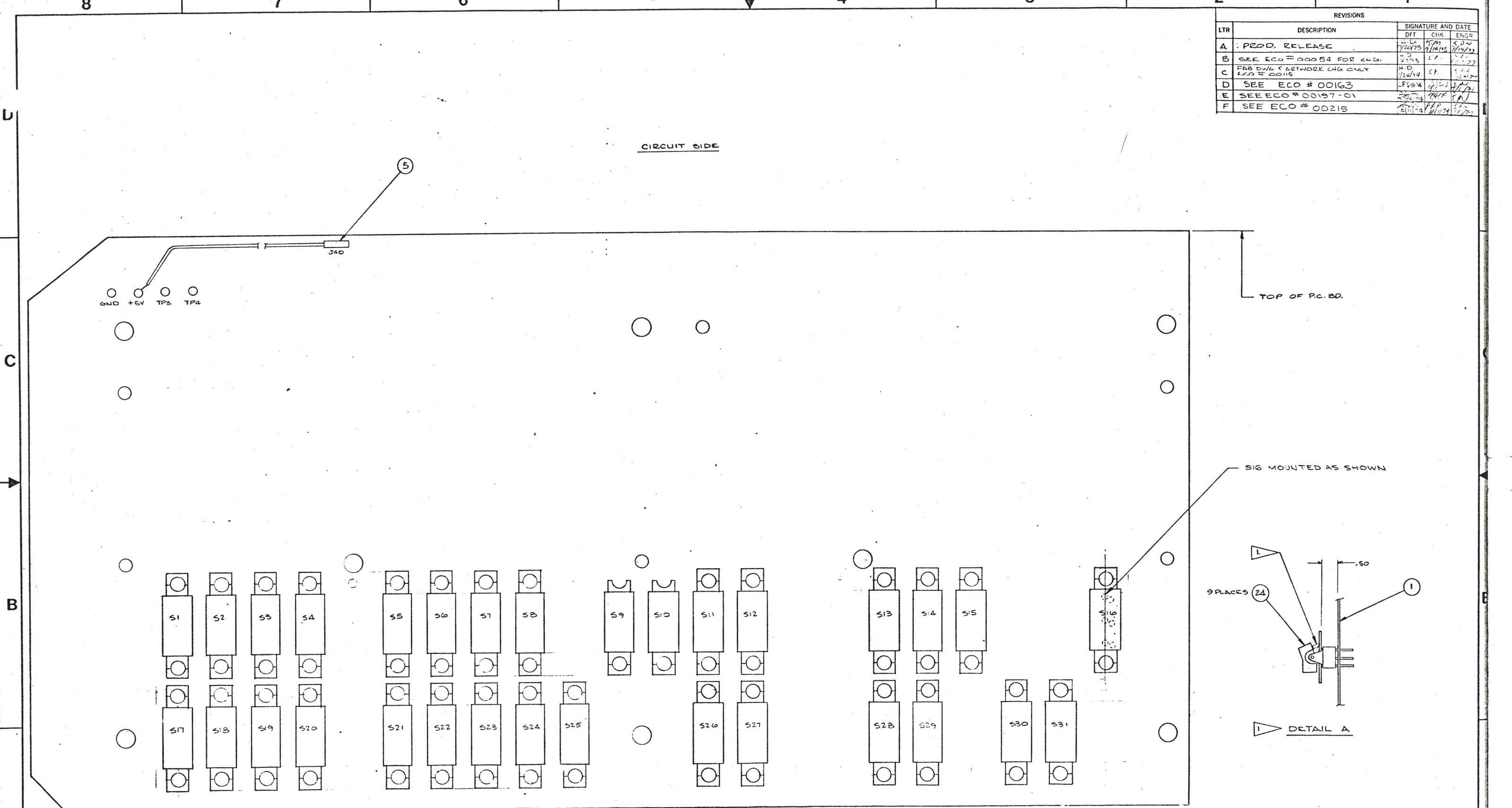
DASH NO.	01
000	01
001	01
002	01
003	01
004	01

PACKAGE TYPE		DIE SIZE		DIP	
DEVICE		GKM		117-32	
BRN		GKM		117-32	
MFG		INTEL		D	
NEXT ASSY		USED ON		2P1P	
DATE		MAY 1973		REV. 1	
DRAWING NO.		CI-0126		-000	

intel  
SCHEMATIC  
IN-28



REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	ENGR
A	PROD. RELEASE	[Signature]	7/14/73
B	SEE ECO # 00054 FOR CHG.	[Signature]	7/14/73
C	FAB DWG & NETWORK CHG ONLY ECO # 00115	[Signature]	7/14/73
D	SEE ECO # 00163	[Signature]	7/14/73
E	SEE ECO # 00197-01	[Signature]	7/14/73
F	SEE ECO # 00215	[Signature]	7/14/73



NOTES: UNLESS OTHERWISE SPECIFIED  
 1. S13, 14, 15, S23-S25, S27, S29, S30 ARE SPRING LOADED.  
 SPRING SHOULD BE FACING TOWARD THE TOP OF P.C. BD.  
 SEE DETAIL A FOR MOUNTING SWITCH.

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.

ITEM NO.	QUANTITY PER DASH NO.	PART NUMBER	DESCRIPTION
	SCALE: 2:1	SIGNATURE DATE	
	TOL. ±	DRN BY [Signature] 7/14/73	
		CHK BY T. MORGAN 7/14/73	
	MATERIAL:	DFT APPD [Signature] 7/14/73	
		ENGR APPD [Signature] 7/14/73	
	FINISH:	AUTH BY [Signature] 7/14/73	
		CODE:	SHEET 1 OF 2
		SIZE	DEPT
		D	410
		DRAWING NO.	1000143
		REV	F

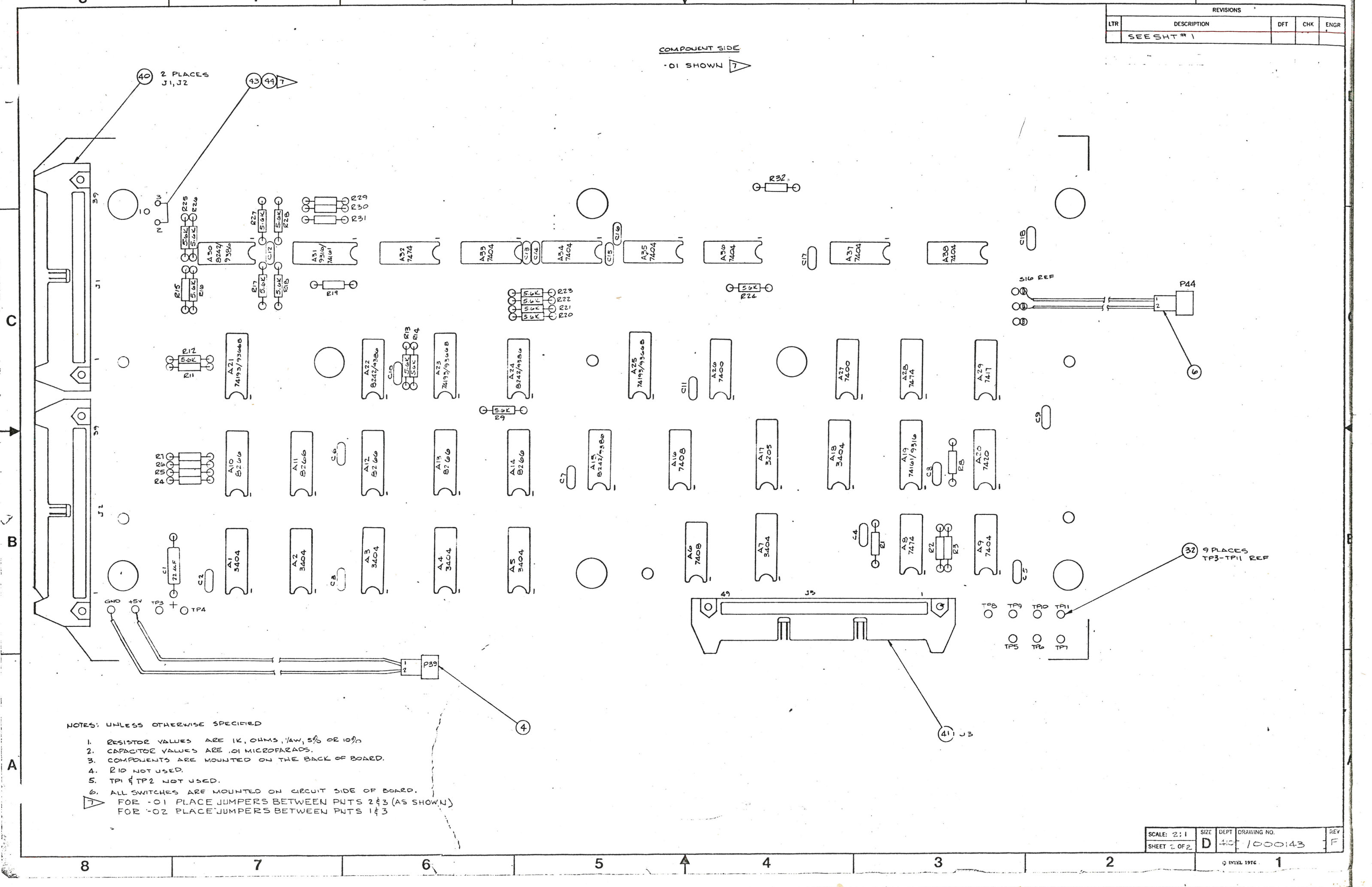
**intel** 3065 BOWERS AVE. SANTA CLARA CALIF. 95051

TITLE: PRINTED WIRING ASSEMBLY FRONT PANEL LOGIC



REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
	SEE SHT # 1			

COMPONENT SIDE  
 -01 SHOWN

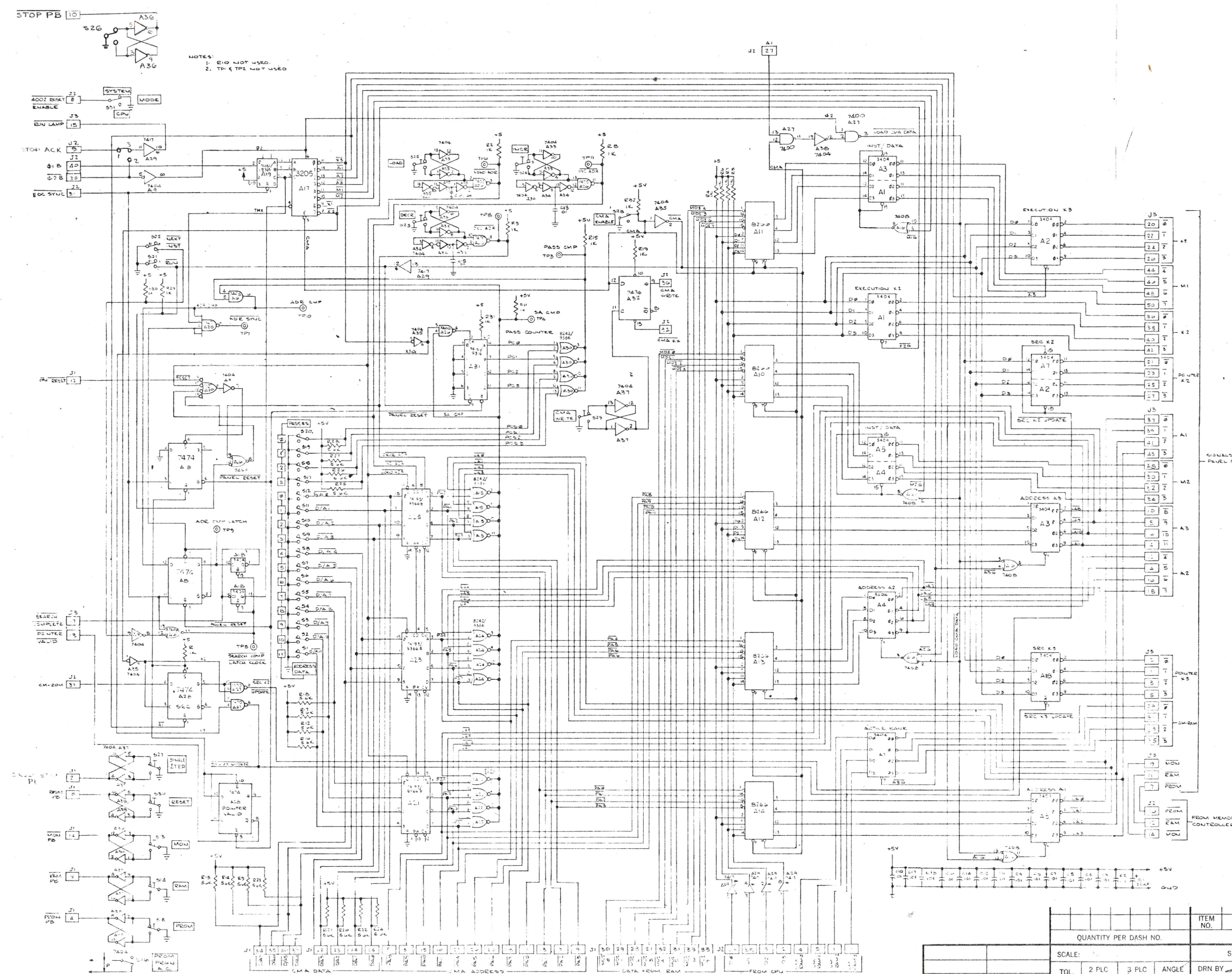


- NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE 1K, 0HMS, 1/4W, 5% OR 10%
  2. CAPACITOR VALUES ARE .01 MICROFARADS.
  3. COMPONENTS ARE MOUNTED ON THE BACK OF BOARD.
  4. R10 NOT USED.
  5. TP1 & TP2 NOT USED.
  6. ALL SWITCHES ARE MOUNTED ON CIRCUIT SIDE OF BOARD.
7. FOR -01 PLACE JUMPERS BETWEEN PNTS 2 & 3 (AS SHOWN)  
 FOR -02 PLACE JUMPERS BETWEEN PNTS 1 & 3

