

# intellec<sup>®</sup> MDS

## Reference Schematic Drawings

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SECTION 1

MODULES

4000282 - OUTLINE DRAWING

1000292 } - 16K x 8/450 RAM  
2000614 }

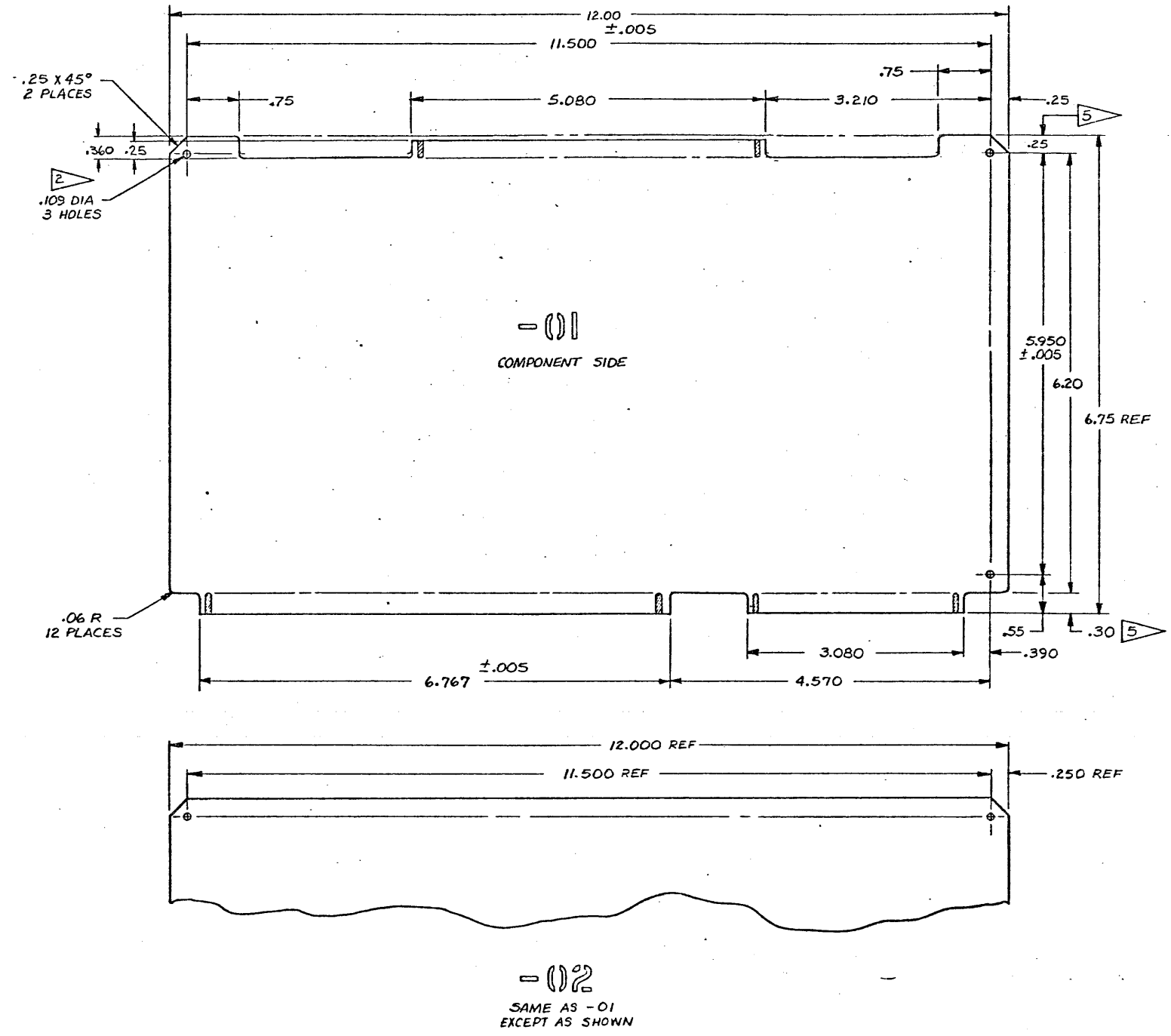
1000305 } - MOTHERBOARD  
2000307 }

1000340 } - CPU  
2000342 }

1000343 } - FRONT PANEL CONTROL  
2000345 }

1000351 } - MONITOR  
2000353 }

REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PROD RELEASE	LF	THP	MM
B	SEE ECO 00224	SM		
C	SEE ECO 00243	THP		



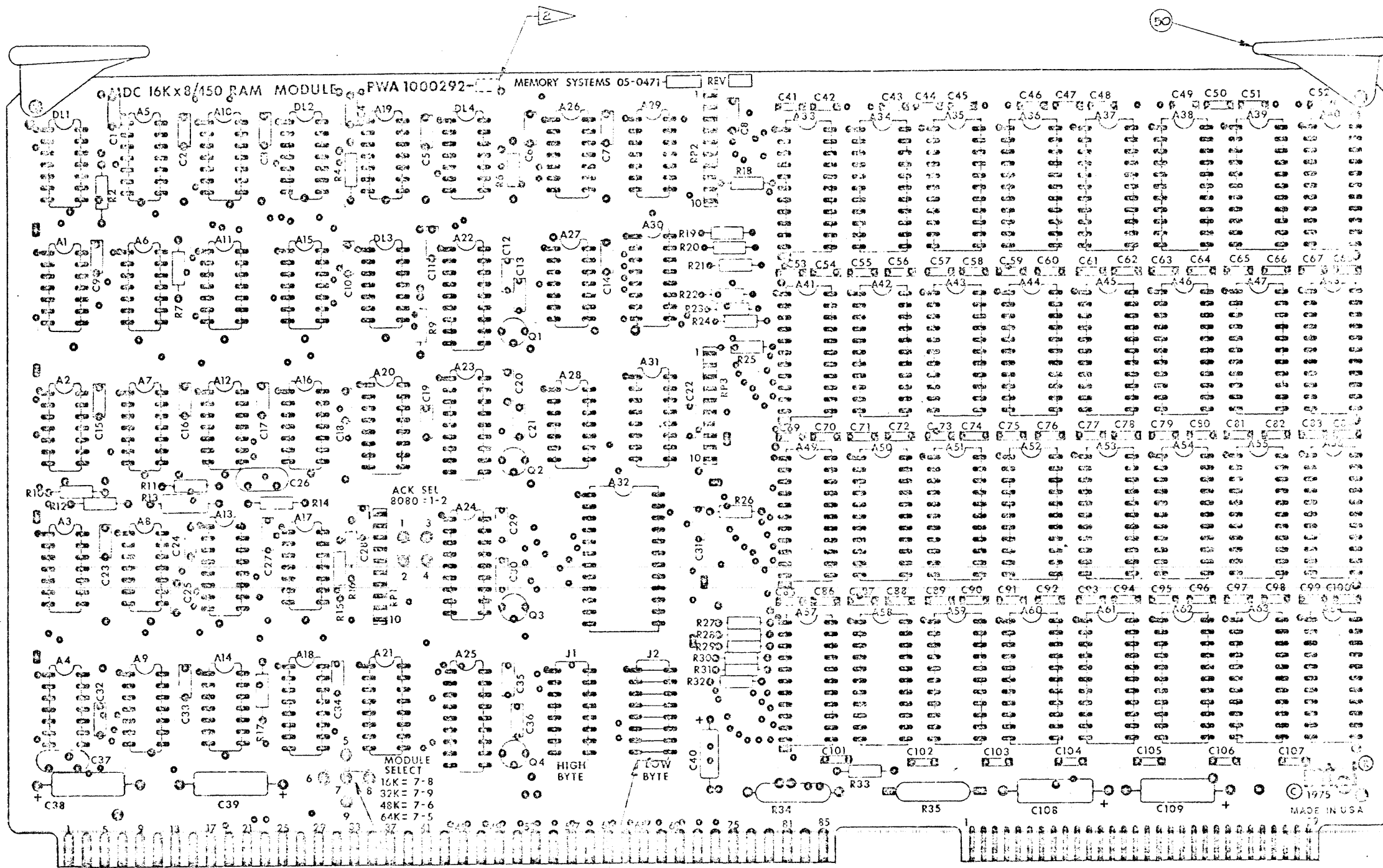
NOTES:

1. MATERIAL : .062 THK, 1 OZ COPPER CLAD, NATURAL EPOXY GLASS, TYPE G10 (20% AFTER PLATING THRU)
2. BOARD EDGES ARE LOCATED FROM INDEX HOLES. INDEX HOLES ARE ON .050 GRID INTERSECTION AND ARE USED FOR ARTWORK REGISTRATION AND MAY BE USED AS TOOLING HOLES, PLATING OPTIONAL.
3. HOLES ARE PLATED THRU WITH COPPER WALL THICKNESS OF .0007 MINIMUM.
4. HOLE SIZES SPECIFIED ARE AFTER PLATING; ±.003 TOLERANCE
5. CONTACT FINGERS ARE OVERPLATED WITH A MINIMUM OF 50 MILLIONTHS GOLD OVER NICKEL TO DIMENSION SHOWN.
6. APPLY SOLDER MASK OVER SOLDER PLATE USING MATERIAL; MECUMASK GREEN
- 7.
8. DRILL FROM CIRCUIT SIDE.
9. TRACE WIDTHS MUST BE WITHIN .004 OF ARTWORK NEGATIVES.
10. APPLY SILKSCREEN ON COMPONENT SIDE, AFTER SOLDER MASK IS APPLIED, USING WHITE EPOXY INK.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 1:1		SIGNATURE		DATE
TOL: 2 PLC .020, 3 PLC .010, ANGLE		DRN BY L. FRIESE		5-5-79
MATERIAL: 1		CHK BY		DATE
FINISH: 6		DFT APPD		DATE
UNIV. INT. MDS		ENGR APPD		DATE
NEXT ASSY USED ON		AUTH BY		DATE
		CODE: SHEET 1 OF		
PARTS LIST				intel 3055 BOWERS AVE. SANTA CLARA CALIF. 95051
TITLE				OUTLINE DRAWING
DRAWING NO.				P.W.B. INT. MDS
SIZE	DEPT	DRAWING NO.		REV
D 410	4000282			C

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



3	ENDOR RELEASE	
A	PRODUCTION RELEASE	
B	PL CHANGE ONLY SEE ECO	
C	ECO 00244-B	
D	ECO 00304-B	2/3 3/35
E	ECO# 00419-1	
F	ECO# 00498-2	
F	ADDED VIA-3880 DL	

48 2 RECD  
49 9 RECD

46  
47  
-01 SHOWN

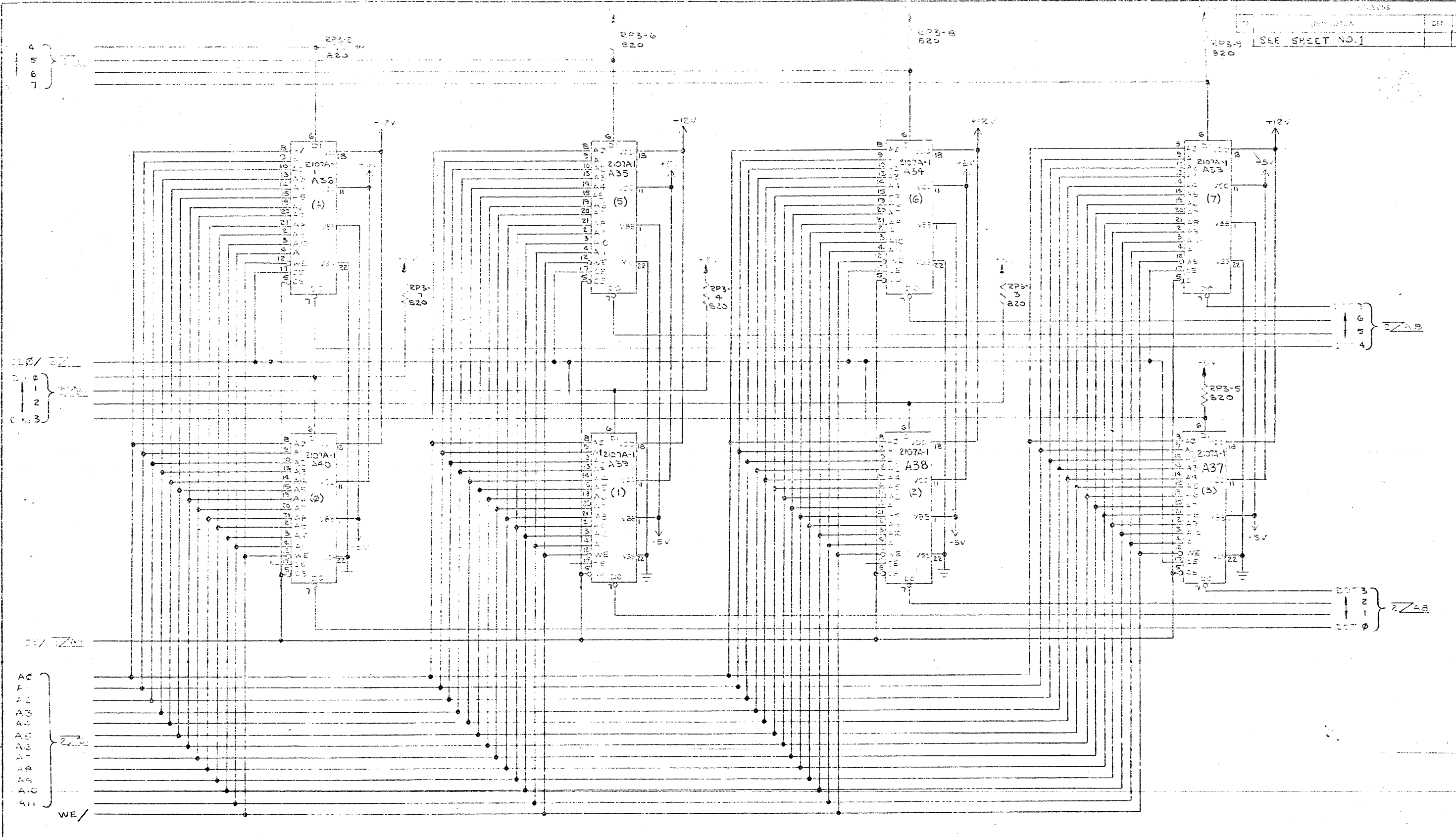
3 -02 ONLY

NOTE: UNLESS OTHERWISE SPECIFIED  
1. ASSEMBLY NO. IS 1000292-XX  
2. MARK DASH NO. IN POSITION SHOWN.

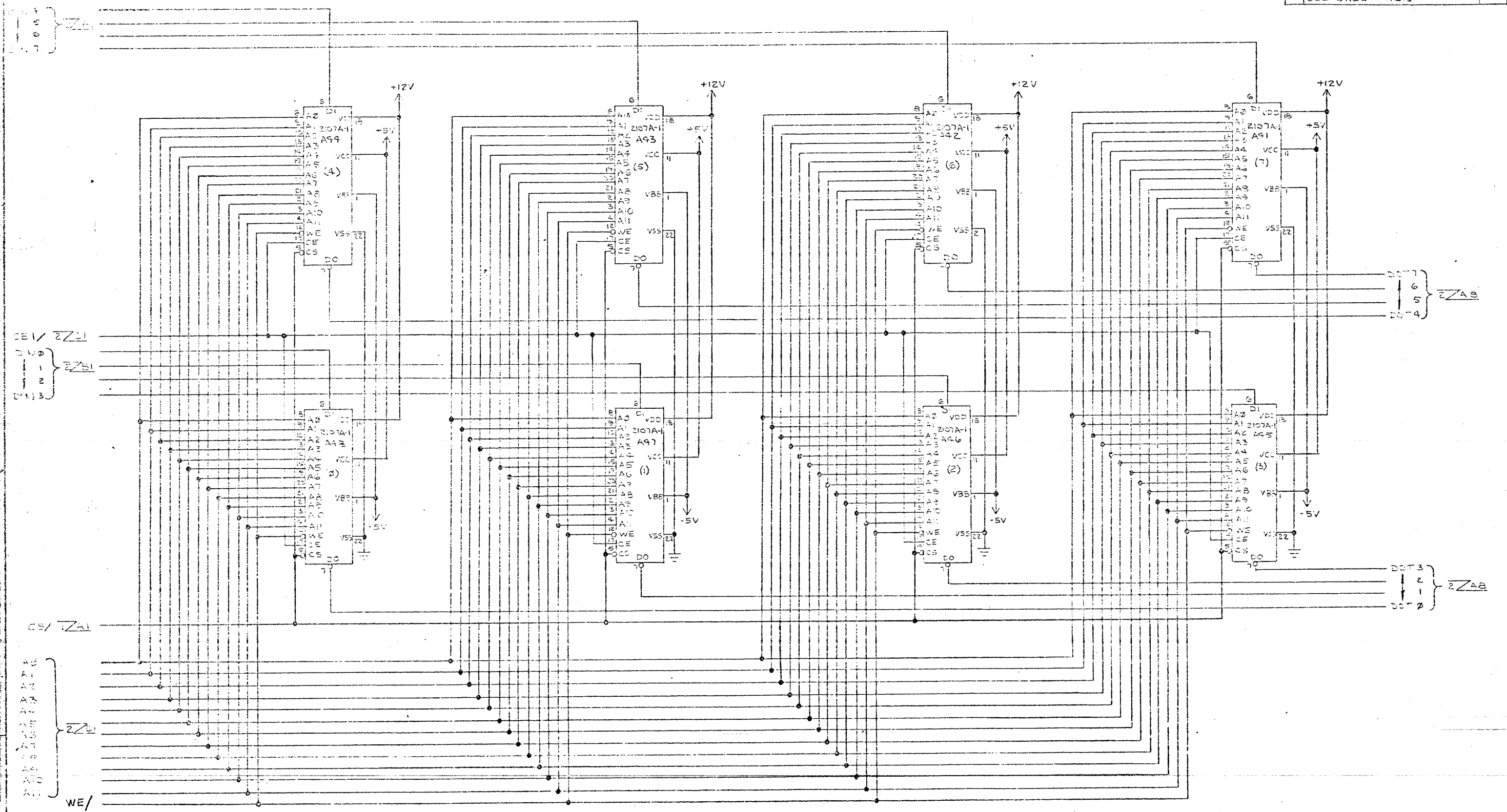
4000000 4000000 4000000 4000000 4000000 4000000 4000000 4000000	21	PRINTED WIRING ASSEMBLY 16Kx8/150 RAM
		100 1000292 F