SCALE: 2:1	SIZE: D	DEPT: 40	DRAWING NO.: 1000143	REV: F
SHEET 2 OF 2				



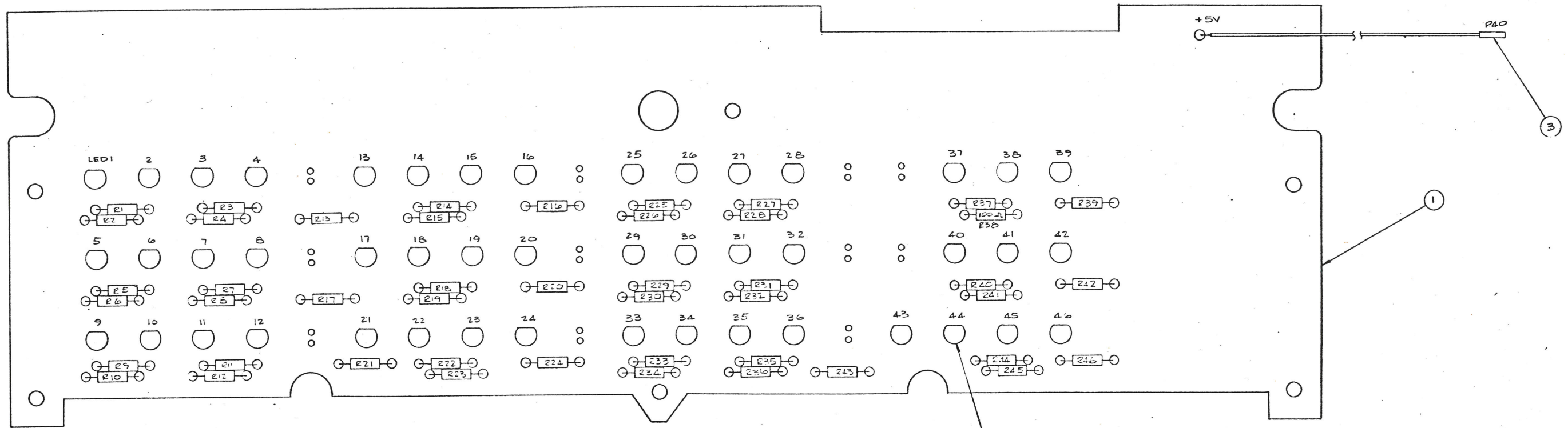
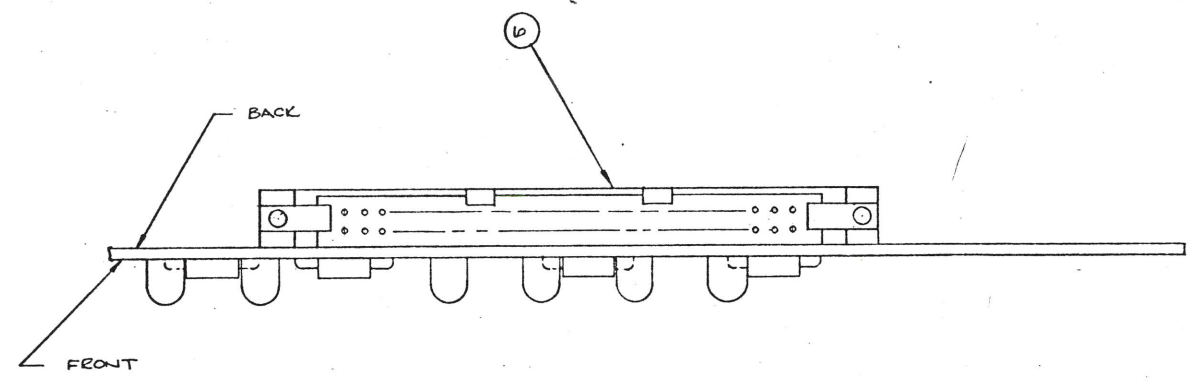
REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK ENGR
A	RELEASE TO PROD.	<i>[Signature]</i>	<i>[Signature]</i>



QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE:	TOL.	SIGNATURE		
2 PLC	3 PLC	DATE		
ANGLE		DRN BY <i>[Signature]</i>		
		DATE		
MATERIAL:		CHK BY <i>[Signature]</i>		
		DATE		
		DFT APPD <i>[Signature]</i>		
		DATE		
		ENGR APPD <i>[Signature]</i>		
		DATE		
FINISH:		AUTH BY <i>[Signature]</i>		
4MOD40		DATE		
NEXT ASSY USED ON		CODE: SHEET OF		
		TITLE		
		3065 BOWERS AVE. SANTA CLARA CALIF. 95051		
		SCHEMATIC (INT 4 MOD 40)		
		FRONT PANEL LOGIC		
SIZE	DEPT	DRAWING NO.		REV
D 410		2000329		A

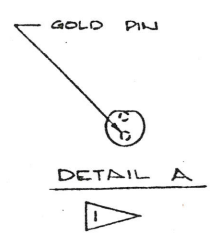


REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	ENGR
A	PROD. RELEASE	7/9/73	7/11/73
B	ADDED ITEM 3 SEE ECO # 00052, #00060	4/3/73	11/1/73



NOTES:

1 ALL LED'S ARE INSTALLED ACCORDING TO DETAIL 'A'.



QTY	ITEM NO.	PART NUMBER	DESCRIPTION
45	7		RESISTOR, 240Ω, 1/4W, 5% R1-37, R39-46
1	6	3433-1002	CONNECTOR, 3M SCOTCHFLEX 50 PIN
1	5		RESISTOR, 100Ω, 1/4W, 5% R38
46	4	SSL-22	LED'S 46, LED 1-46
1	3	4000190-02	CABLE ASSY
REF	2	2000086	SCHEMATIC
1	1	1000085	PRINTED WIRING BOARD

QUANTITY PER DASH NO.				PARTS LIST			
SCALE:	SIGNATURE			DATE		intel	
2:1	DRN BY	CHK BY				3065 BOWERS AVE. SANTA CLARA CALIF. 95051	
TOL. ±	2 PLC	3 PLC	ANGLE	DFT APPD	ENGR APPD	TITLE PRINTED WIRING ASSEMBLY FRONT PANEL DISPLAY BOARD	
MATERIAL:	FINISH:			AUTH BY	CODE:	SIZE	DEPT
4000190 NEXT ASSY	INTELLEC. USED ON					D	410
				SHEET 1 OF 1		DRAWING NO.	REV
						1000084-01	13

C

C

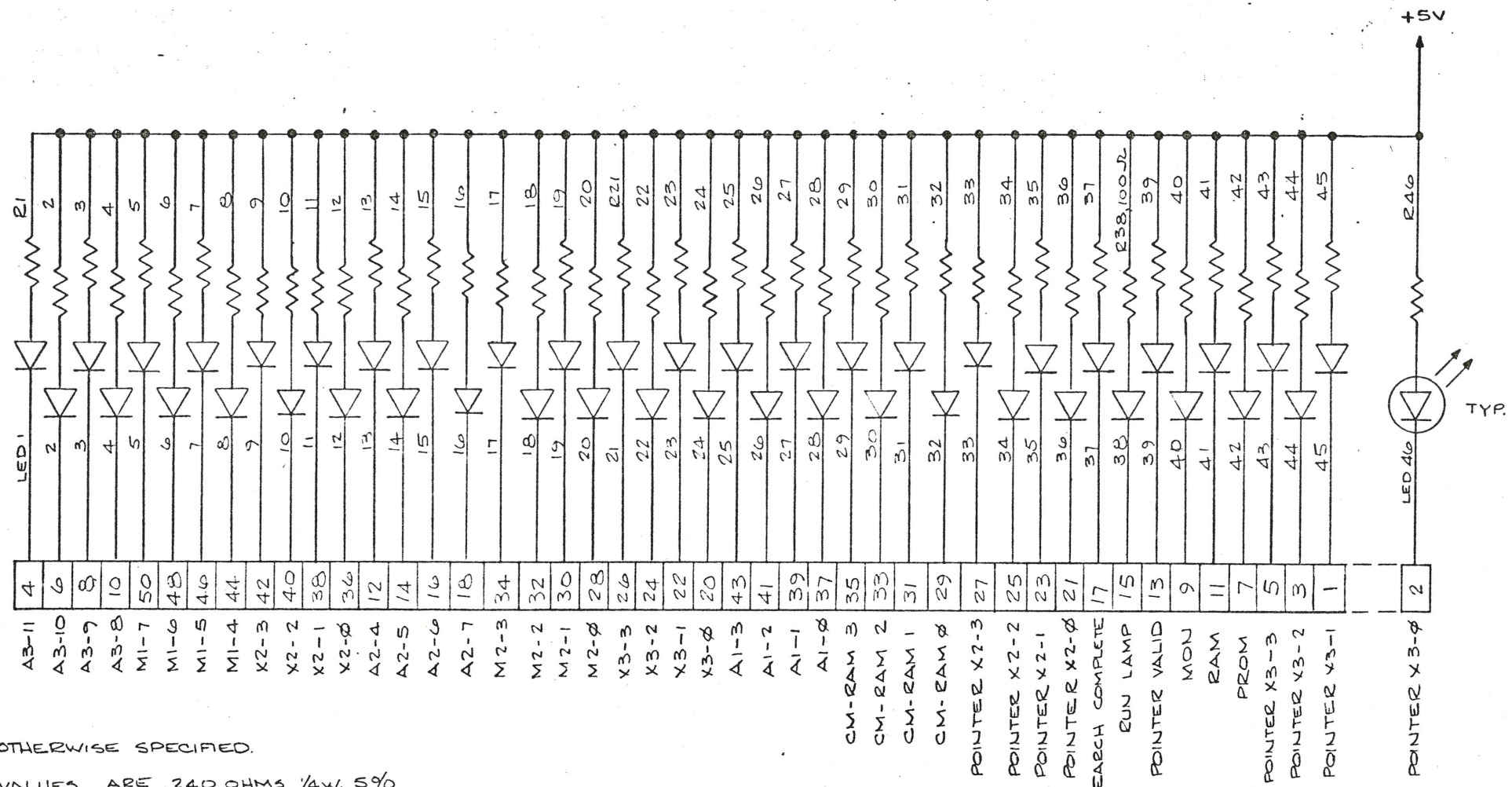
B

A

8 7 6 5 4 3 2 1



REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PROD. RELEASE	H.D. 9/14/73		J.P. 9/13/73
B	FAB DWG CHG ONLY ELEC DEX 60	H.D. 11/14/73	C.H. 11/14/73	C.H. 11/14/73



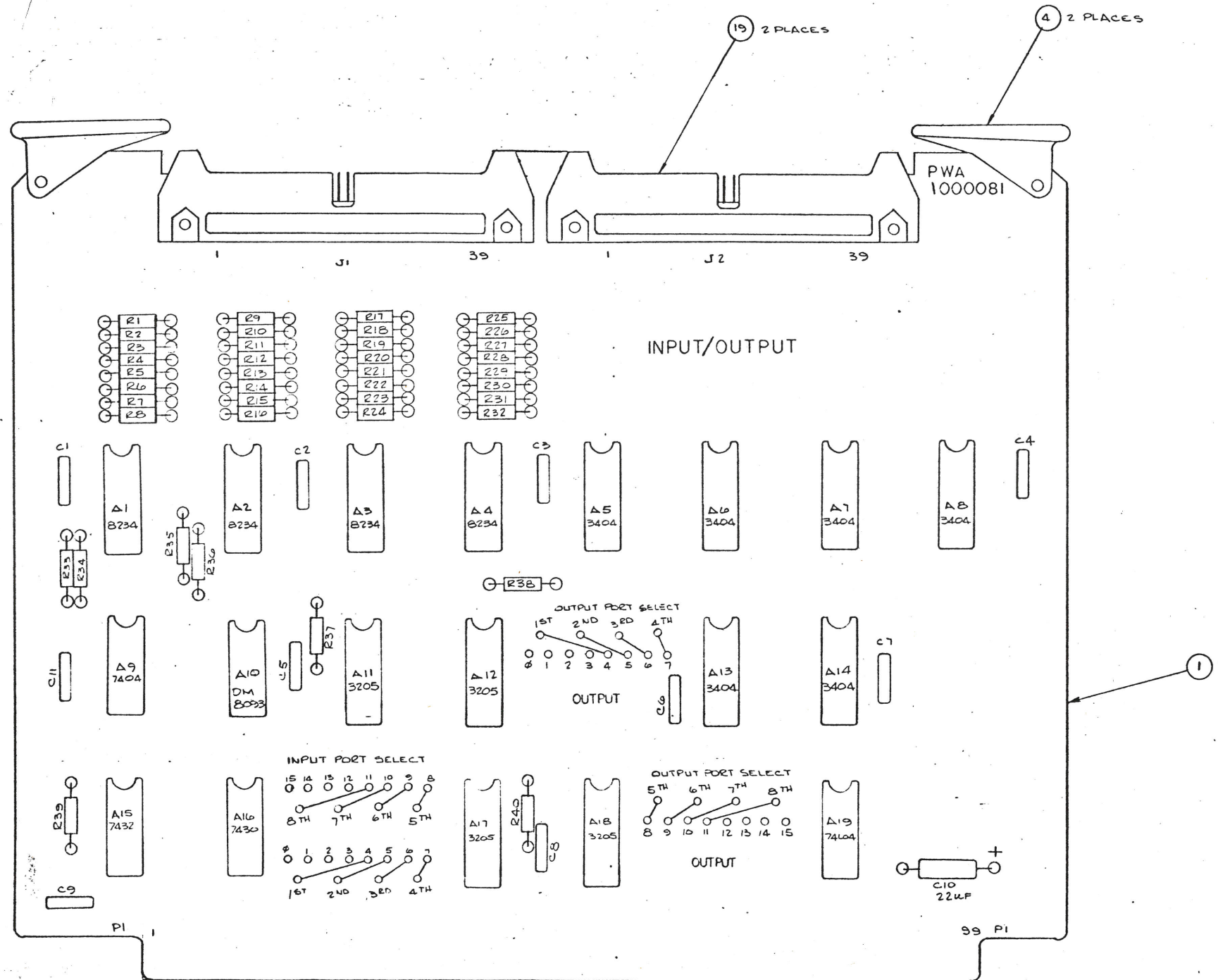
NOTES: UNLESS OTHERWISE SPECIFIED.

1. RESISTOR VALUES ARE 240 OHMS 1/4W, 5%
2. LED'S ARE PART NUMBER SSL-22 G.E.

ITEM NO.		PART NUMBER		DESCRIPTION	
QUANTITY PER DASH NO.					
SCALE: NONE					
TOL. #		2 PLC	3 PLC	ANGLE	
MATERIAL:		SIGNATURE		DATE	
FINISH:		DRN BY <i>David Walker</i>		2/4/73	
		CHK BY <i>T. Walker</i>		1/73	
		DFT APPD			
		ENGR APPD			
		AUTH BY <i>David Walker</i>		9/14/73	
NEXT ASSY		CODE:		SHEET	1 OF 1
INTELLEC 4 USED ON		SHEET		1 OF 1	
PARTS LIST					
3065 BOWERS AVE. SANTA CLARA CALIF. 95051					
TITLE: SCHEMATIC FRONT PANEL DISPLAY (INTELLEC 4)					
SIZE	DEPT	DRAWING NO.		REV	
C	410	2000036		B	



REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PROD. RELEASE	9/4/73		
B	ARTWORK CHG ONLY ECO# 00057	11/2/73	CPV	11/1/73
C	REVISED CIRCUIT ECO# 00102	11/20/73	12V	11/1/73
D	SEE ECO# 00203 P/ONLY	12-3-74	12V	11/1/73