8 7 6 5 4 3 2 1

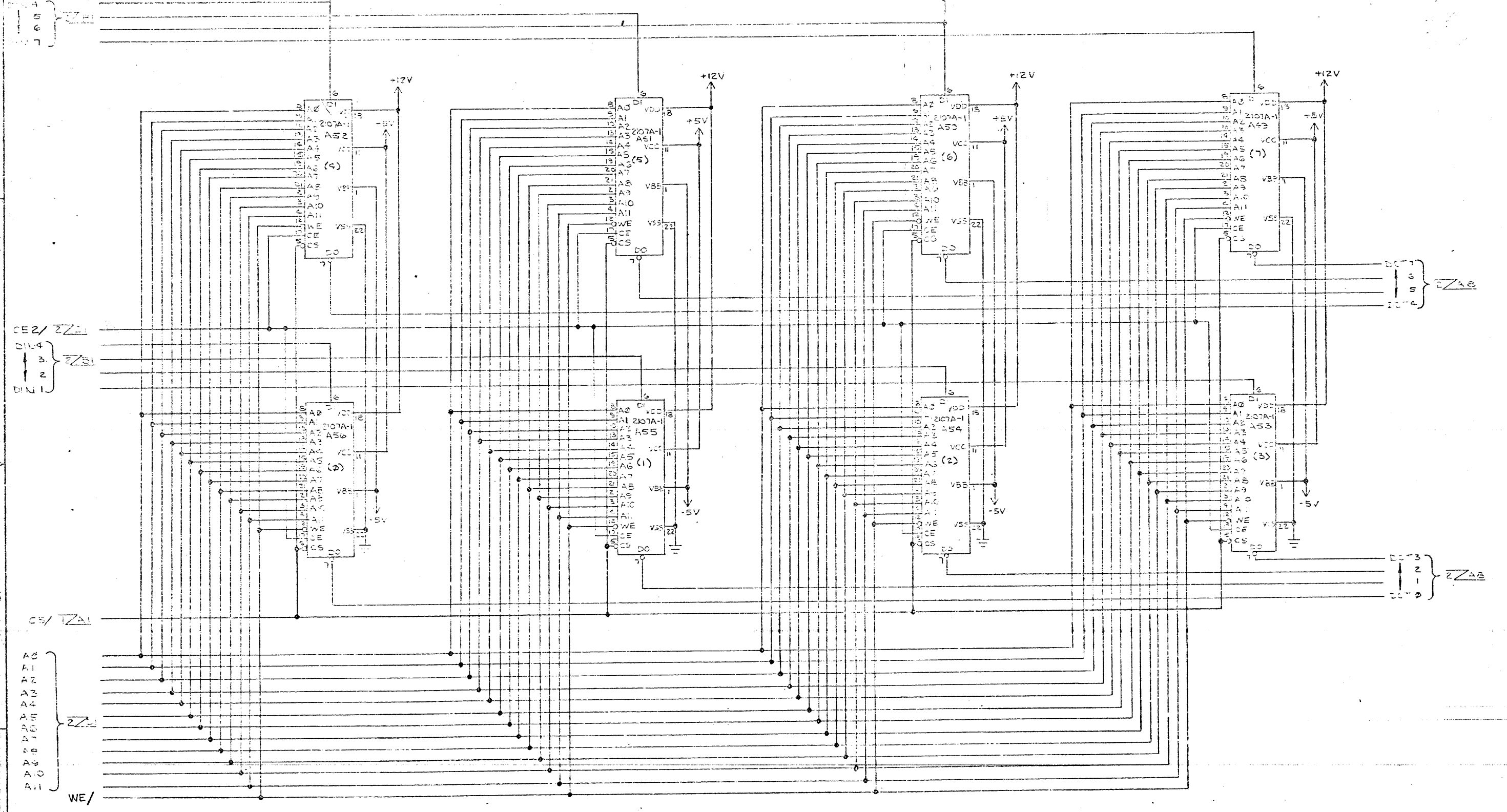




PANEL # 0



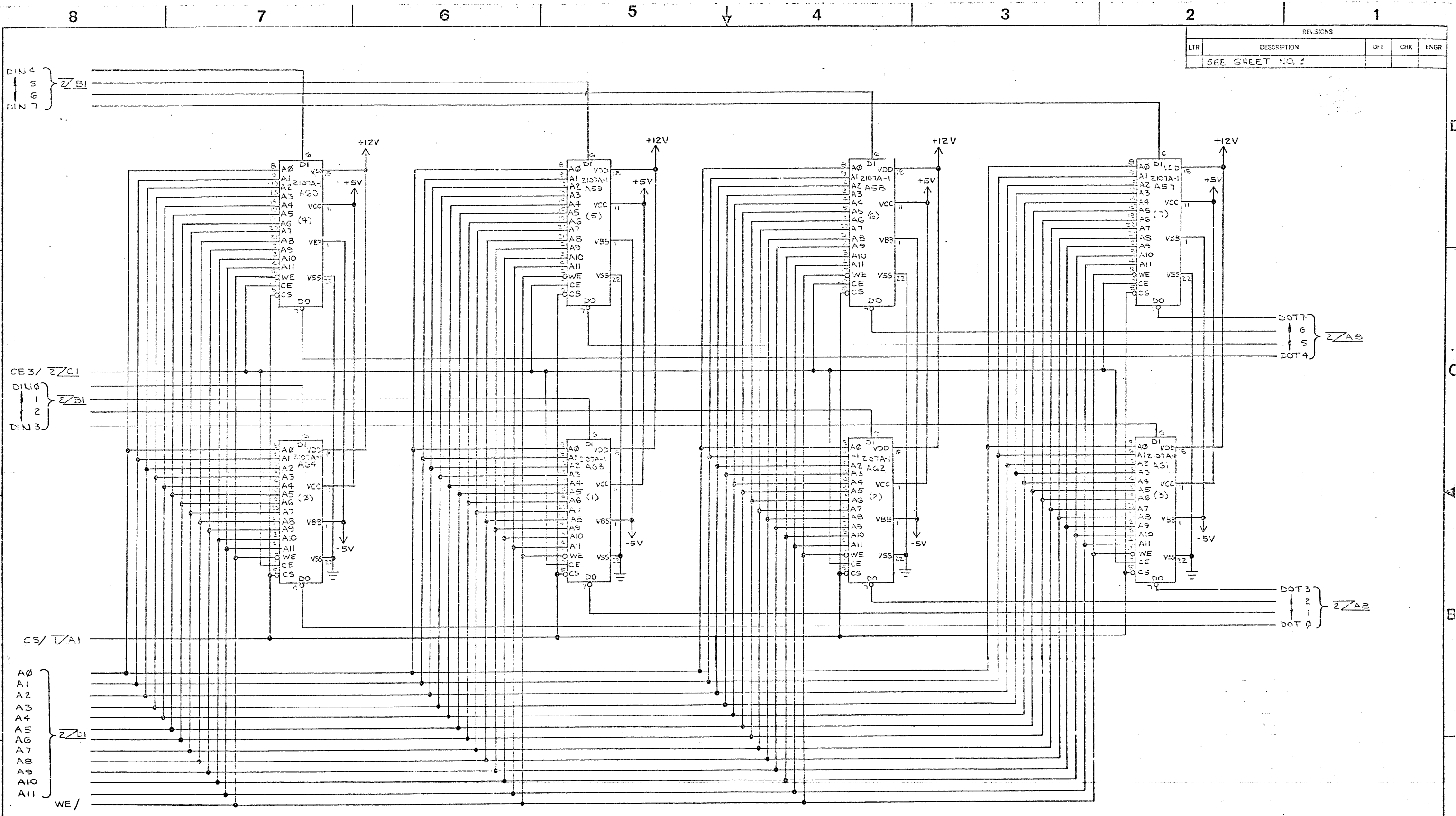
BANK # 1



BACK #2

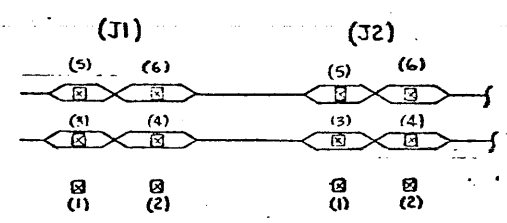
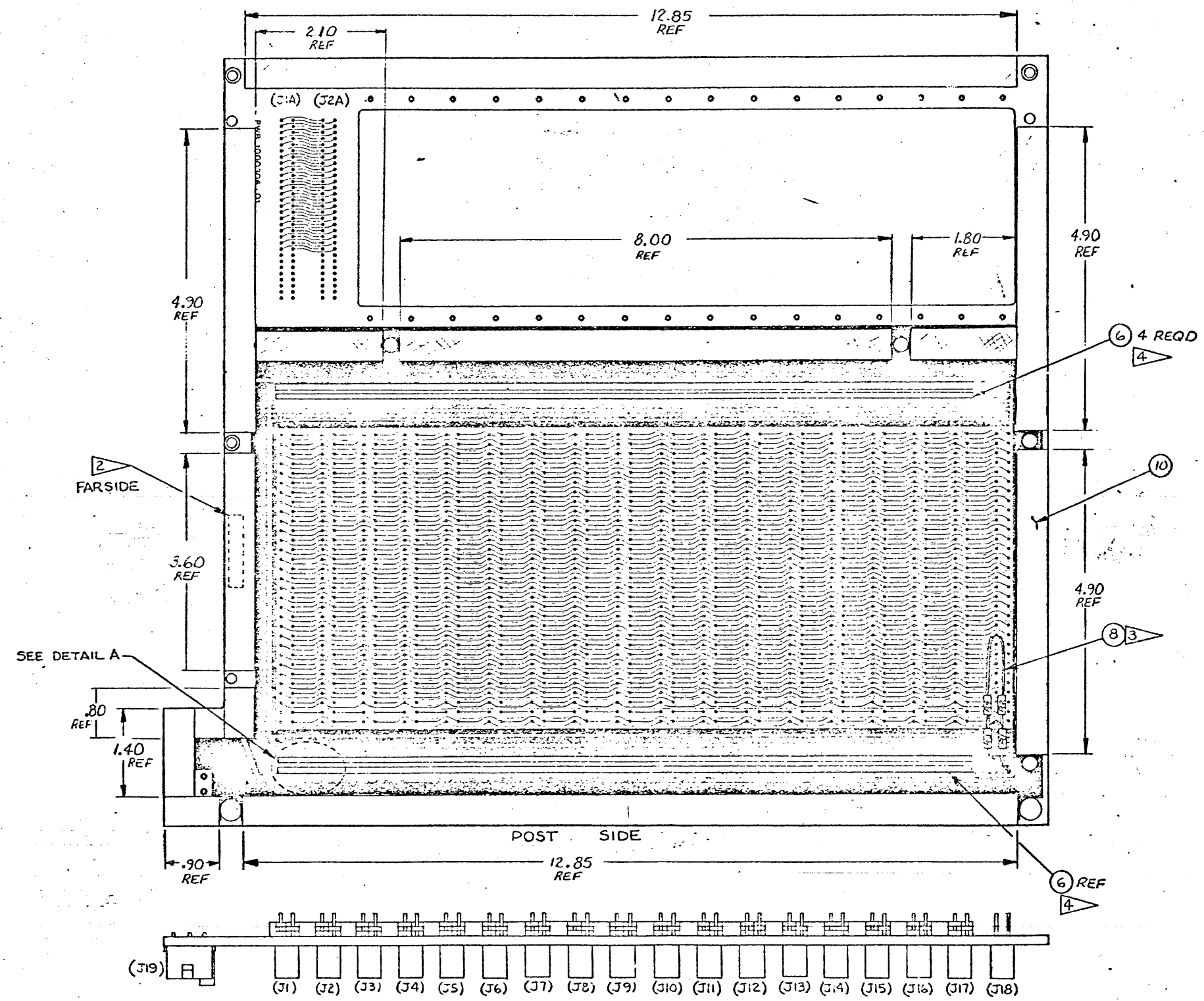


REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
	SEE SHEET NO. 1			



BANK #3

REVISIONS	
NO.	DESCRIPTION
1	ENGINEERING REL
2	ENG REL ECO 255



**DETAIL A**  
SCALE 4:1  
INSTALL ON PIN 3 OF J1 THRU J17.  
INSTALL ON PIN 6 OF J1 THRU J17.  
INSTALL ON PIN 8 OF J1 THRU J17.  
INSTALL ON PIN 84 OF J1 THRU J17.

- NOTE: UNLESS OTHERWISE SPECIFIED
1. ASSY NO. IS 1000305-01
  2. MARK ASSY NO. IN POSITION SHOWN USING .12 HIGH WHT CHARACTERS.
  3. SLEEVE RESISTOR LEADS.
  4. AFTER INSTALLING BUS BARS AS SHOWN TACK SOLDER BAR IN PLACE.