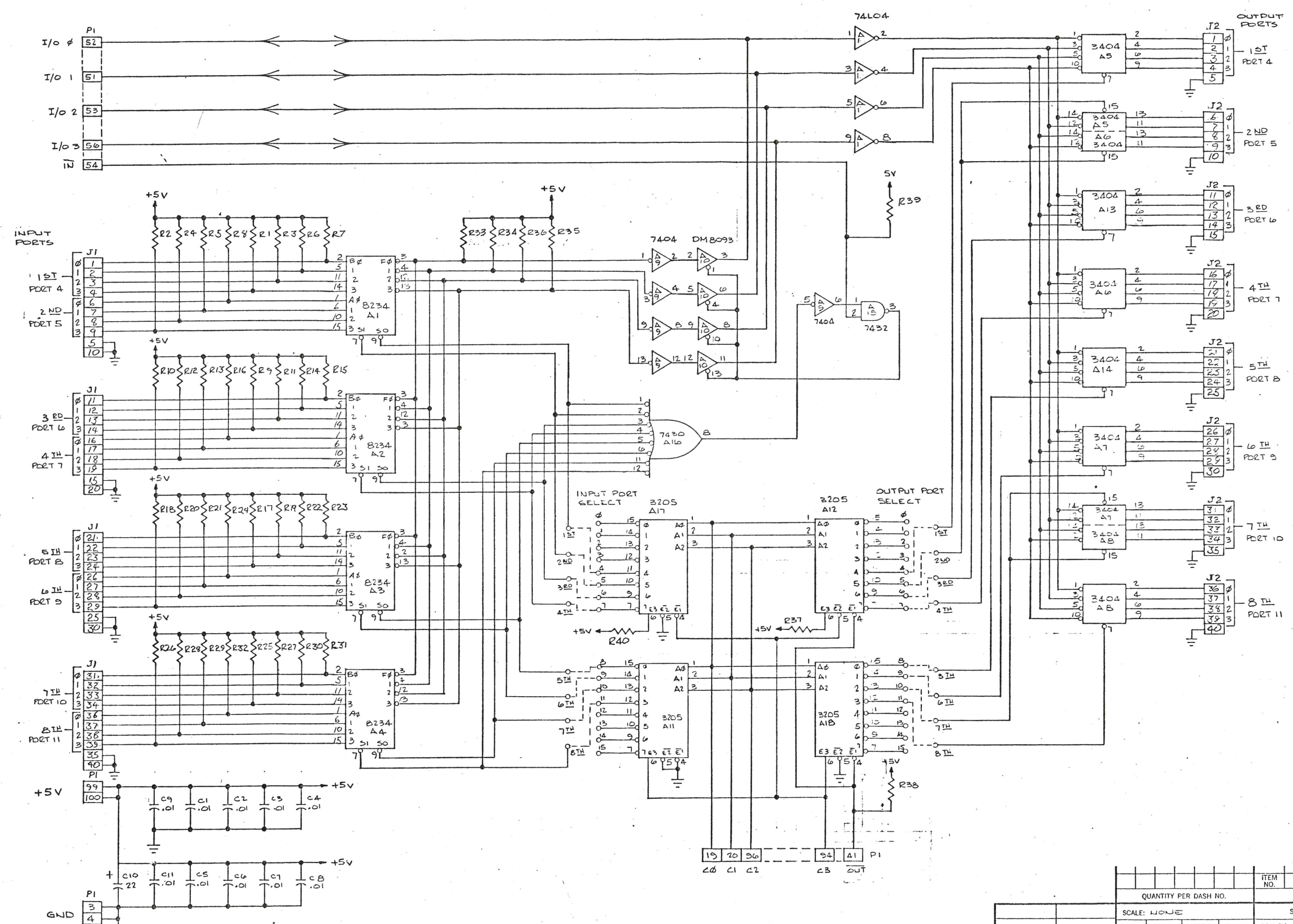
NOTES: UNLESS OTHERWISE SPECIFIED  
 1. RESISTOR VALUES ARE 5.0K OHMS 1/4W 5% OR 10%  
 2. CAPACITOR VALUES ARE .01 MICROFARADS

ITEM NO.	PART NUMBER	DESCRIPTION
QUANTITY PER DASH NO.		
SCALE: 2:1		
SIGNATURE: <i>[Signature]</i> DATE: 11/1/73		
TOL: 2 PLC 3 PLC ANGLE		
MATERIAL:		
FINISH:		
DRN BY: <i>[Signature]</i> DATE: 11/1/73		
CHK BY: <i>[Signature]</i> DATE: 11/1/73		
DFT APPD: <i>[Signature]</i> DATE: 11/1/73		
ENGR APPD: <i>[Signature]</i> DATE: 11/1/73		
AUTH BY: <i>[Signature]</i> DATE: 11/1/73		
CODE: SHEET 1 OF 1		
TITLE: PRINTED WIRING ASSEMBLY INPUT/OUTPUT MODULE		
INTEL 3065 BOWERS AVE. SANTA CLARA CALIF. 95051		
SIZE	DEPT	DRAWING NO.
D	410	1000081
REV		

A



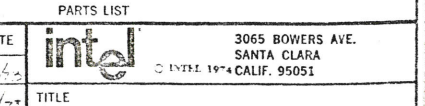
REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK ENGR
A	PROD. RELEASE	H.D.	5/19/72
B	NETWORK CLUG ONLY ECO# 00081	H.D.	5/19/72
C	REVISED CIRCUIT ECO# 00012	H.D.	5/19/72
D	SEE ECO# 00112	H.D.	5/19/72



NOTES: UNLESS OTHERWISE SPECIFIED

1. RESISTOR VALUES ARE 5.6K OHMS, 1/4W, 10%.
2. CAPACITOR VALUES ARE IN MICROFARADS.
3. ALL PORTS ARE POSITIVE TRUE.
4. PORTS NORMALLY SELECTED AS SHOWN, BUT MAYBE SELECTED TO SUIT SYSTEM CONFIGURATION.
5. PORTS ARE SHOWN AS WIRE AT ASSEMBLY.

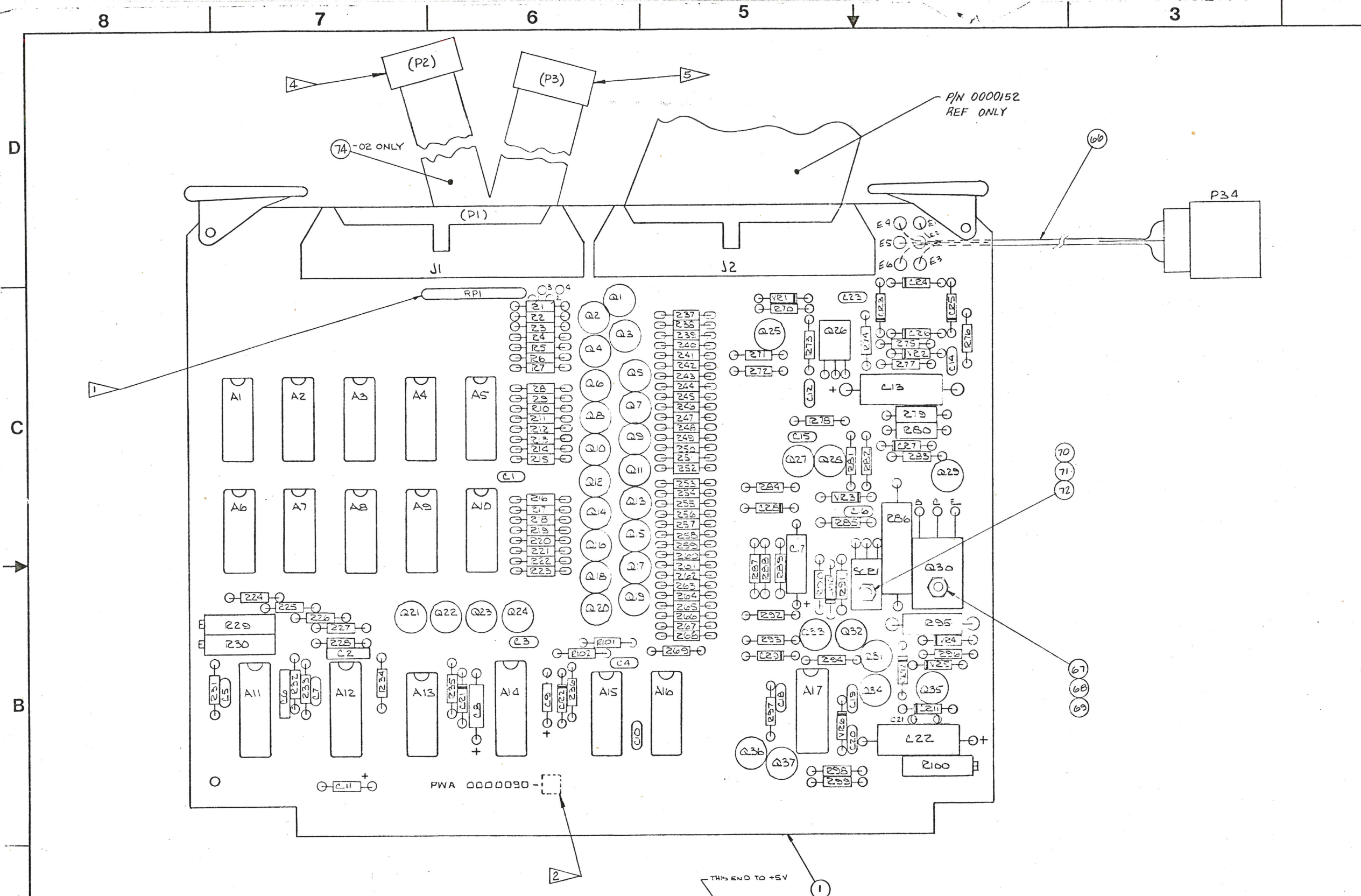
QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE	TOL. ±	2 PLC	3 PLC	ANGLE
MATERIAL:		SIGNATURE		DATE
FINISH:		CHK BY T. MCGAN		9/14/72
NEXT ASSY		INTELLEC 4		USED ON
CODE:		AUTH BY		DATE
SHEET		OF 1		
SIZE		DEPT		DRAWING NO.
D		410		2000083
REV		D		



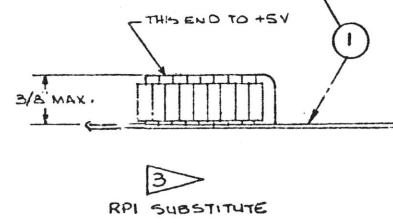
TITLE: SCHEMATIC INPUT/OUTPUT



REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
A	ADD J3 A1 PROD RELEASE	SLD		
B	ADDED ITEM 24 TO 2. ADDED DETAIL FOR RESISTOR PACK SUBSTITUTE ECO# 00011	1/15/73	1/19/73	
C	ADDED R101 R102 RELOCATE C4 ECO# 00025	1/15/73	1/19/73	
D	P34 WAS J3 ECO# 00011	1/15/73	1/19/73	
E	SEE ECO # 00128	1/15/73	1/19/73	
F	REMOVE CR12, SEE ECO 00137	1/15/73	1/19/73	
G	ADDED CR12 ECO# 00142-1	1/15/73	1/19/73	
H	SEE ECO# 00153	1/15/73	1/19/73	
I	SEE ECO # 00184-1	1/15/73	1/19/73	
J	ADDED NEXT ASSY 4000324 NO ECO	1/15/73	1/19/73	



- 1 ASSY PART NO. IS 1000090-XX.
- 2 MARK DASH NO. IN POSITION SHOWN.
- 3 INDIVIDUAL RESISTOR MAY BE SUBSTITUTED IF RESISTOR PACK IS NOT AVAILABLE SEE DETAIL FOR INSTALLATION.
- 4 P3 END OF CABLE CONNECTS TO I/O MODULE, J2.
- 5 P2 END OF CABLE CONNECTS TO I/O MODULE, J3.



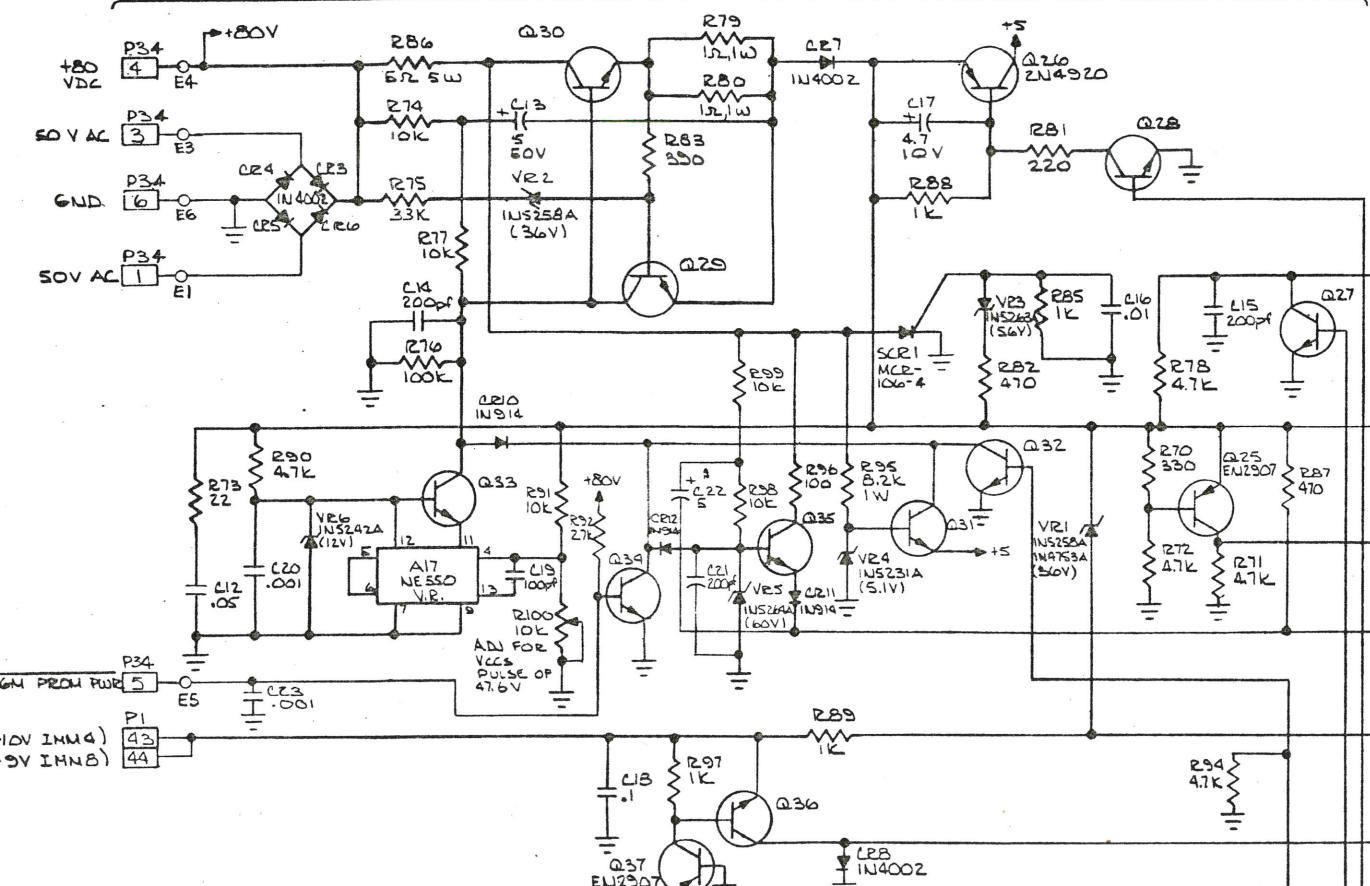
PIN	6	E6		
	5	E5		
	4	E4		
	3	E3	4000324	INT. 4 MOD 90
	2		4000283	INT. 7 MOD 80
	1	E1	4000128	INT. 8 / -02
	P34	P.W.A.	4000100	INT. 4 / -01
			NEXT ASSY	USED ON

ITEM NO.	PART NUMBER	DESCRIPTION
		QUANTITY PER DASH NO.
		SCALE: 1:1
		TOL: 2 PLC 3 PLC ANGLE
		MATERIAL:
		FINISH:
		SIGNATURE
		DATE
		DRN BY
		CHK BY
		DFT APPD
		ENGR APPD
		AUTH BY
		CODE:
		SHEET 1 OF 1

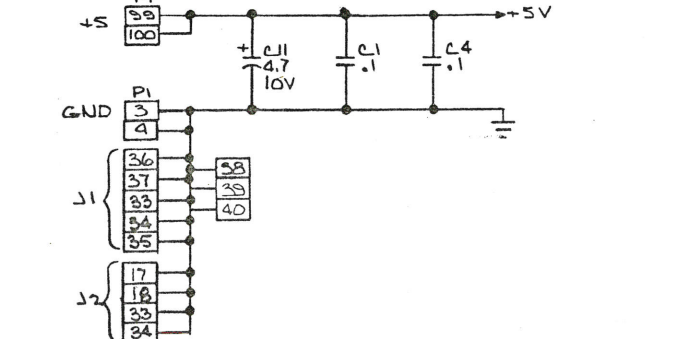
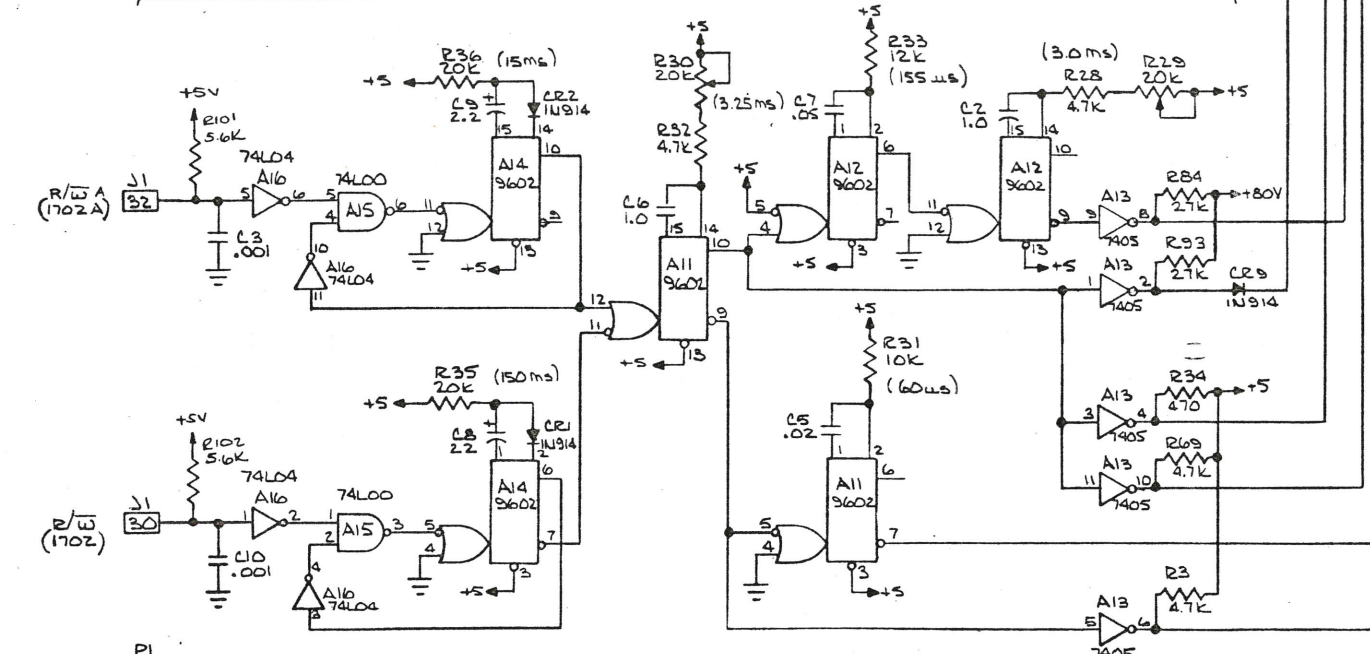
PARTS LIST		TITLE	
intel	3055 BOWERS AVE. SANTA CLARA, CALIF. 95051	PRINTED WIRING ASSEMBLY	PROM PROGRAMMER
SIZE	DEPT	DRAWING NO.	REV
D	410	1000090	J



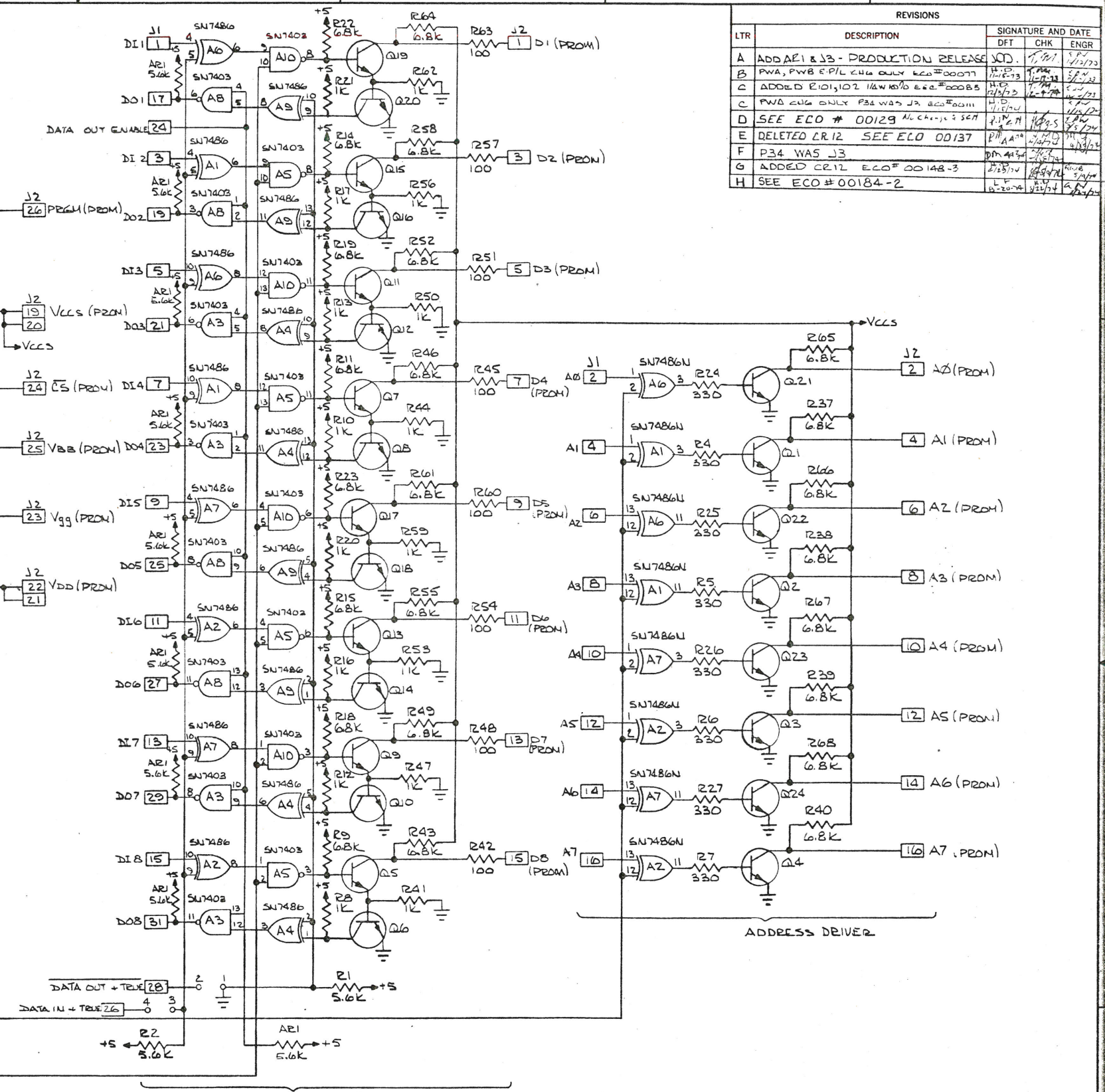
POWER SUPPLY REGULATOR



PROGRAM PULSE TIMING



- NOTES: UNLESS OTHERWISE SPECIFIED  
 1. ALL RESISTORS ARE IN OHMS 1/4W ±10%.  
 2. ALL CAPACITORS ARE IN MICROFARADS.  
 3. ALL TRANSISTORS ARE SE6021, 2N1356B, OR 2N3722.



PROGRAMMER	INTELEC 4	INTELEC B
DI1-8	ROM OUTPUT PORTS 2,3	OUTPUT PORT 3
DO1-8	ROM INPUT PORTS 2,3	INPUT PORT 2
A0-7	ROM OUTPUT PORTS 0,1	OUTPUT PORT 2
R/W A	RAM PORT 1 BIT 1	OUTPUT PORT 1 BIT 7
R/W	RAM PORT 1 BIT 2	OUTPUT PORT 1 BIT 6
DATA OUT ENABLE	SWITCH ON REAR PANEL	OUTPUT PORT 1 BIT 3

QUANTITY PER DASH NO.		SIGNATURE		DATE		PARTS LIST	
TOL	2 PLC 3 PLC ANGLE	[Signature]		3-29-73		intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051	
MATERIAL:				TITLE: SCHEMATIC PROM PROGRAMMER			
FINISH:				AUTH BY: [Signature] DATE: 4/12/73			
NEXT ASSY USED ON		1000090 INT. 8/ MOD B0		1000090 INT. 8/ MOD B0		1000090 INTELLEC 4	
SCALE: NONE		DRN BY: [Signature]		DATE: 3-29-73		SIZE DEPT DRAWING NO. REV	
CODE: SHEET 1 OF 1		D		410		2000092 H	

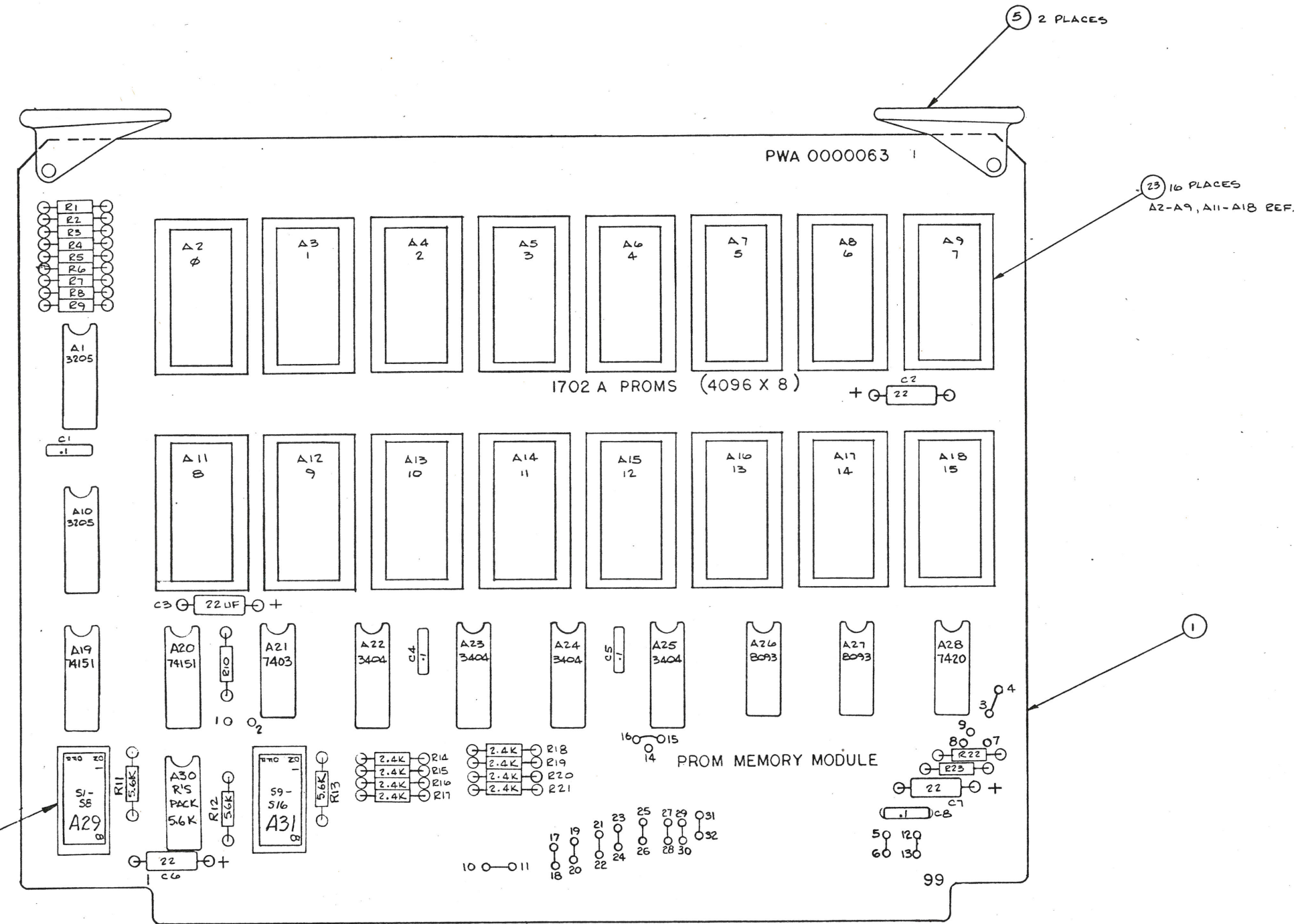
LTR	DESCRIPTION	SIGNATURE AND DATE
A	ADD A1 & J3 - PRODUCTION RELEASE	[Signature] 1/11/73
B	PWA, PWB S/P/L CHG ONLY ECO# 00077	[Signature] 1/11/73
C	ADDED R101, R102 1/4W 100Ω ECO# 00085	[Signature] 1/11/73
D	SEE ECO # 00129	[Signature] 1/11/73
E	DELETED CR12 SEE ECO 00137	[Signature] 1/11/73
F	P34 WAS J3	[Signature] 1/11/73
G	ADDED CR12 ECO# 00148-3	[Signature] 1/11/73
H	SEE ECO # 00184-2	[Signature] 1/11/73

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REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
1	ENGRG RELEASE	4.15	4.15	4.15
A	PRODUCTION RELEASE	8-17-75	8-17-75	8-17-75