	FROM	TO
R1	J18-2	J18-13
R2	J18-2	J18-31
R3	J18-5	J18-13
R4	J18-5	J18-31

QTY	ITEM NO.	PART NUMBER	DESCRIPTION
11	10	90-039	TAPE SCOTCH #27 ELEC TAPE .50 WIDE
5	8	80-011	SLEEVING 3/32 WHT
4	6	B2-023	BUS BAR
2	4	56-016	RESISTOR COMP 330Ω 1/4W 5% R1, R2
2	3	56-011	RESISTOR COMP 220Ω 1/4W 5% R3, R4
REF	2	2000307	SCHEMATIC
1	1	1000306-01	PRINTED WIRING BOARD
01			

SCALE: 1:1	SIGNATURE: L.R. FRESE	DATE: 4/1/75	3005 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL: 2 PLC 3 PLC ANGLE	DRN BY: L.R. FRESE	CHK BY: [Signature]	
MATERIAL:	FINISH:	4000320 INT MDS	PRINTED WIRING ASSEMBLY MOTHER BOARD
CODE: SHEET 1 OF 2	SIZE: D 410	DIFF: E1000305	REV: 2

8

7

6

5

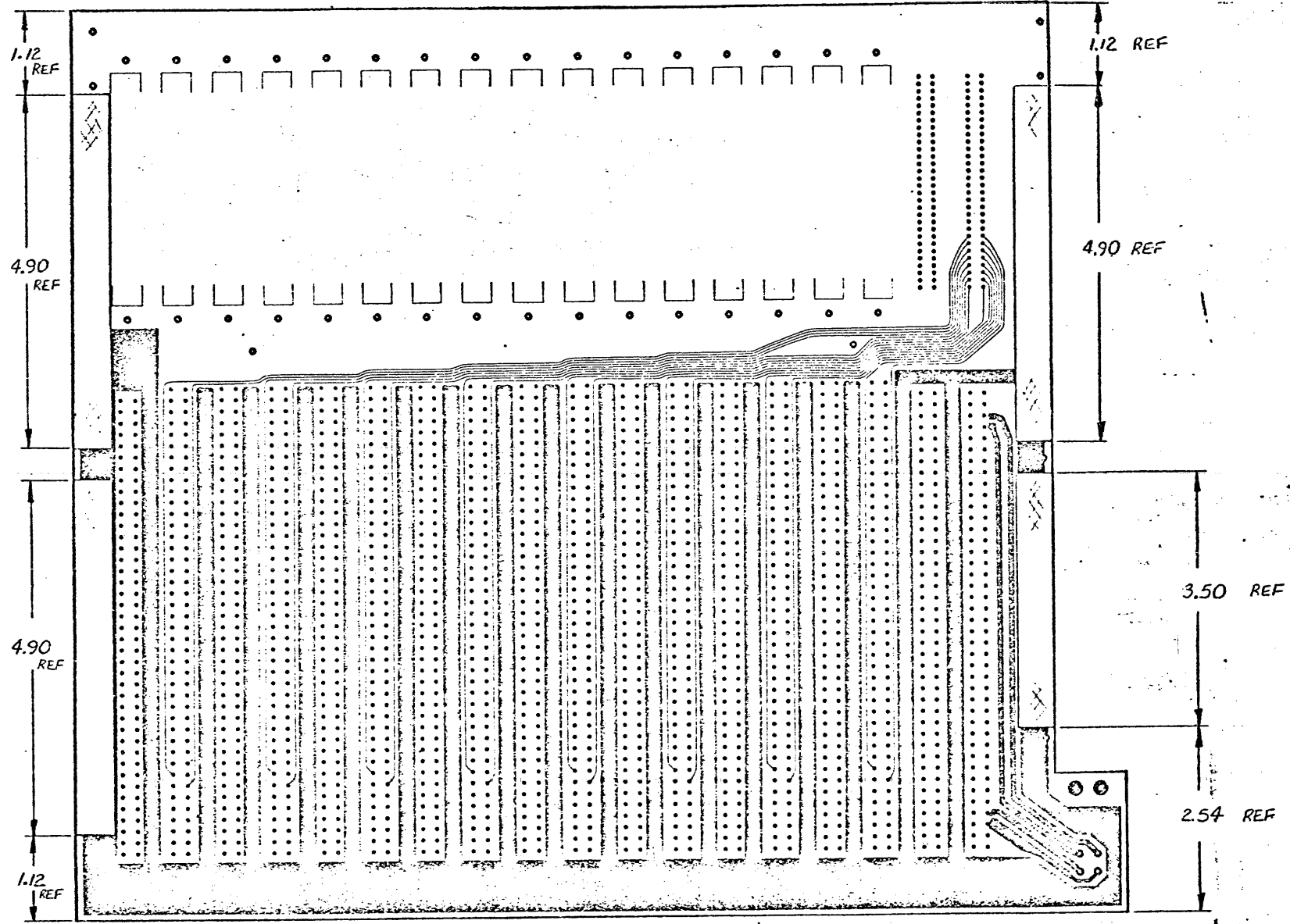
4

3

2

1

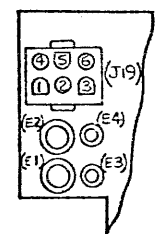
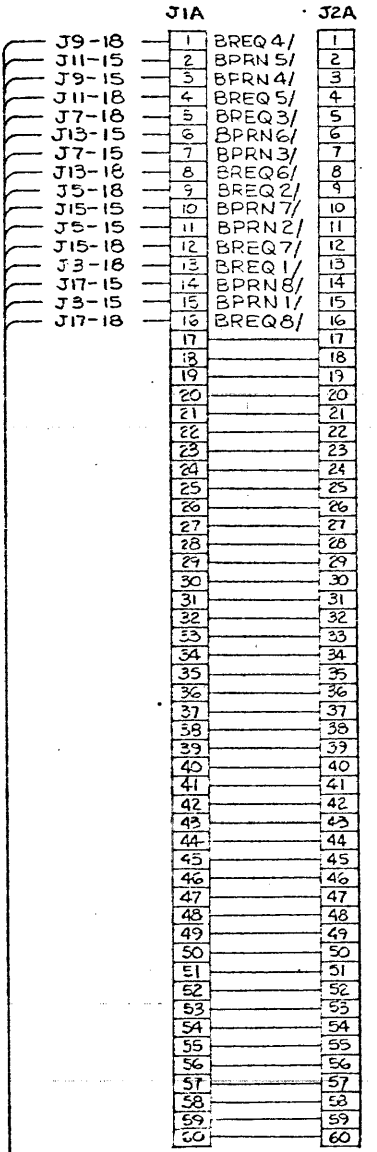
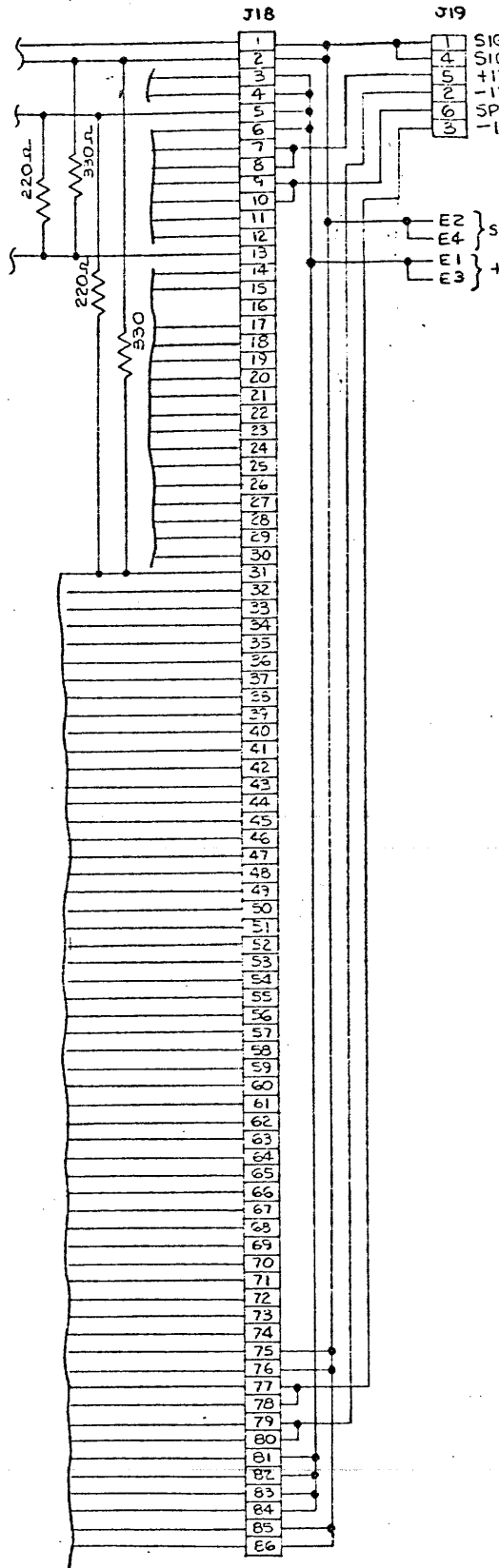
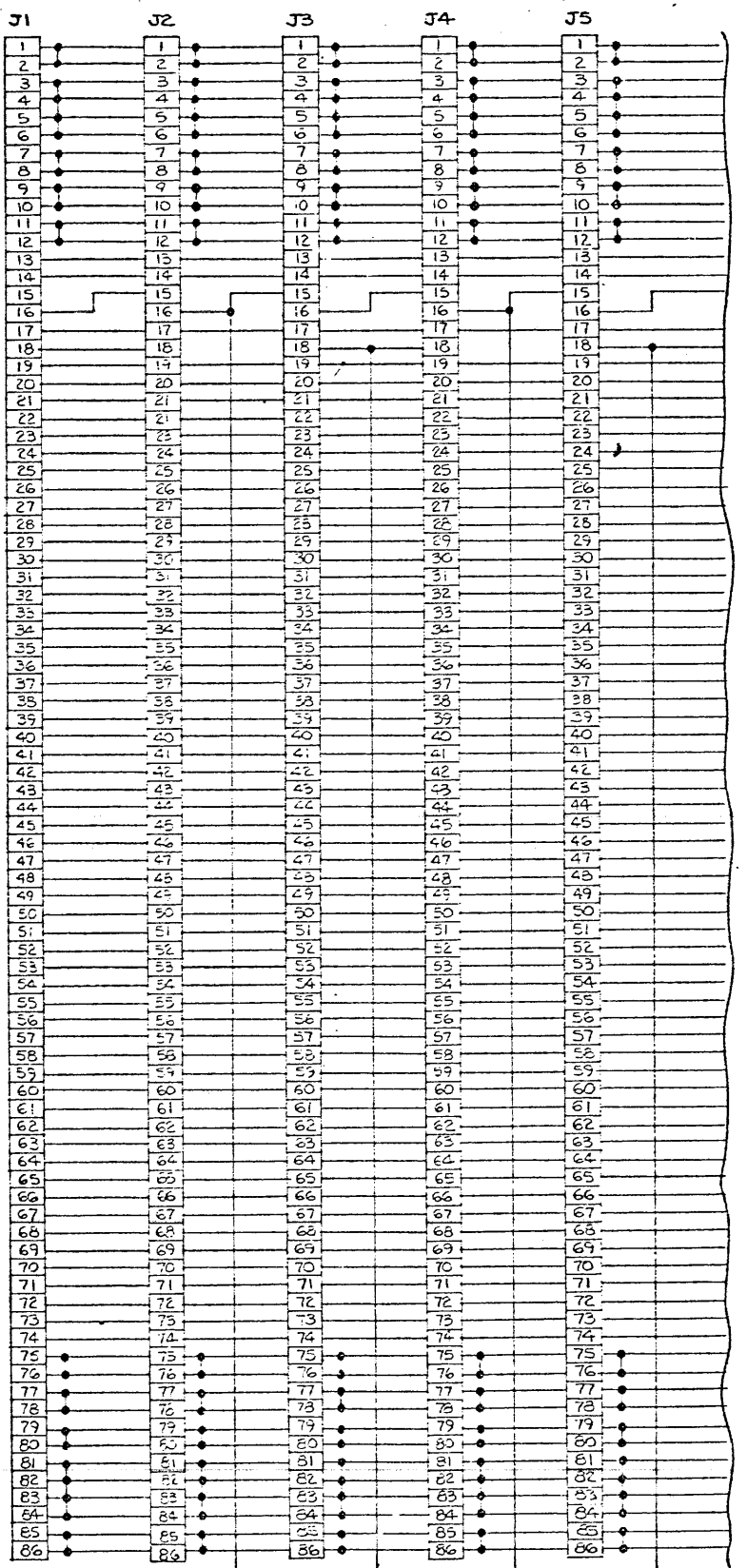
REVISIONS			
LTR	DESCRIPTION	DFT	ENGR



COMPONENT SIDE

REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	ENGR
1	ENGINEERING REL	[Signature]	[Date]
2	ENGINEERING REL	[Signature]	[Date]

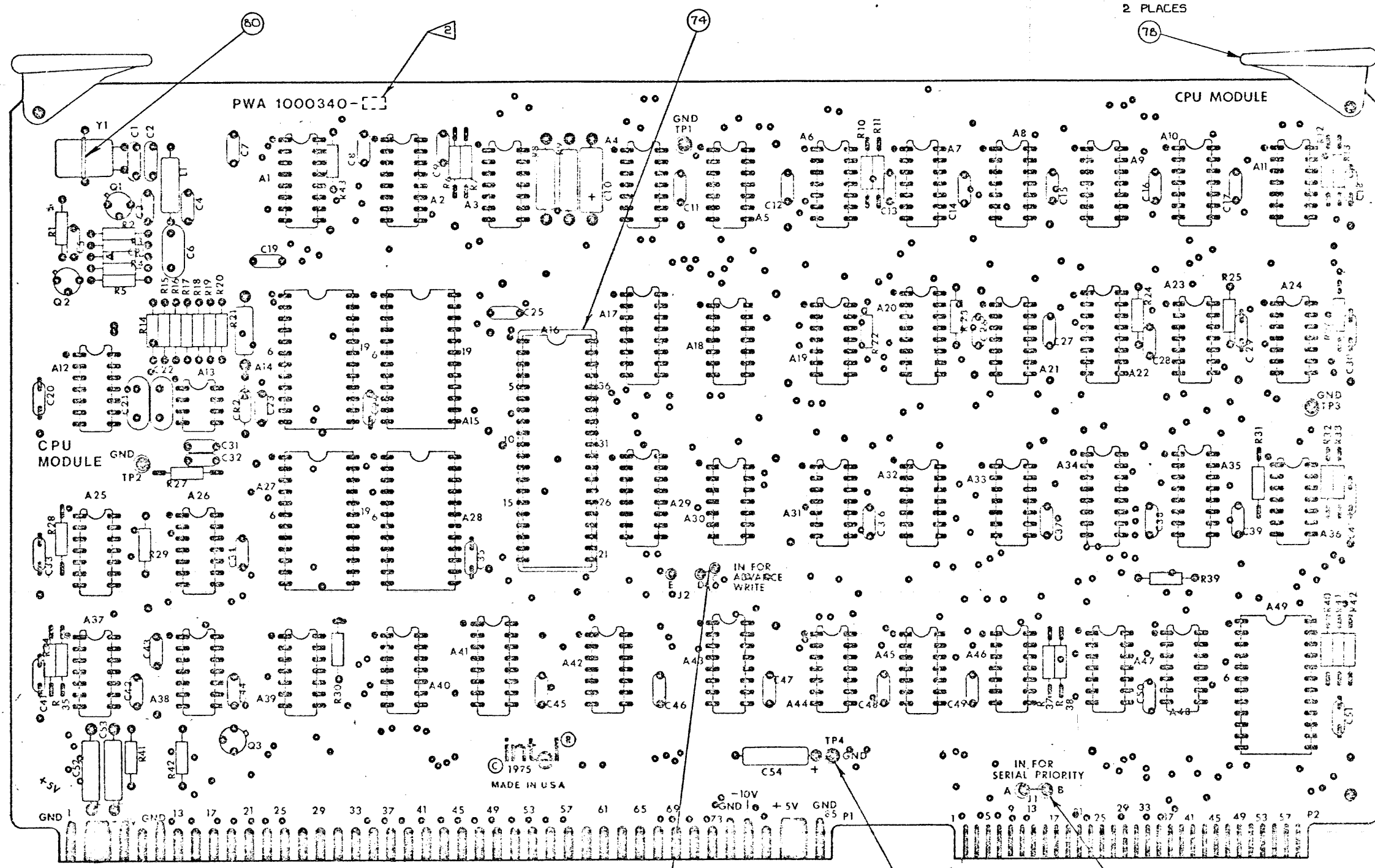
- SIG GND
- SIG GND
- + 5V
- + 5V
- + 5V
- + 5V
- + 12V
- + 12V
- V<sub>BI</sub>
- SIG GND
- SIG GND
- BCLK/
- INIT/
- BPRN/
- BPRC/
- BUSY/
- BREQ/
- MRDC/
- MWTC/
- IORC/
- IOWC/
- XACK/
- INH1/
- BOE0/
- INH2/
- MACK/
- SPARE
- SPARE
- SPARE
- CCLK/
- SPARE
- INTR/
- SPARE
- INT0/
- INT7/
- INT4/
- INT5/
- INT2/
- INT3/
- INT0/
- INT4/
- ADRE/
- ADRF/
- ADRC/
- ADRD/
- ADRA/
- ADRB/
- ADR0/
- ADP0/
- ADR6/
- ADR7/
- ADR4/
- ADR5/
- ADR2/
- ADR3/
- ADR0/
- ADR1/
- DATE/
- DATF/
- DATC/
- DATD/
- DATA/
- DATB/
- DAT0/
- DAT8/
- DAT6/
- DAT7/
- DAT4/
- DAT5/
- DAT2/
- DAT3/
- DAT0/
- DAT1/
- SIG GND
- SIG GND
- 10V
- 10V
- 12V
- 12V
- +5V
- +5V
- +5V
- +5V
- SIG GND
- SIG GND



PIN ORIENTATION  
CONNECTOR SIDE  
J19, E1, E2, E3, E4.

NOTE: UNLESS OTHERWISE SPECIFIED  
 1. RESISTOR VALUES ARE IN OHMS.  
 2. LATEST ARTWORK REVISION IS 3.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE	TOL. 2 PLC 3 PLC ANGLE	SIGNATURE		DATE
MATERIAL:	DFT APPD		[Signature]	
FINISH:	ENGR APPD		[Signature]	
AUTH BY:	CODE:		SHEET OF	
10CC306	INT MDC	D		410 E2000307
NEXT ASSY	USED ON	REV		2