D  
C  
B  
A



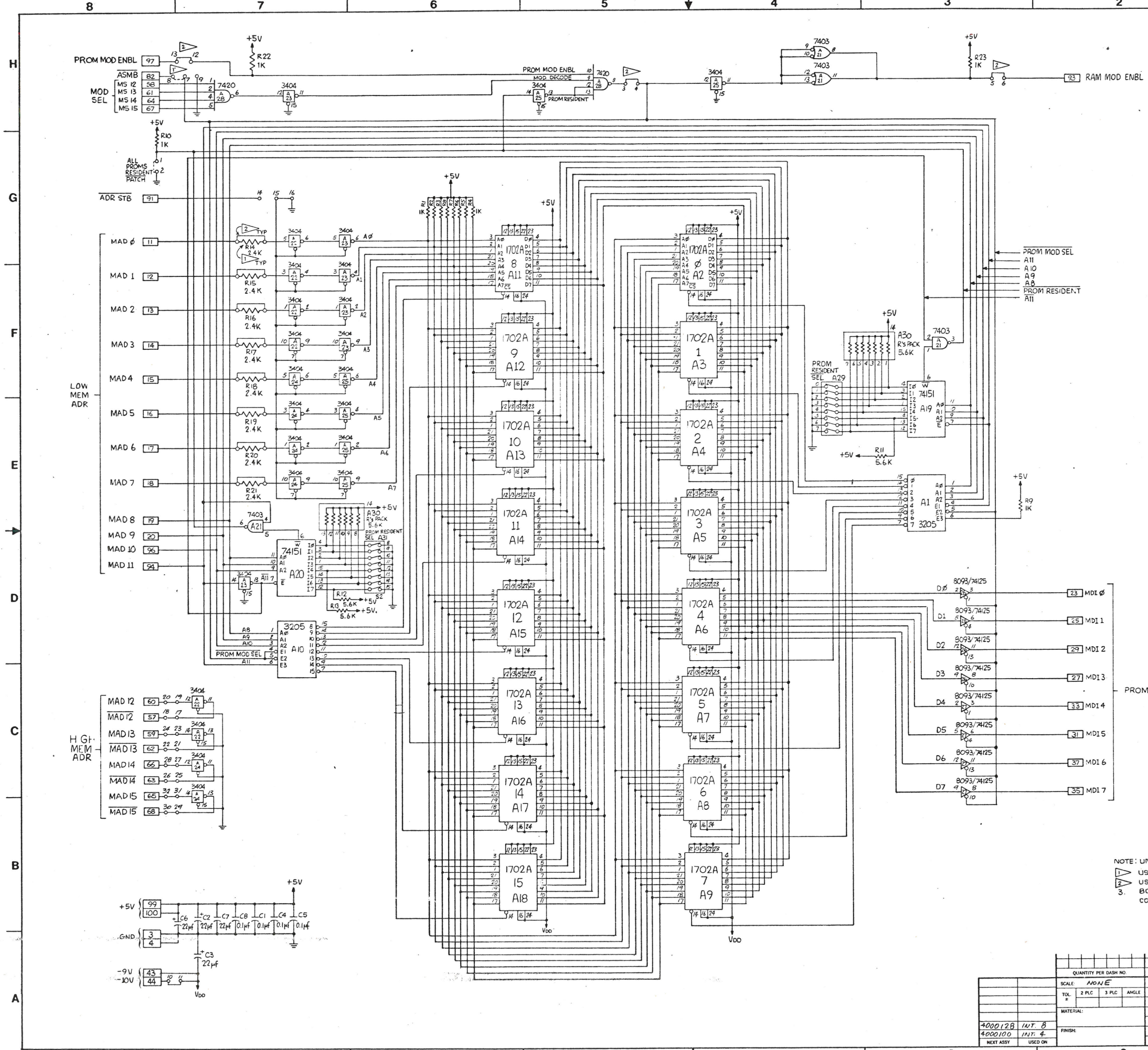
- NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE 1K OHMS, 1/4W, 5% OR 10%
  2. CAPACITOR VALUES ARE IN MICROFARADS.
  3. BOARD SHIPPED FROM FACTORY CONFIGURED FOR INTELLEC 8

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 2:1		SIGNATURE		DATE
TOL ±	2 PLC	3 PLC	ANGLE	DRN BY <i>H. Bowers</i> 6/9/75
MATERIAL:		CHK BY <i>[Signature]</i> 8/11/75		TITLE (1mm 6-26)
FINISH:		AUTH BY <i>[Signature]</i> 11/17/75		PRINTED WIRING ASSEMBLY
4000273	INT B (BASEBOARD)	DFT APPD		3065 BOWERS AVE.
4000128	INT B	ENGR APPD		SANTA CLARA
4000100	INT A	CODE: E SHEET 1 OF 1		CALIF. 95051
NEXT ASSY	USED ON	SIZE DEPT DRAWING NO.		REV
		D 410 1000063		A

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REVISIONS		
LT#	DESCRIPTION	SIGNATURE AND DATE
A	PRODUCTION RELEASE	L.F.R. 1/1/77



NOTE: UNLESS OTHERWISE SPECIFIED  
 1. USED FOR INTELLEC 4 ONLY.  
 2. USED FOR INTELLEC B ONLY.  
 3. BOARD SHIPPED FROM FACTORY CONFIGURED FOR INTELLEC B

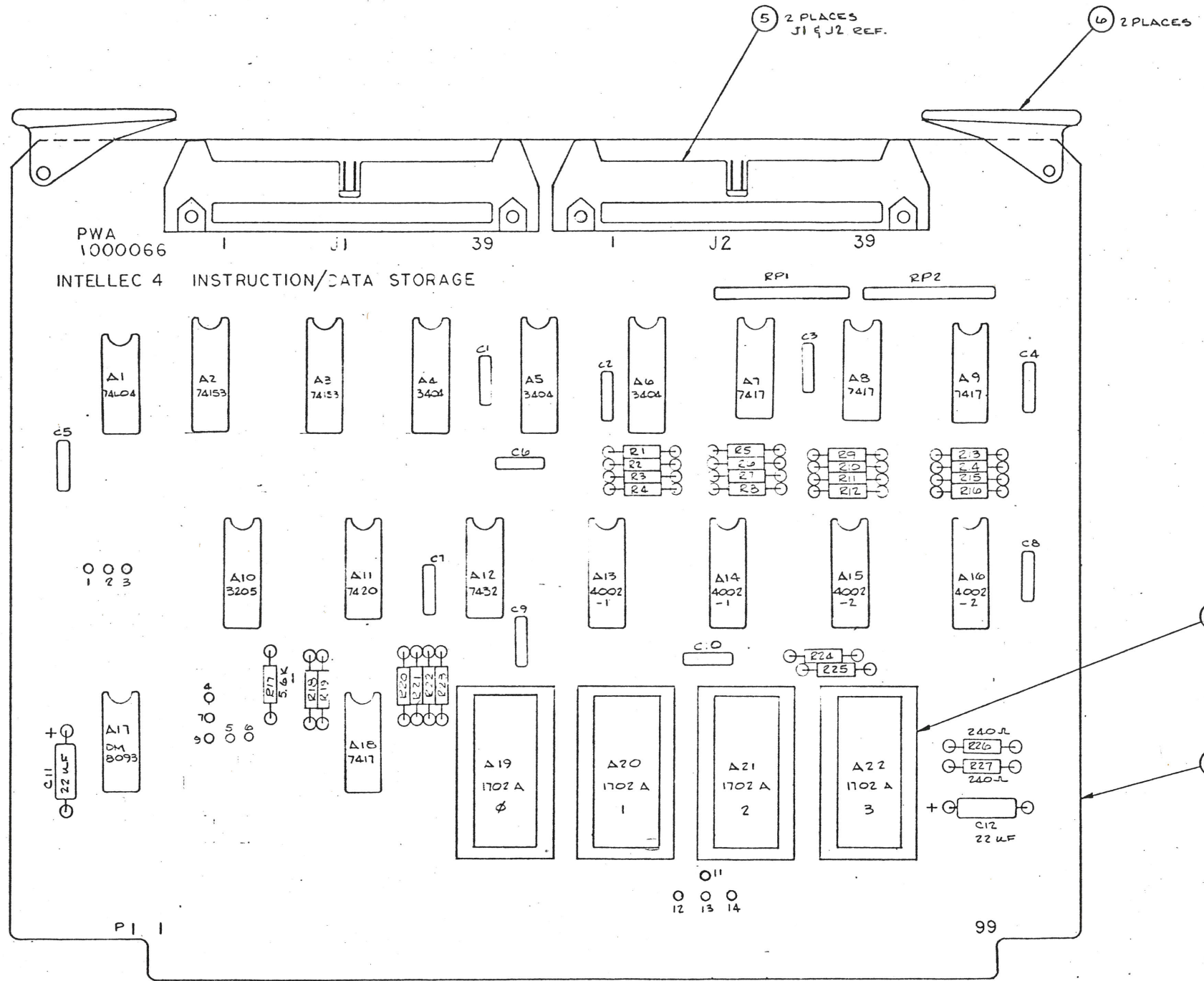
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QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	PARTS LIST DESCRIPTION
SCALE: 1/16" = 1"		SIGNATURE: L.R. FRIESE		DATE: 5/11/77
TOL: 2 P.L.C. 3 P.L.C. ANGLE		DRAWN BY: L.R. FRIESE		DATE: 5/11/77
MATERIAL:		CHK BY: J. J. ...		DATE: 5/11/77
FINISH:		ENGR. APP'D: J. J. ...		DATE: 5/11/77
AUTH BY: J. J. ...		DATE: 5/11/77		SIZE: 4 1/2" x 3 1/2"
CODE: SHEET 1 OF 1		REV: A		REV: A

4000128 INT. B	4000100 INT. 4	4000100 INT. 4	4000100 INT. 4
NEXT ASSY	USED ON		



REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PROD. RELEASE			
B	DELETE CRI SEE ECO #00051			
C	SEE ECO #00056 FOR CUL			



- NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE 12K OHMS, 1/4W, 5% OR 10%.
  2. CAPACITOR VALUES ARE 1.0 MICROFARD.

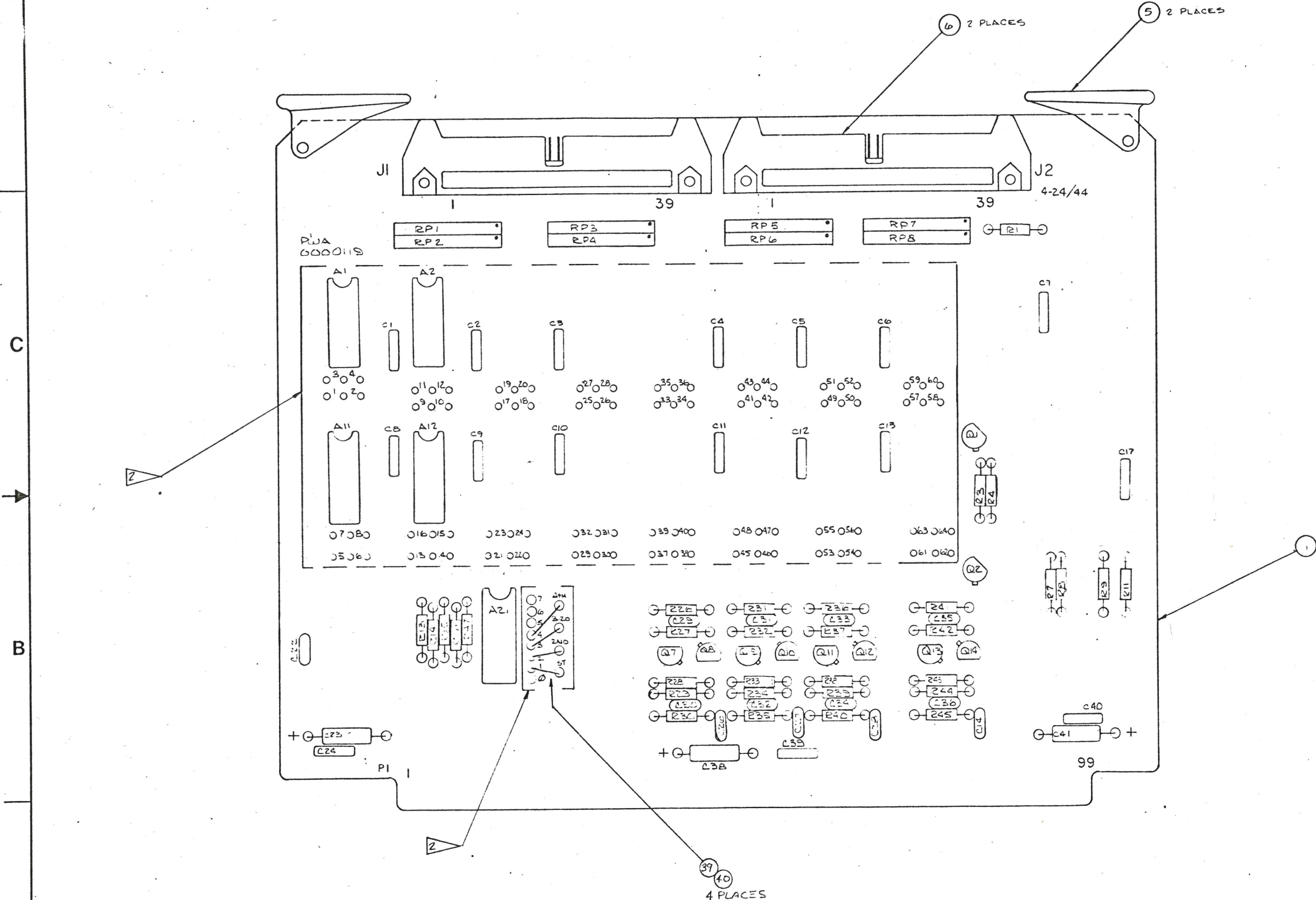
QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 2:1		SIGNATURE		DATE
TOL	2 PLC	3 PLC	ANGLE	
MATERIAL:		CHK BY		
FINISH:		DFT APPD		
NEXT ASSY		ENGR APPD		
USED ON		AUTH BY		
		CODE: E		SHEET 1 OF 1
		PARTS LIST		
		intel		3065 BOWERS AVE. SANTA CLARA CALIF. 95051
		TITLE		PRINTED WIRING ASSEMBLY
		DRAWING NO.		10000 66
		REV		C







REVISIONS		SIGNATURE AND DATE		
LTR	DESCRIPTION	DFT	CHK	ENGR
A	PRODUCTION RELEASE	SCD	T.M.	1/24/73
A	ADDED 29 REMOVE 27, 25, 20, 40, 212, 217 TO 225 ECO# 000000	A.D.	T.M.	1/24/73
B	FAB LWB 248 ONLY ECO# 00107	A.D.	T.M.	1/24/73



NOTES: UNLESS OTHERWISE SPECIFIED  
 1. ALL COMPONENTS SHOULD NOT BE HIGHER THAN 7/16" FROM PCB.  
 2. SOLDER MASK ALL UNUSED HOLES ON THIS AREA BEFORE WAVE SOLDER.

ITEM NO.	PART NUMBER	DESCRIPTION
QUANTITY PER DASH NO.		
SCALE: 2:1		SIGNATURE
TOL ±		DATE
MATERIAL:		CHK BY
FINISH:		DFT
NEXT ASSY		APPD
USED ON		ENGR
		APPD
		AUTH BY
		CODE:
		SHEET 1 OF 1

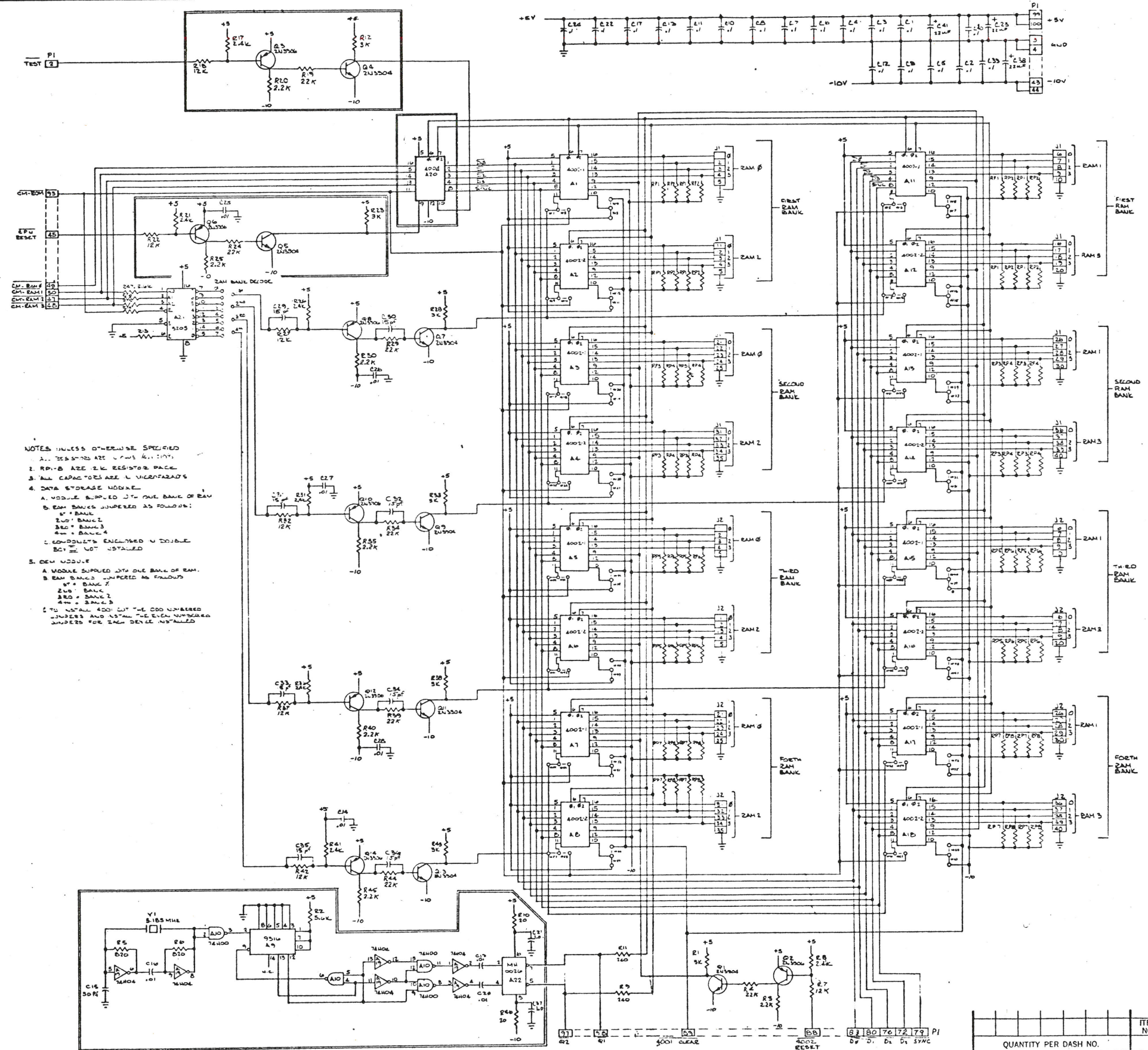
**intel** 3065 BOWERS AVE. SANTA CLARA CALIF. 95051

TITLE: PRINTED WIRING ASSEMBLY  
 DATA STORAGE MODULE

SIZE: D DEPT: 410 DRAWING NO.: 1000119-01 REV: B



REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK ENGR
FOR PREVIOUS REVISIONS SEE HISTORY			
B	REDRAWN NO CHANGE		



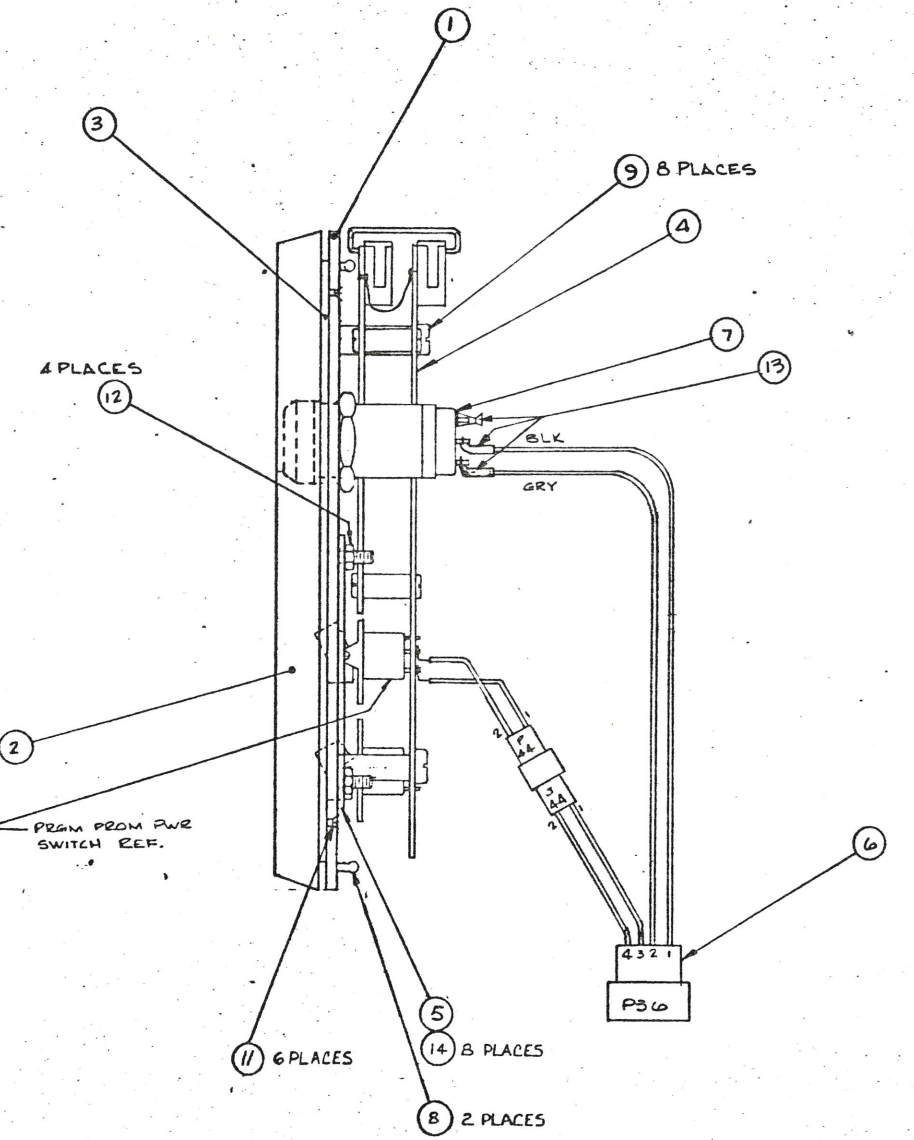
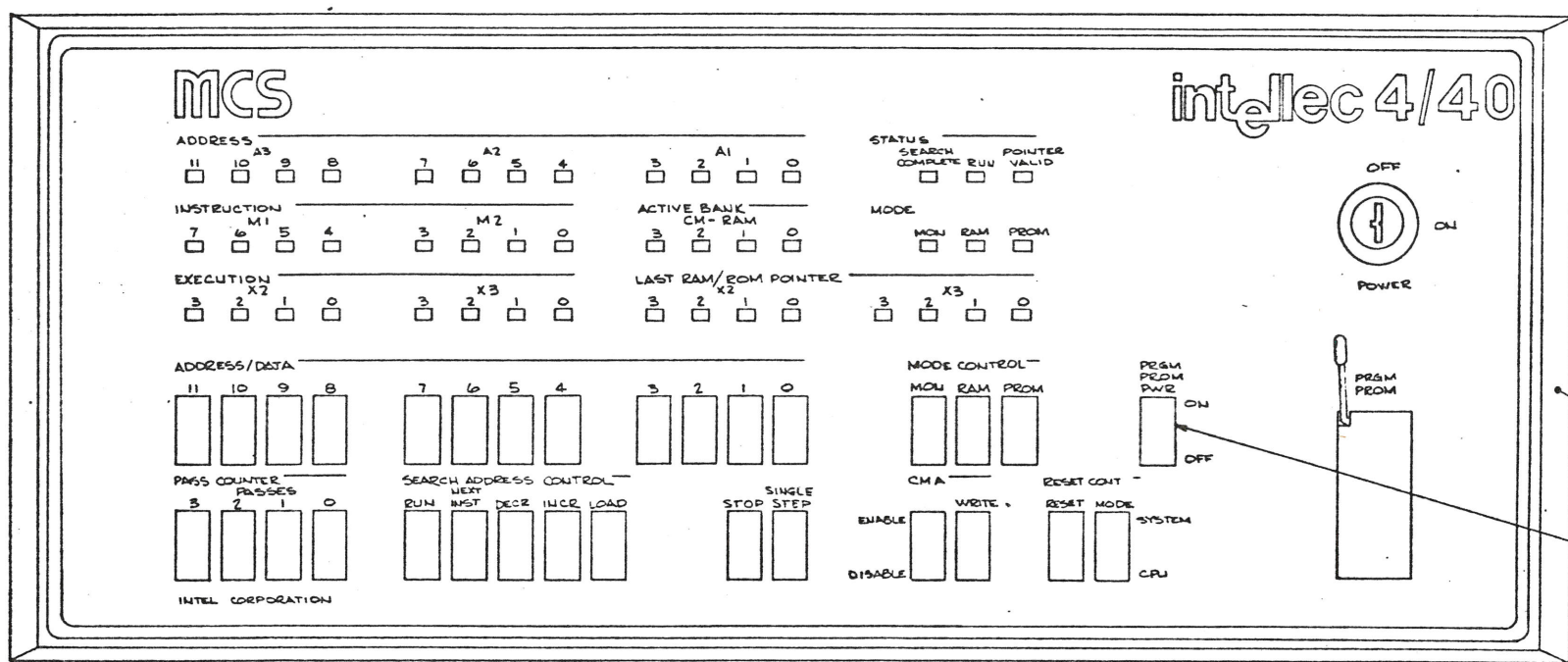
NOTES UNLESS OTHERWISE SPECIFIED  
 1. RESISTORS ARE 1/4W 5% (UNLESS OTHERWISE SPECIFIED)  
 2. RPN-B ARE 2.0K RESISTOR PACKS  
 3. ALL CAPACITORS ARE 1 MICROFARAD'S  
 4. DATA STORAGE MODELS:  
 A. MODULE SUPPLIED WITH ONE BANK OF RAM  
 B. RAM BANKS WIRING AS FOLLOWS:  
 0 = BANK 1  
 1 = BANK 2  
 2 = BANK 3  
 3 = BANK 4  
 C. COMPONENTS ENCLOSED IN DOUBLE BOX ARE NOT INSTALLED  
 5. DEW MODULE:  
 A. MODULE SUPPLIED WITH ONE BANK OF RAM  
 B. RAM BANKS WIRING AS FOLLOWS:  
 0 = BANK 1  
 1 = BANK 2  
 2 = BANK 3  
 3 = BANK 4  
 C. TO INSTALL 4001 PUT THE ODD NUMBERED WIRING AND INSTALL THE EVEN NUMBERED WIRING FOR EACH DEVICE INSTALLED

QUANTITY PER DASH NO.		PARTS LIST	
ITEM NO.	PART NUMBER	DESCRIPTION	
SCALE: N 1:1	SIGNATURE: DRN BY H DUMALO	DATE: 5-18-73	intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL: ±	CHK BY T MORGAN	DATE: 10-25-73	
MATERIAL:	DFT APPD: E P WALKER	DATE: 10-26-73	TITLE: SCHEMATIC DATA STORAGE/OEM MODULE
FINISH:	AUTH BY P. TAI	DATE: 10-29-73	SIZE: DEPT: DRAWING NO. REV: B
NEXT ASSY: USED ON	CODE: SHEET 1 OF 1	SIZE: D 410	DRAWING NO. 2000121

C  
B  
A



REVISIONS		SIGNATURE AND DATE		
LTR	DESCRIPTION	DFT	CHK	ENGR
A	PROD. RELEASE	11/74	11/74	11/74



QUANTITY PER DASH NO.				ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE				SIGNATURE		DATE
TOL. ±				DRN BY		DATE
MATERIAL: SEE PARTS LIST				CHK BY		DATE
FINISH:				DFT APPD		DATE
NEXT ASSY USED ON				ENGR APPD		DATE
				AUTH BY		DATE
				CODE:		SHEET 1 OF 1

PARTS LIST		DESCRIPTION	
intel		3065 BOWERS AVE. SANTA CLARA CALIF. 95051	
TITLE		FRONT PANEL ASSEMBLY (MOD 40)	
SIZE	DEPT	DRAWING NO.	REV
D	410	4000328	A

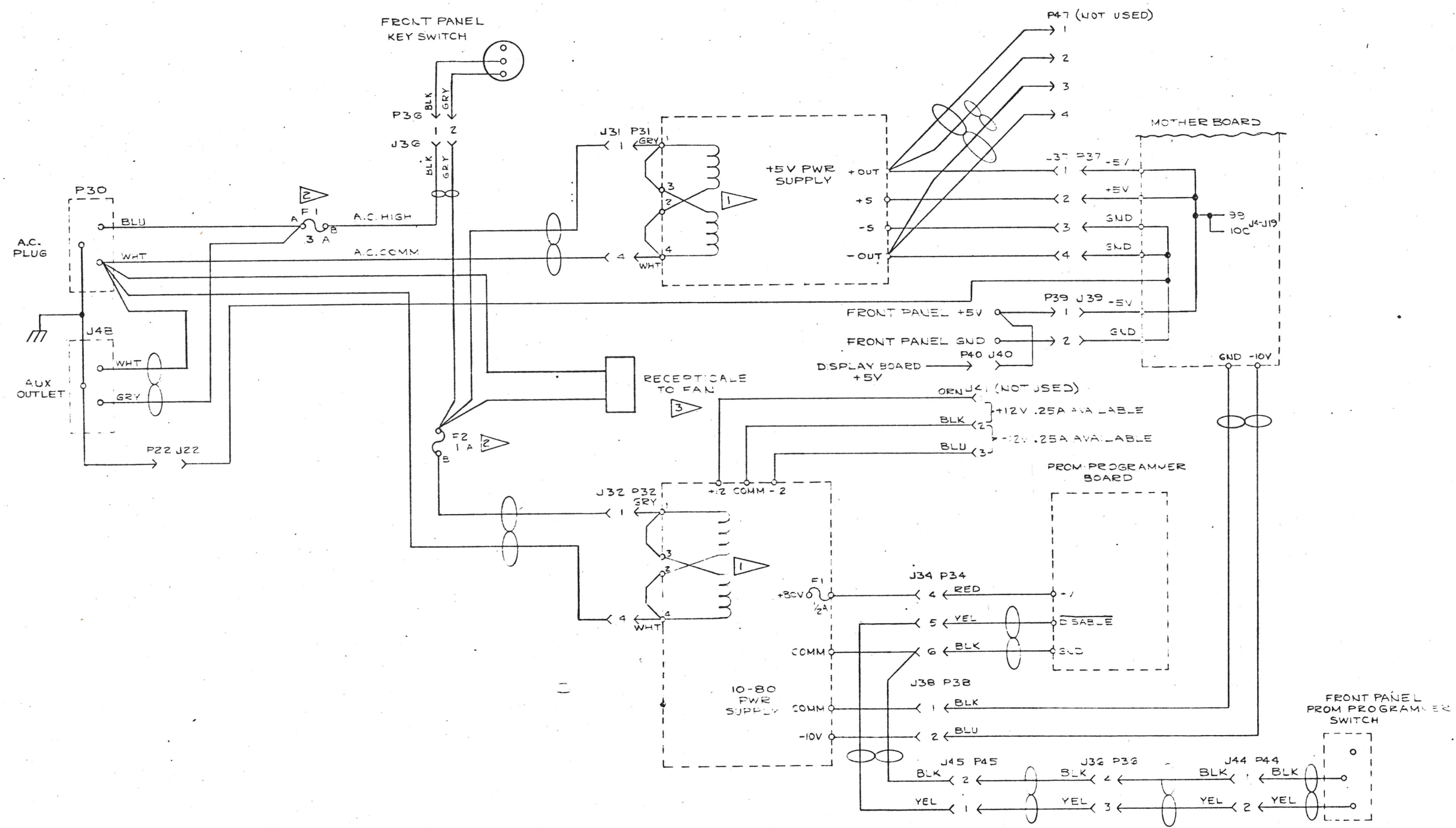
C  
B  
A

8 7 6 5 4 3 2 1



REVISIONS			SIGNATURE AND DATE	
LTR	DESCRIPTION	DESIGNER	CHK	ENGR
A	RELEASE TO PROD.			