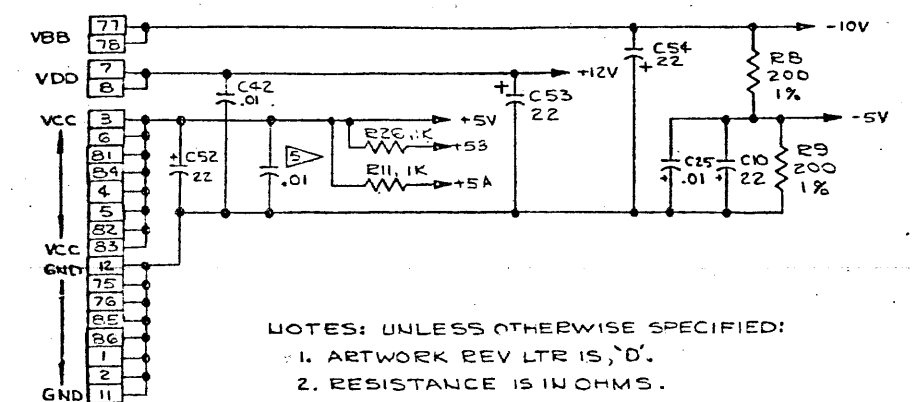
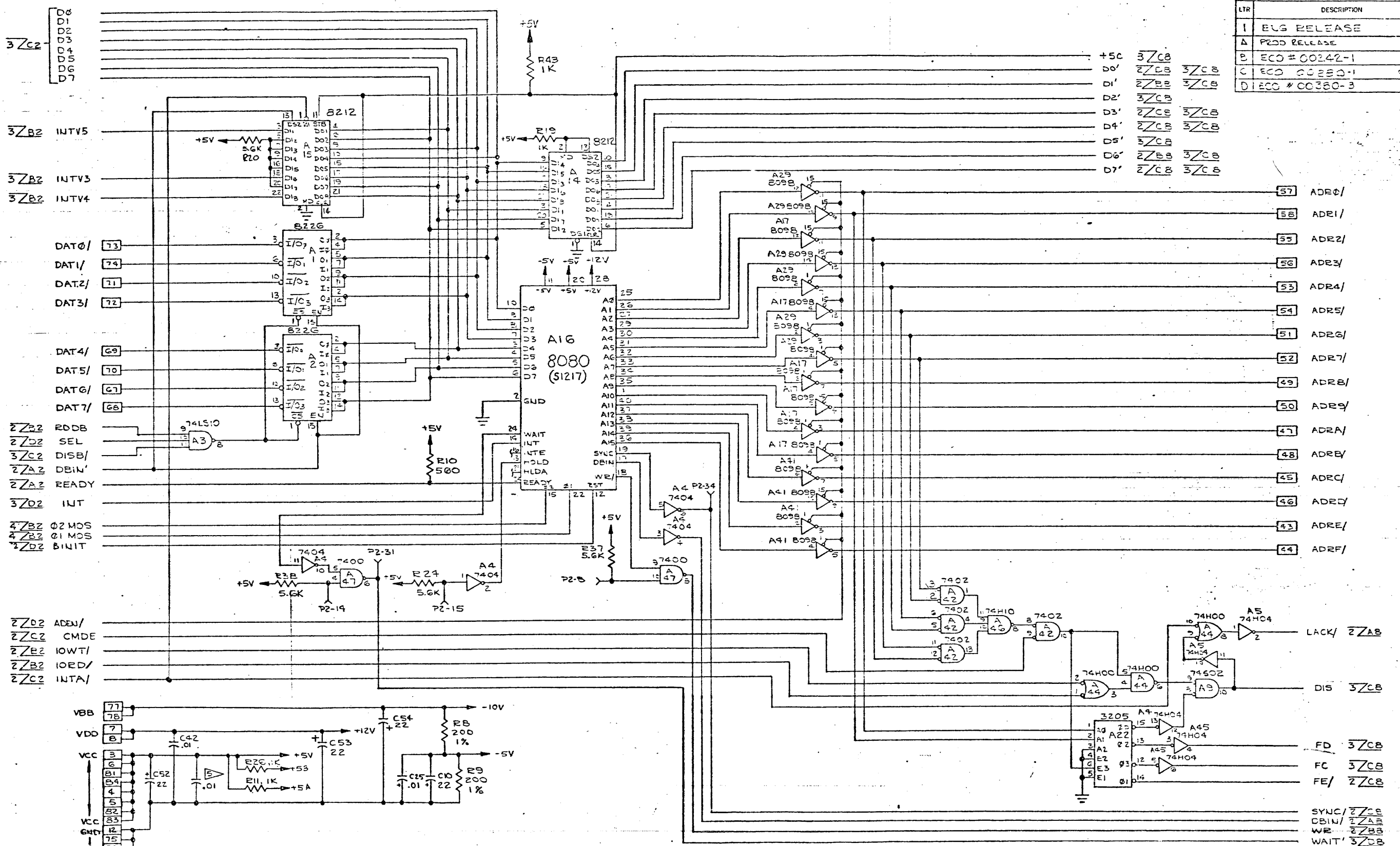


NOTE: UNLESS OTHERWISE SPECIFIED  
 1. ASSEMBLY NO. IS 1000340-01.  
 2. MARK DASH NO. IN POSITION SHOWN.

4 PLACES  
 TP1-TP4 (REF)

PART NUMBER		DESCRIPTION	
SCALE	2:1	DATE	1/2/76
TRG		DESIGNED BY	H. DUMLAD
MATERIAL		DESIGNED BY	H. DUMLAD
		DESIGNED BY	T. TOCKEV
		DESIGNED BY	R. GARROW
		DESIGNED BY	S. HOU
4000320 INT MDS		PWA CPU MODULE	
		D 410 1000340 D	

REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
I	ELG RELEASE		
A	PROD RELEASE		
B	ECO # 00242-1		
C	ECO # 00280-1	CLB	
D	ECO # 00360-3		



- NOTES: UNLESS OTHERWISE SPECIFIED:
1. ARTWORK REV LTR IS 'D'.
  2. RESISTANCE IS IN OHMS.
  3. CAPACITANCE IS IN MICRO FARADS.
  4. JUMPER J1 A & B IS IN FOR SERIAL PRIORITY; AND OUT FOR PARALLEL PRIORITY.
  5. THE FOLLOWING ARE BETWEEN GND & +5; C11-12, 20, 23, 24, 26-30, 34-41 & 43-51.
  6. EDGE CONNECTOR PINS ARE, P1.

REF DESIG		SPARES		
LAST USED	NOT USED	REF DESIG	TYPE	QTY
A49				
E44	R36			
C54				
CB2				
Q3		A43	8095	2
Y1		A5	74HC4	1
L1		A31	74H74	1

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE:	TOL:			
MATERIAL:	FINISH:			

SIGNATURE		DATE	PARTS LIST	
DRN BY: [Signature]		DATE: [Date]	PARTS LIST	
CHK BY: [Signature]		DATE: [Date]	PARTS LIST	
DEF. APPD: [Signature]		DATE: [Date]	PARTS LIST	
ENGR. APPROV: [Signature]		DATE: [Date]	PARTS LIST	
AUTH BY: S. Hagg		DATE: 3/3/74	PARTS LIST	
CODE:	SHEET	CF 4	PARTS LIST	

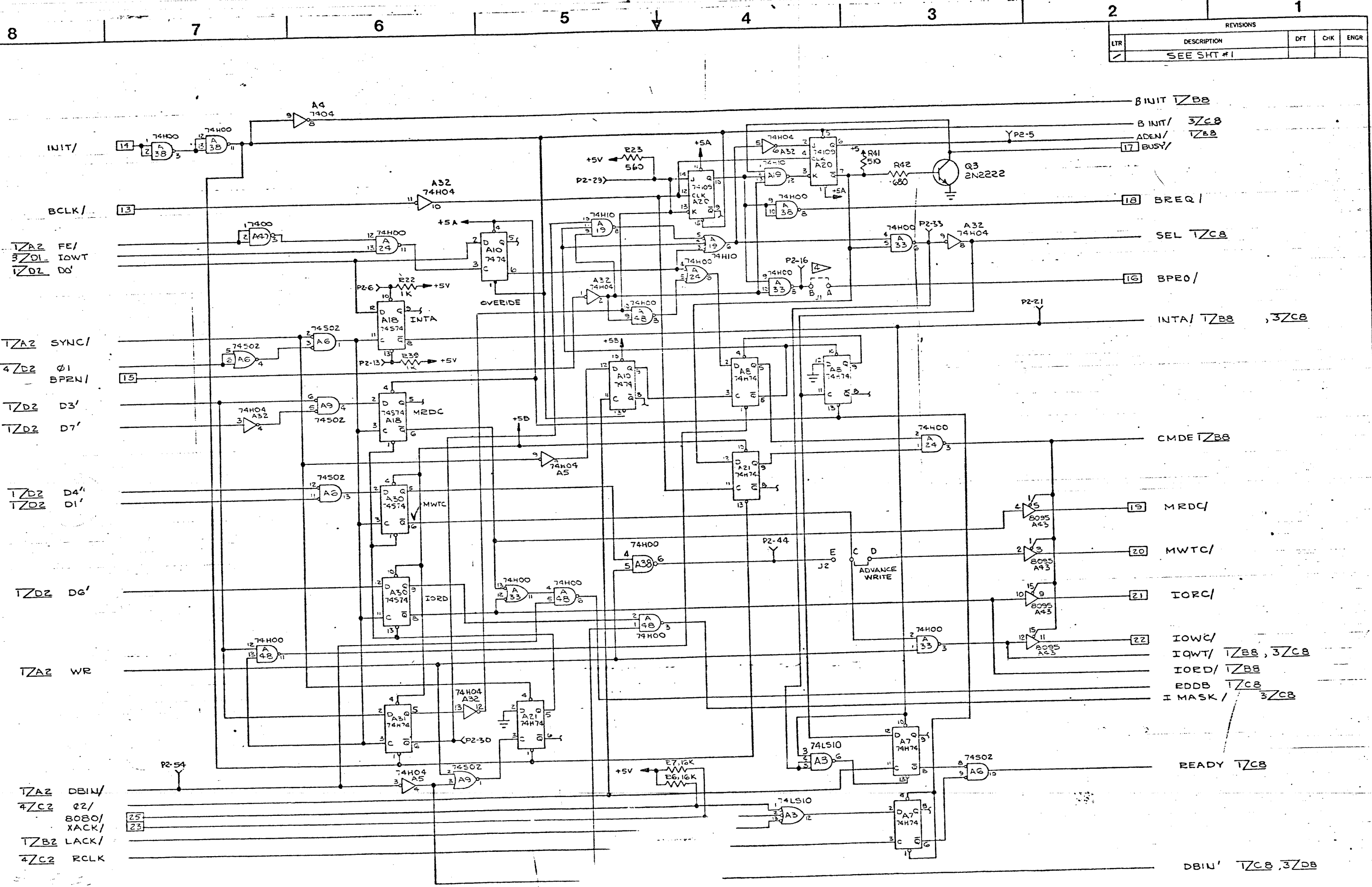
SIZE	DEPT	DRAWING NO.	REV.
D	410	2000342	10

intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051

TITLE: SCHEMATIC CPU MODULE



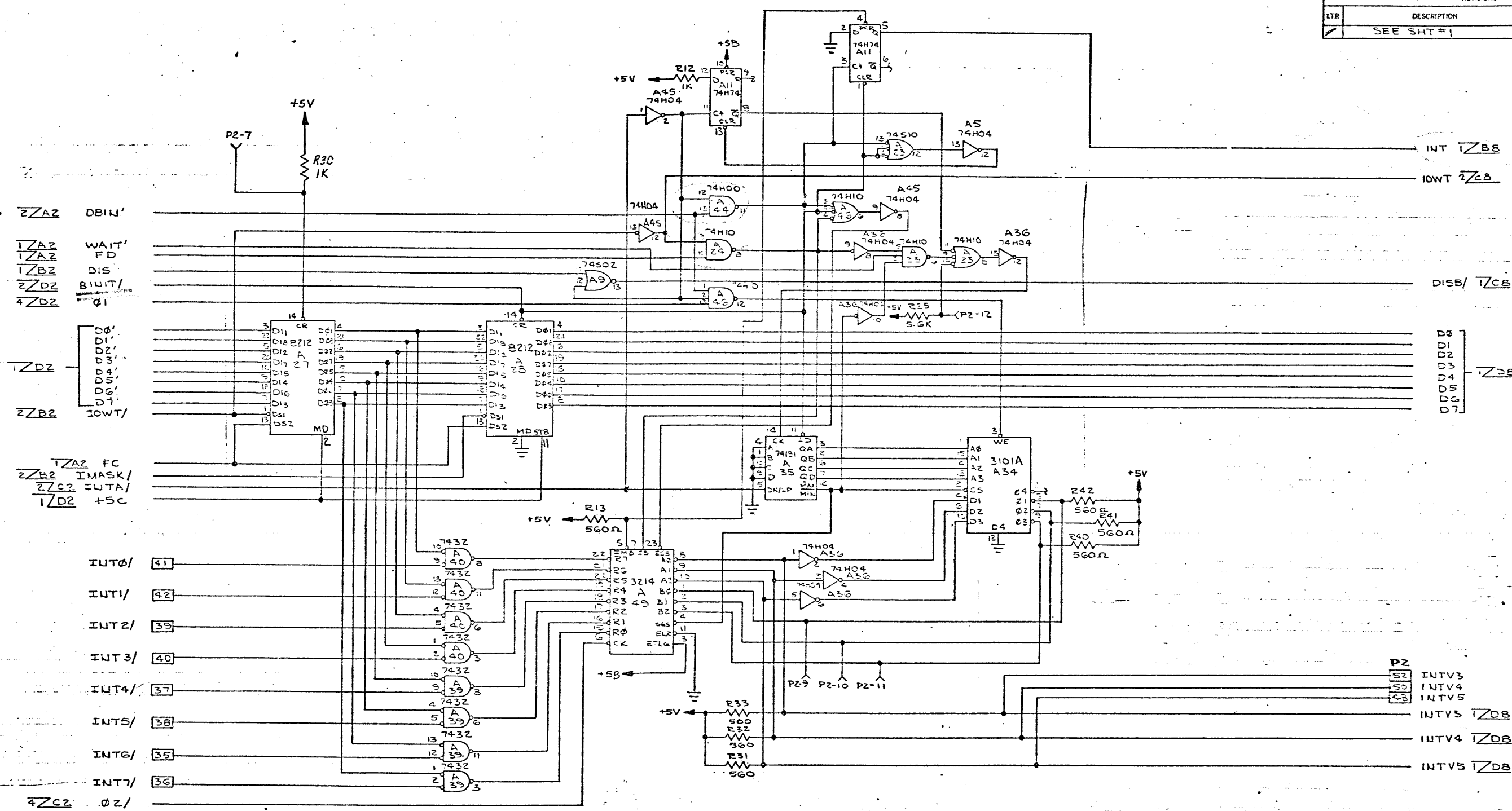
REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
✓	SEE SH#1			



SCALE: 1:1	SIZE: D	DEPT: 110	DRAWING NO.: 2000342	REV: D
SHEET 2 OF 4				

COPY 1

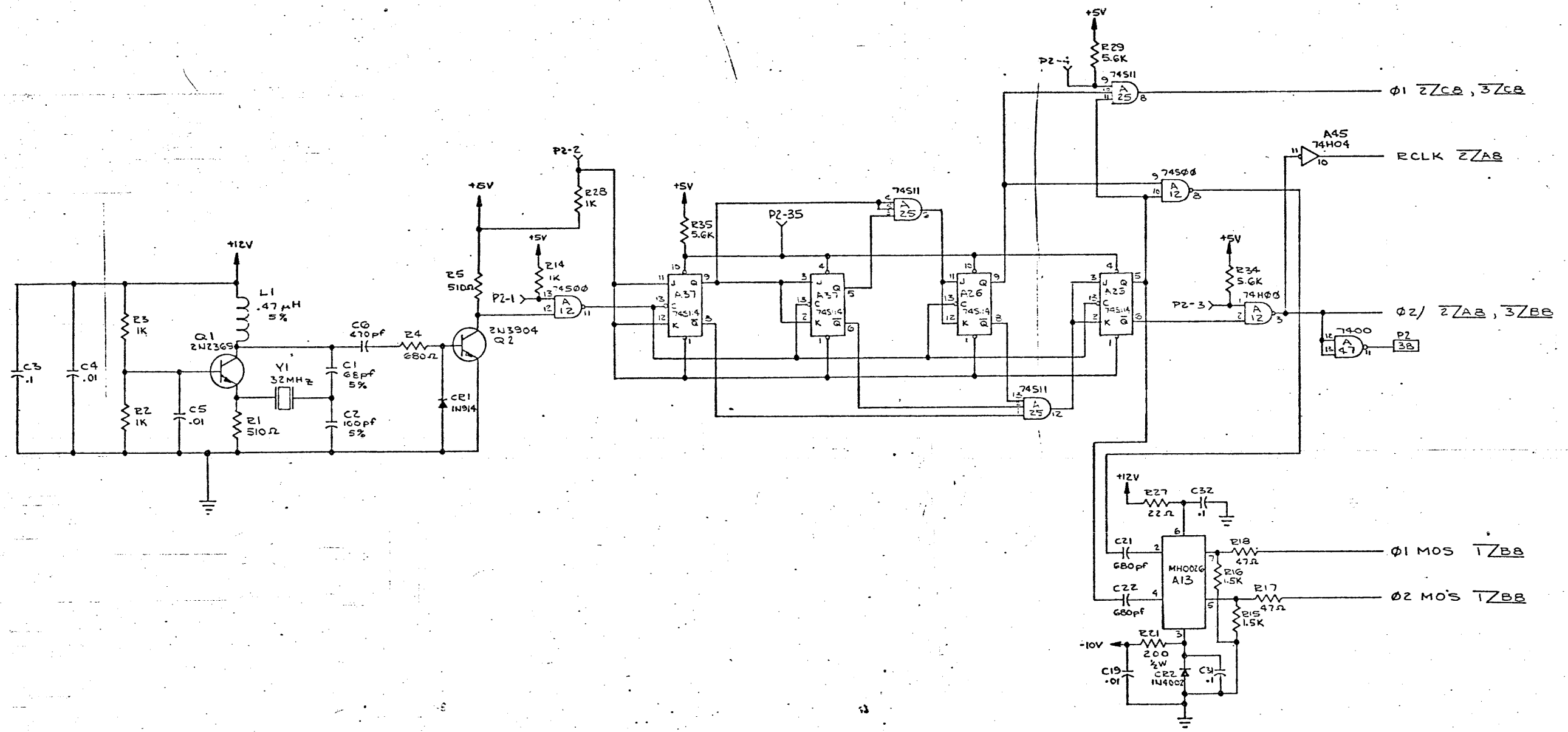
REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
/	SEE SHT #1			



SCALE: ~	SIZE: D	DEPT: 4-0	ISSUING NO.: 2000342	REF: D
SHEET 3 OF 2			DATE: 1975	



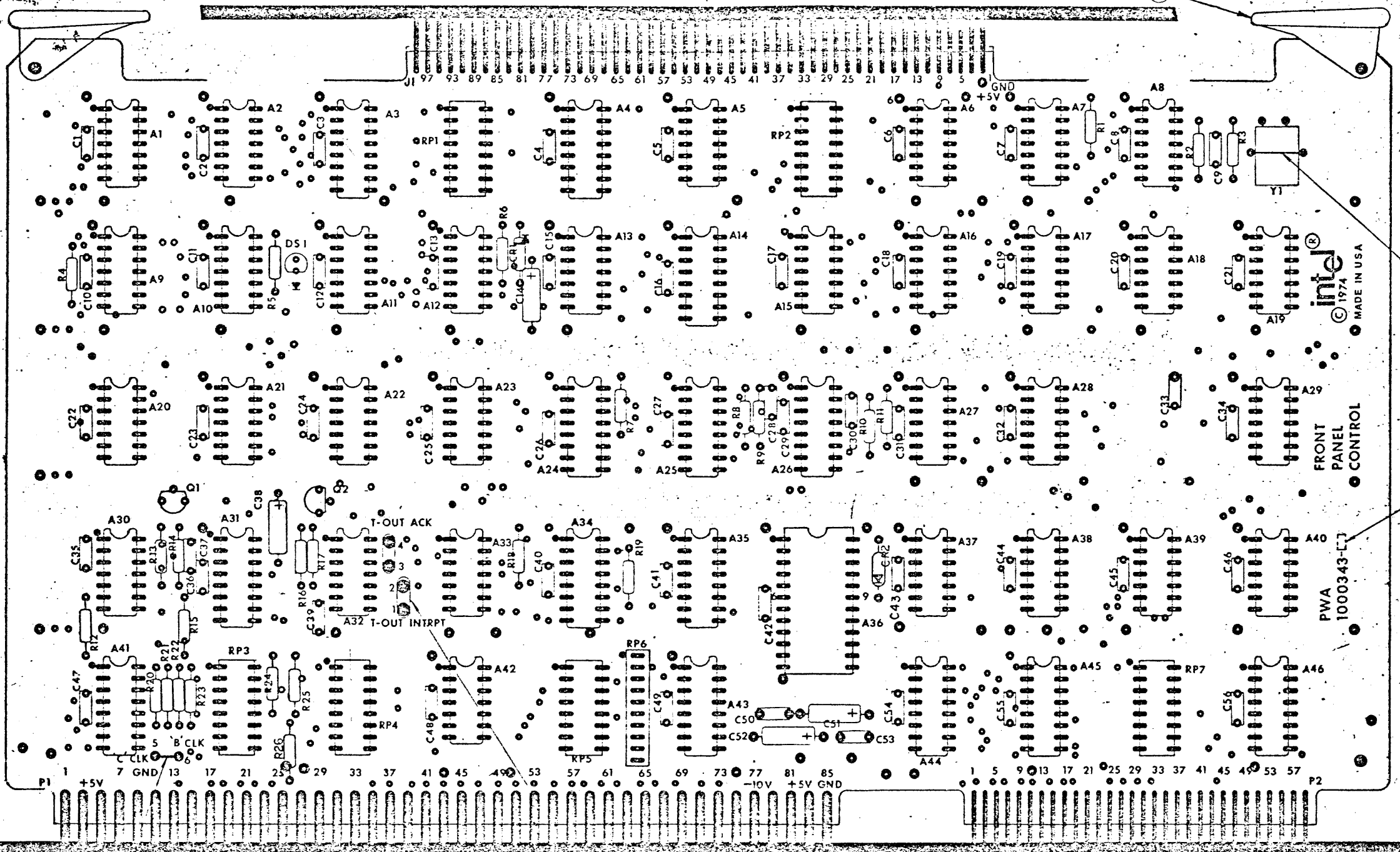
REVISIONS			
LTR	DESCRIPTION	DFT	CHK
/	SEE SHT #1		



SCALE: ~	SIZE: D	DEF: 40	DRAWING NO.: 20C0342	REV: 0
SHEET 4 OF 4			ENT 122	

005  
1005

REVISIONS		
LTR	DESCRIPTION	DATE
2	EUGENE RELEASE	11/10/74
A	PROD RELEASE	11/10/74
B	ECO #00258	11/10/74
C	ECO 00315-2	11/10/74
D	ECO 00371	11/10/74
E	ECO #00494-2	11/10/74



intel  
© 1974  
MADE IN USA

FRONT  
PANEL  
CONTROL

PWA  
1000343-L7

NOTE: UNLESS OTHERWISE SPECIFIED  
1. ASSEMBLY NO. IS 1000343-D1  
2. MARK DASH NO. IN POSITION SHOWN.