D  
C  
B  
A



- NOTES:
- 1 TRANSFORMERS CONNECTED FOR 115V; FOR 230V, PIN 1 AC.HOT, PINS 2&3 JUMPED TOGETHER, PIN 4 AC.COMM
  - 2 FOR 230V F1=1/2A, F2=1/2A
  - 3 UNITS SHIPPED TO EUROPE HAVE 230V FAN, 115V FAN USED ON U.S.A. MODEL

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
4000184	INT 4			
4000180	INT 4			
	NEXT ASSY		USED ON	

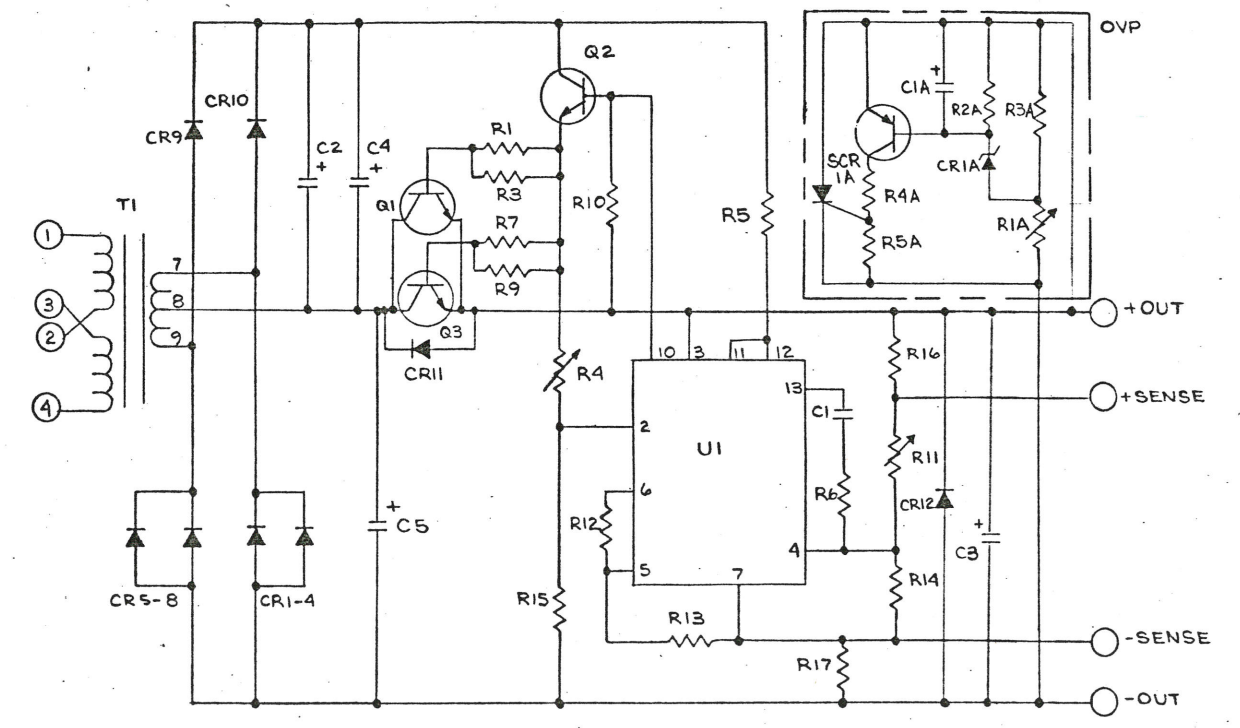
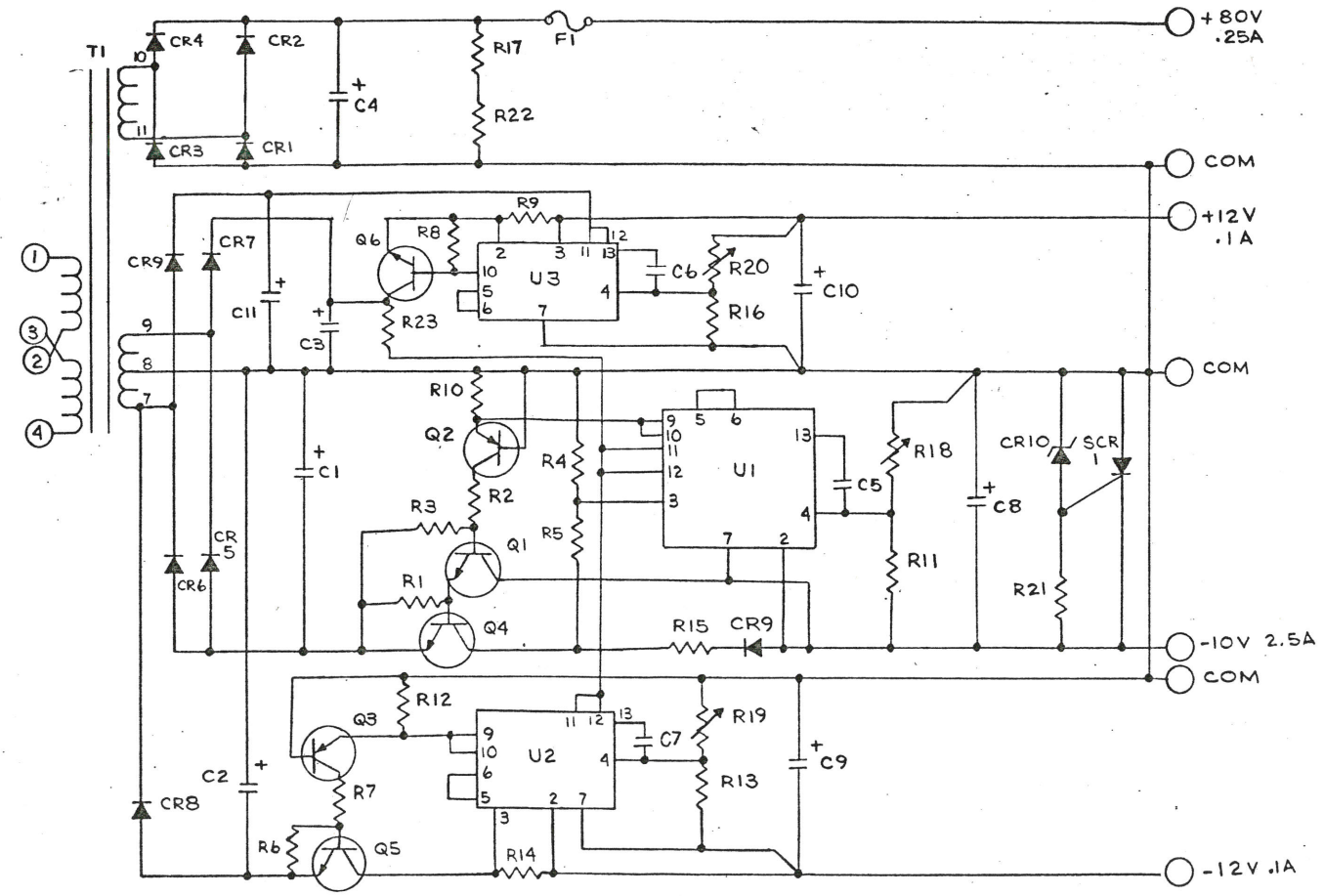
SCALE:	2 PLC	3 PLC	ANGLE	SIGNATURE	DATE
TOL.					
MATERIAL:					
FINISH:					

AUTH BY: J Hall		DATE: 1/24/78		3065 BOWERS AVE. SANTA CLARA CALIF. 95051
CODE:	SHEET 1 OF 1			TITLE: AC-DC PWR DISTB.
SIZE: D	DEPT: 410	DRAWING NO: 2000309	REV: A	



REVISIONS				
E.O.	SYM.	DESCRIPTION	DATE	APP'D.



REF DES	QTY	DESCRIPTION
C1	4000/30	CAPACITOR ALUM ELECT.
C2,3	470/25	ALUM ELECT.
C4	500/100	
C8,9,10	100/25	MYLAR
C5,7	.01/100	CAPACITOR MYLAR
C6	.001/100	
CR1,2,3,4,7,8	AE1C	DIODE 1A 200V
CR5,6,9	AE3B	DIODE ZENER 400 MV 12V
CR10	IN759A	DIODE ZENER 3A 100V
SCR1	S0303LS3	SCR 3A
U1	μa723	I.C. VOLTAGE REGULATOR
Q1	2N2218A	TRANSISTOR SIGNAL NPN
Q2,3	2N2906	TRANSISTOR SIGNAL PNP
Q4,5,6	2N3055	TRANSISTOR POWER NPN
F1	0.5A	FUSE 3AG FAST BLOW
R1,2,3,6,7,10,11,12,13,16	1.6K	RESISTOR 1/2W CARBON
R17,22,8	10K	
R4	4.7K	
R5,23	270Ω	
R21	47Ω	
R9,14	4.7Ω	RESISTOR 1/2W CARBON
R15	.12Ω	RESISTOR 2W, WW, BWH
R18,19,20	1.5K	POTENTIOMETER 2W WW
T1	12030A	TRANSFORMER POWER
PCB	12044	PRINTED CIRCUIT BOARD
CHASSIS	12178	CHASSIS ALUM

REF DES	QTY	DESCRIPTION
C1	.001/100	CAPACITOR FILM
C2,3,4	1000/16	CAPACITOR ELECT.
C5	5000/15	CAPACITOR ELECT.
C1A	1/50	CAPACITOR ELECT.
CR1-8,12	AE3B	DIODE 3A 100V
CR9,10,11	AE1C	DIODE 1A 200V
Q1,2,3	2N3055	TRANSISTOR POWER
Q1A	2N2907A	TRANSISTOR
CR1A	IN752A	DIODE ZENER
R1,3,5,6,7,9,16,17	7.5Ω or 6.8Ω	RESISTOR 1/2W 5% CF
R10,12,13,15	2.2K	RESISTOR 1/2W 5% CF
R14	1.6K	RESISTOR 1/4W 2% MF
R2A,3A,5A	330Ω	RESISTOR 1/2W 5% CF
R4,11,1A	1.5K	POTENTIOMETER 2W, WW
R4A	47Ω	RESISTOR 1/2W 5% CF
T1	11053-S101	POWER TRANSFORMER
SCR1A	S0508LS3	SCR 8A
PCB	11050	PRINTED CIRCUIT BOARD
U1	μa723	I.C. VOLTAGE REGULATOR
PCB OVP	11160	PRINTED CIRCUIT BOARD
CHASSIS	11051	CHASSIS ALUM

DASH NO.	NEXT ASSEMBLY	NO. REQ'D	FINAL ASSEMBLY	MODEL NUMBER	DESCRIPTION	MAT'L SPEC.	FIN. WT.

TOLERANCES		APPLICATION		BASIC MODEL TITLE	
UNLESS OTHERWISE SPEC'D DIMS ARE IN INCHES	DATE	DATE	DATE	DATE	DATE
FRACTIONS 1/16"	DECIMALS .01"				
ANGLES 15°					
REMOVE BURRS & SHARP EDGES SEE MAX SURFACE FINISH					
MATERIAL	APPROVED	DATE	DATE	DATE	DATE
TREATMENT	DO NOT SCALE PRINT				
	SCALE: NONE				

DRAWING TITLE		DRAWING NUMBER	
SCHEMATIC DIAGRAM			
CP110, D5-12 S113			
POWER SUPPLIES			

POWER ONE INC.	
531 DAWSON AVE.	
CAMARILLO, CALIF.	

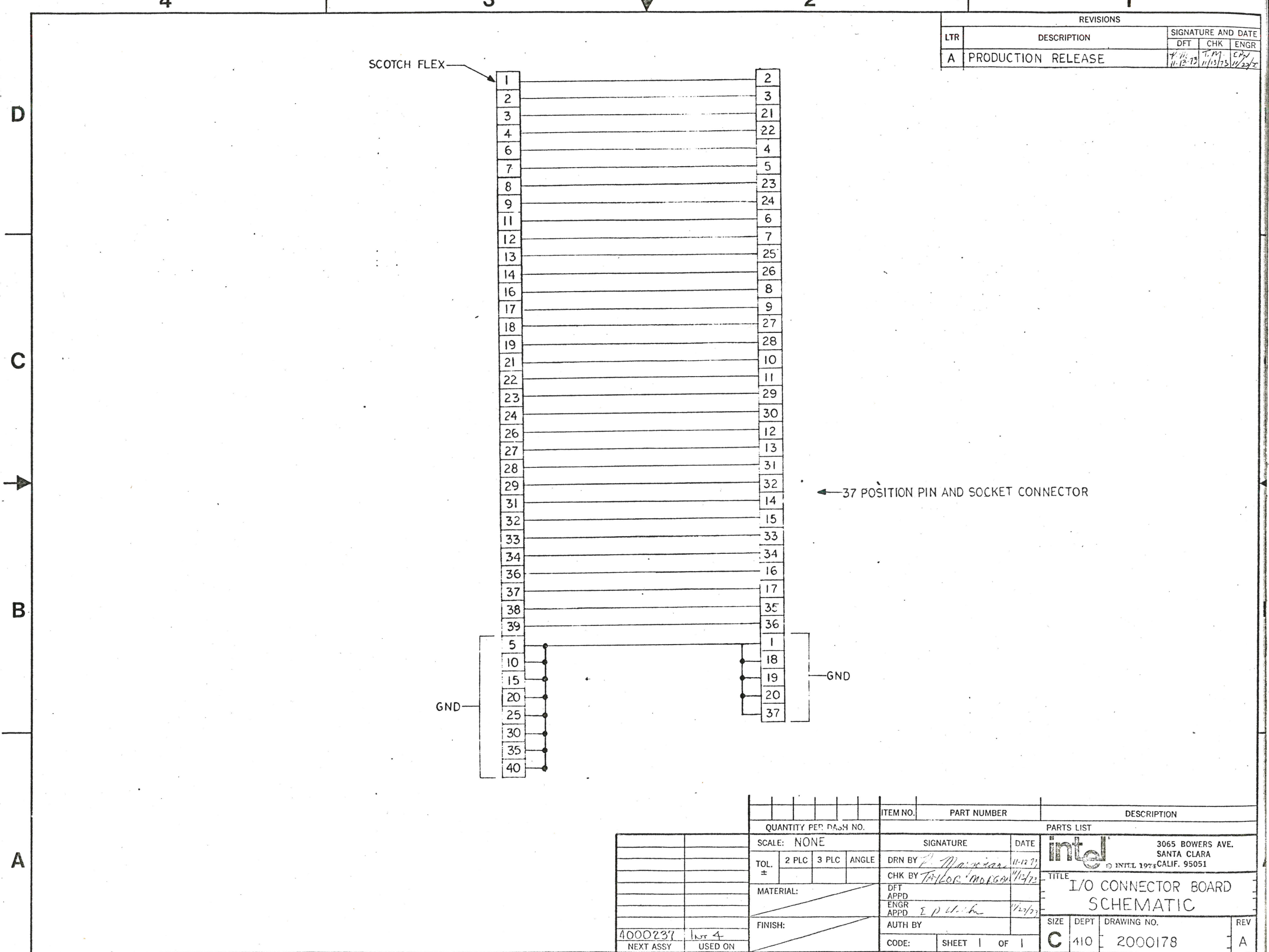












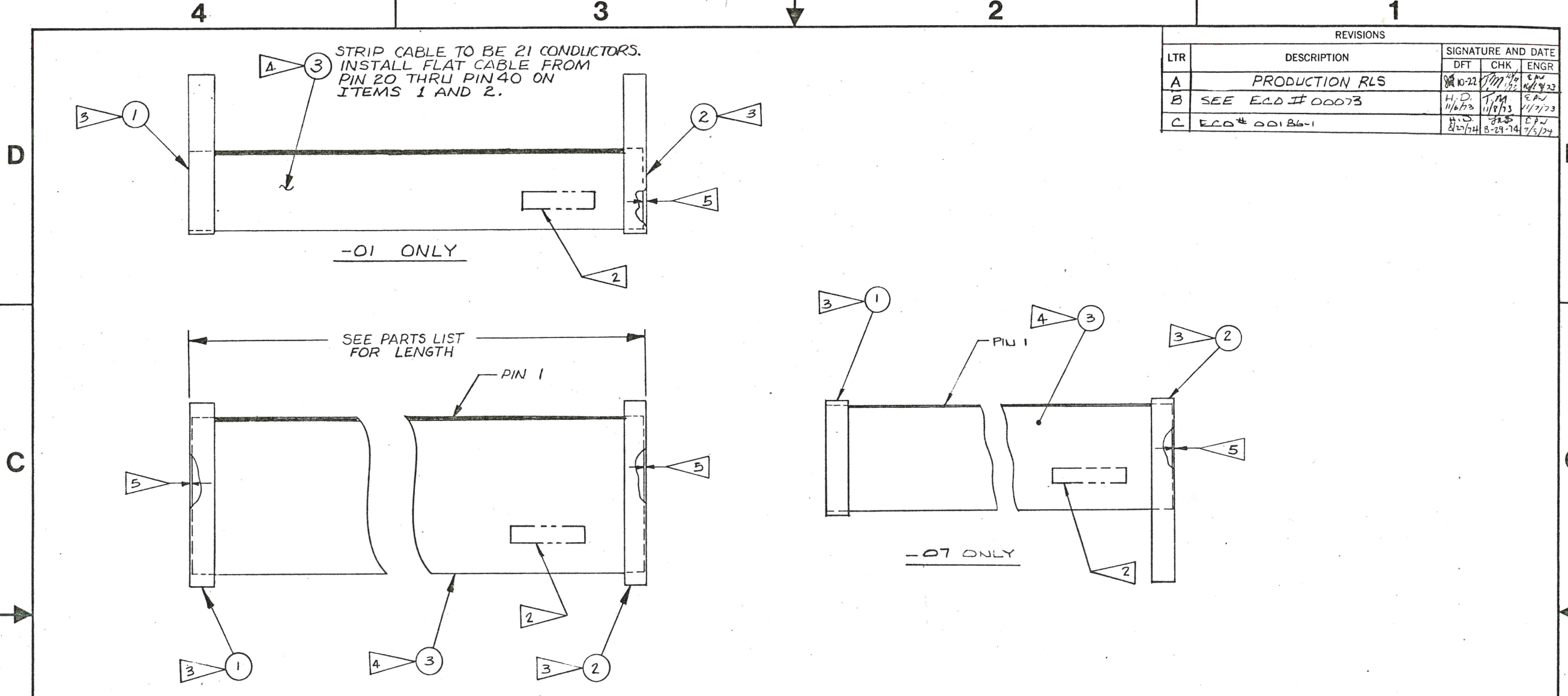
REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK ENGR
A	PRODUCTION RELEASE	T.M. 11-13-73	EPJ 11/23/73

← 37 POSITION PIN AND SOCKET CONNECTOR

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE		SIGNATURE		DATE
TOL. ±	2 PLC	3 PLC	ANGLE	DRN BY <i>P. Morrison</i> 11-12-73
MATERIAL:		CHK BY <i>TAYLOR MORISON</i> 11-27-73		DATE
FINISH:		AUTH BY <i>E.P. L. L.</i> 11-27-73		DATE
4000237	INT 4	CODE:		SHEET 1 OF 1
NEXT ASSY	USED ON	C 410		DRAWING NO. 2000178
PARTS LIST				DESCRIPTION
intel				3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TITLE				REV
I/O CONNECTOR BOARD SCHEMATIC				A



REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PRODUCTION RLS	10/22/73	T.M.	11/1/73
B	SEE ECD # 00073	H.D.	T.M.	11/7/73
C	ECD # 00186-1	H.S.	T.M.	7/5/74



NOTES:

1. ASSY PART NO. IS 4000168-XY
2. INK STAMP PART NO. IN POSITION SHOWN WITH PREFIX "ASSY" AND DASH NO.
3. ON CONNECTORS, ITEMS 1 & 2, PIN 1 IS INDICATED BY AN ARROW.
4. ON FLAT CABLE, ITEM 3, PIN 1 IS INDICATED BY A RED STRIPE.
5. RECESS CABLE 1/32" ± 1/64" ON ALL CONNECTORS EXCEPT SOLDER-IN TYPE. (68-029, 68-030)

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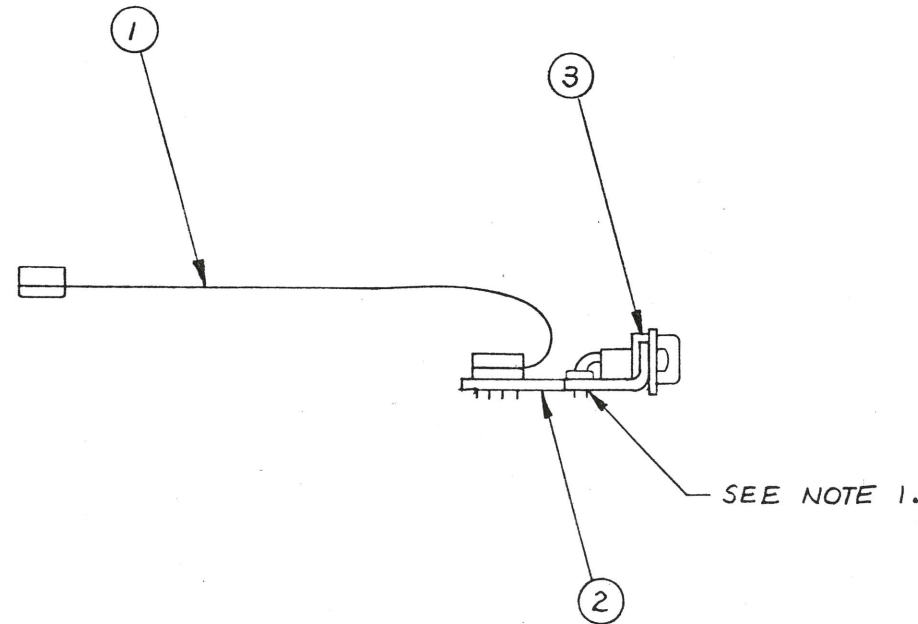
QTY	PLC	ANGLE	ITEM NO.	PART NUMBER	DESCRIPTION
-	-	-	1	3	80-003 WIRE 21 COND 18 INCHES
1	-	-	-	3	80-004 WIRE 40 COND 22 INCHES
-	1	-	-	3	80-003 26 COND 14.0 INCHES
-	-	1	-	3	80-005 50 COND 2 INCHES
-	-	-	1	3	80-004 40 COND 15.5 INCHES
-	-	-	-	3	80-004 9.25 INCHES
-	-	-	1	3	80-004 36 INCHES
-	-	-	-	3	80-004 WIRE 40 COND 18 INCHES
-	-	1	-	2	68-031 CONNECTOR 50 PIN
1	1	-	1	2	68-028 40 PIN
-	1	-	-	1	68-030 26 PIN
-	-	1	-	1	68-031 50 PIN
-	-	-	1	1	68-028 40 PIN
1	-	-	-	1	68-029 CONNECTOR 40 PIN

SCALE: NONE		SIGNATURE		DATE	
TOL. ±		DRN BY L.R. FRESE		8-7-73	
MATERIAL: SEE PARTS LIST		CHK BY T. MORGAN		10/19/73	
FINISH:		DFT APPD		ENGR APPD	
NEXT ASSY USED ON		AUTH BY		DATE	
		CODE: SHEET 1 OF 1		C 410	
		INTEL		3065 BOWERS AVE. SANTA CLARA CALIF. 95051	
		TITLE		DRAWING NO.	
		INTELLEC SYSTEM		4000168	
		FLAT CABLE ASSY		REV C	



REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PRODUCTION RLS	11-9-73	T.M.	11/13/73

D  
C  
B  
A



**APPLICATION TABLE**

OPTION	SYSTEM	USAGE
-01	INT. 4	MOTHERBOARD & GEN. PURPOSE I/O TO CONN. BOX
-02	INT. 4	GEN. PURPOSE I/O TO CONN BOX
-03	INT 8	I/O $\phi$ TO CONN BOX
-04	INT. 8	I/O 1 TO CONN BOX
-05	INT 8	OUTPUT BD TO CONN BOX

NOTE: UNLESS OTHERWISE SPECIFIED  
1. TRIM LEADS ON SOLDER SIDE OF BOARD TO BE FLUSH.

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ITEM NO.	PART NUMBER	DESCRIPTION
1	205860-1	CONNECTOR, AMP
2	1000177	PWB INTELLEC 4
3	1000174	PWB INTELLEC 8
4	4000168-01	FLAT CABLE
5	4000168-08	FLAT CABLE
6	4000168-02	FLAT CABLE

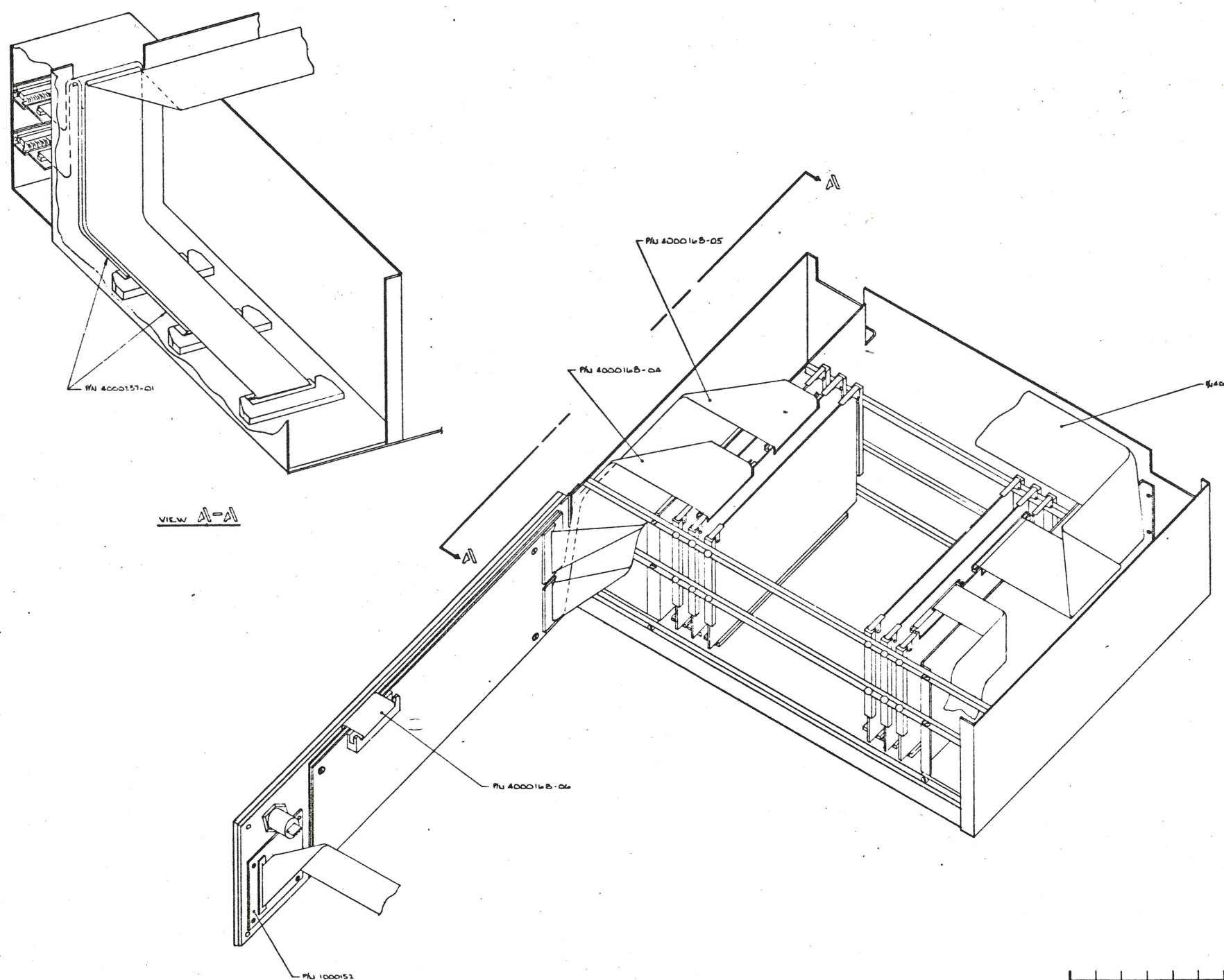
SCALE: NONE	SIGNATURE	DATE		3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL. ±	DRN BY L.R. FRESE	11/2/73		
MATERIAL: SEE PARTS LIST	CHK BY T.M. 11/12/73		TITLE INTELLEC SYSTEM I/O CABLE	
FINISH:	DFT APPD ENGR APPD		SIZE	DEPT
1000075 INT 4	AUTH BY		DRAWING NO.	REV
4000274 INT 4/8	CODE:	SHEET 1 OF 1	C	4000237 A
NEXT ASSY USED ON				


4 3 2 1



8 7 6 5 4 3 2 1

REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
FOR PREVIOUS REVISIONS SEE HISTORY				
E	REDRAWN NO CHANGE			



QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE		SIGNATURE	DATE	 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL. ±	2 PLC 3 PLC ANGLE	DRN BY H DUMAS	2-9-73	
MATERIAL:		CHK BY T MORGAN	2-9-73	TITLE
FINISH:		DFT APPD		INTELLEC 4
NEXT ASSY		ENGR APPD E P WALKER	12-4-73	CABLE ROUTING (REF)
USED ON		AUTH BY P. TAI	12-5-73	SIZE DEPT DRAWING NO. REV
		CODE:	SHEET 1 OF 1	D 410 4000242 B

8 7 6 5 4 3 2 1



INTEL CORPORATION • 3065 Bowers Avenue, Santa Clara, California 95051 • (408) 246-7501