QTY	DESCRIPTION	DATE	BY
2	2:1	11/10/74	T. TOOKEY
	4000852 MDS 800/51		
	4000672 MDS 695		
	4000570 MDS 800		

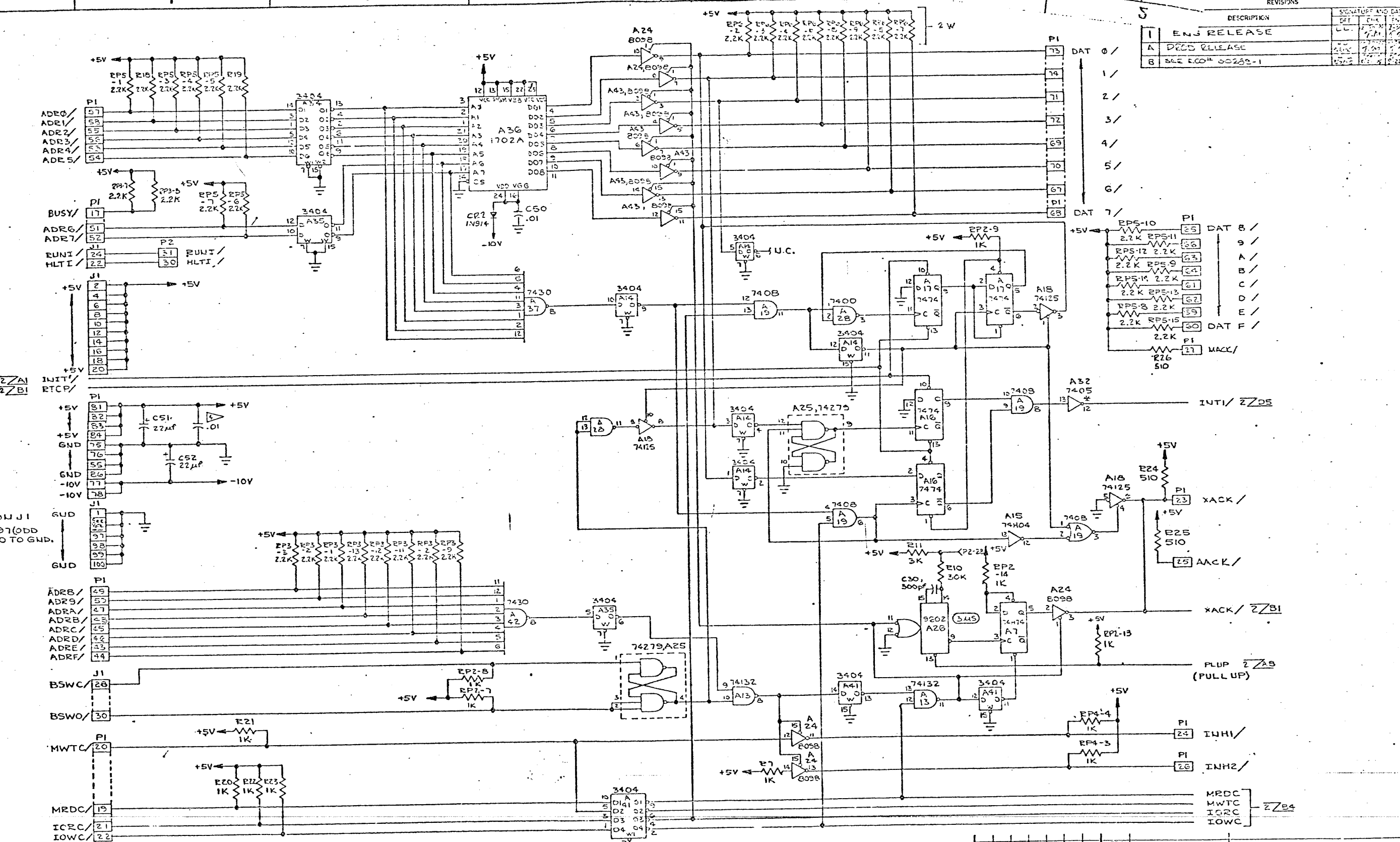
  

DESIGNED BY	11/10/74	DESIGNED BY	11/10/74
CHECKED BY	11/10/74	CHECKED BY	11/10/74
APPROVED BY	11/10/74	APPROVED BY	11/10/74
DATE	11/10/74	DATE	11/10/74

3055 BOWERS AVE SANTA CLARA CALIF 95051	intel
PRINTED WIRING ASSEMBLY FRONT PANEL CONTROL	
D 410	1000343

REVISIONS			
NO.	DESCRIPTION	SIGNATURE AND DATE	BY
1	ENJ RELEASE	LL	7/11/70
A	DEED RELEASE	LL	7/11/70
B	SEE ECO# 00260-1	LL	7/11/70



NOTE: ON J1  
PINS 1-97(ODD ONLY) GO TO GND.

- NOTES: UNLESS OTHERWISE SPECIFIED;
- ARTWORK REV LTR IS 'B'.
  - RESISTANCE IS IN OHMS,  $\frac{1}{4}W$ , 10%.
  - CAPACITANCE IS IN MICRO-FARADS.
  - THE FOLLING ARE CONN BETWEEN +5V & GND: C1-13, 15-27, 31-35, 37, 39-49, 53-56.
  - 1 RPI-RPS, RP7 ARE 15W.

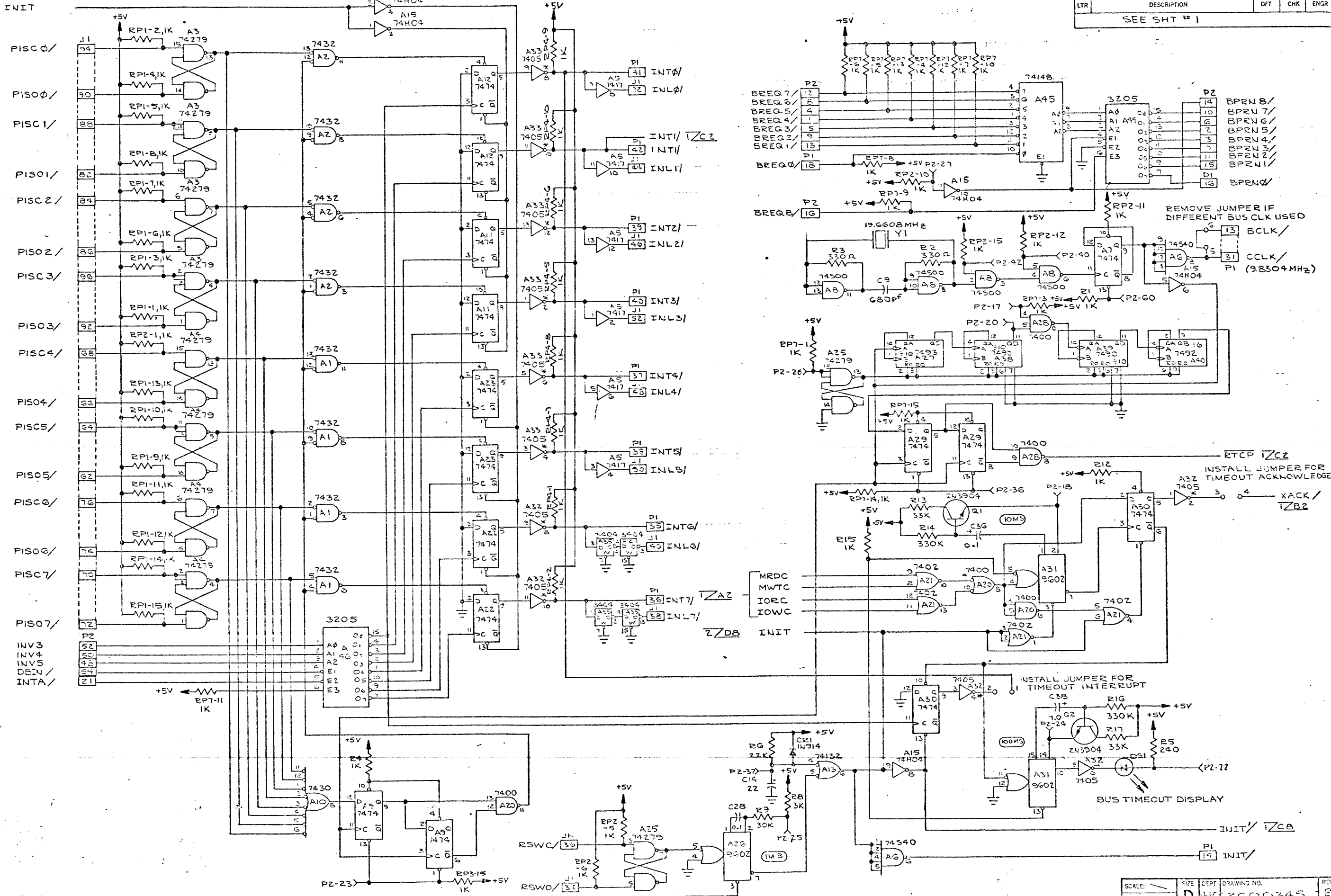
REF DESIG	
LAST USED	NOT USED
A46	
EP7	
Y1	
Q2	
DS1	
CR2	
R26	
C56	

SPARES		
REF DES	TYPE	QTY
A24	8098	1
A26	7400	1
A18	74125	1
A13	74132	1

QUANTITY PER DASH NO.		PARTS LIST	
SCALE:	SIGNATURE:	DATE:	DESCRIPTION:
TOL: 2 PLC 3 PLC ANGLE	DRN BY: [Signature]		3055 EDWERS AVE. SANTA CLARA, CALIF. 95051
MATERIAL:	CHK BY: [Signature]		
FINISH:	APP BY: [Signature]		
1000243 INT.MOS	AUTH BY: S. HALL		
NEXT ASSY:	CODE:	SHEET 1 OF 2	
USED ON:			
		REV: D	410 2000345

REVISIONS			
LTR	DESCRIPTION	DFT	CHK ENGR
	SEE SHT # 1		

ZZB4 INIT



ZZB2 PLUP

SCALE: 1/8"	SIZE: D	DEPT: HIC	DRAWING NO: 2000345	REV: 2
SHEET: 1 OF 2				

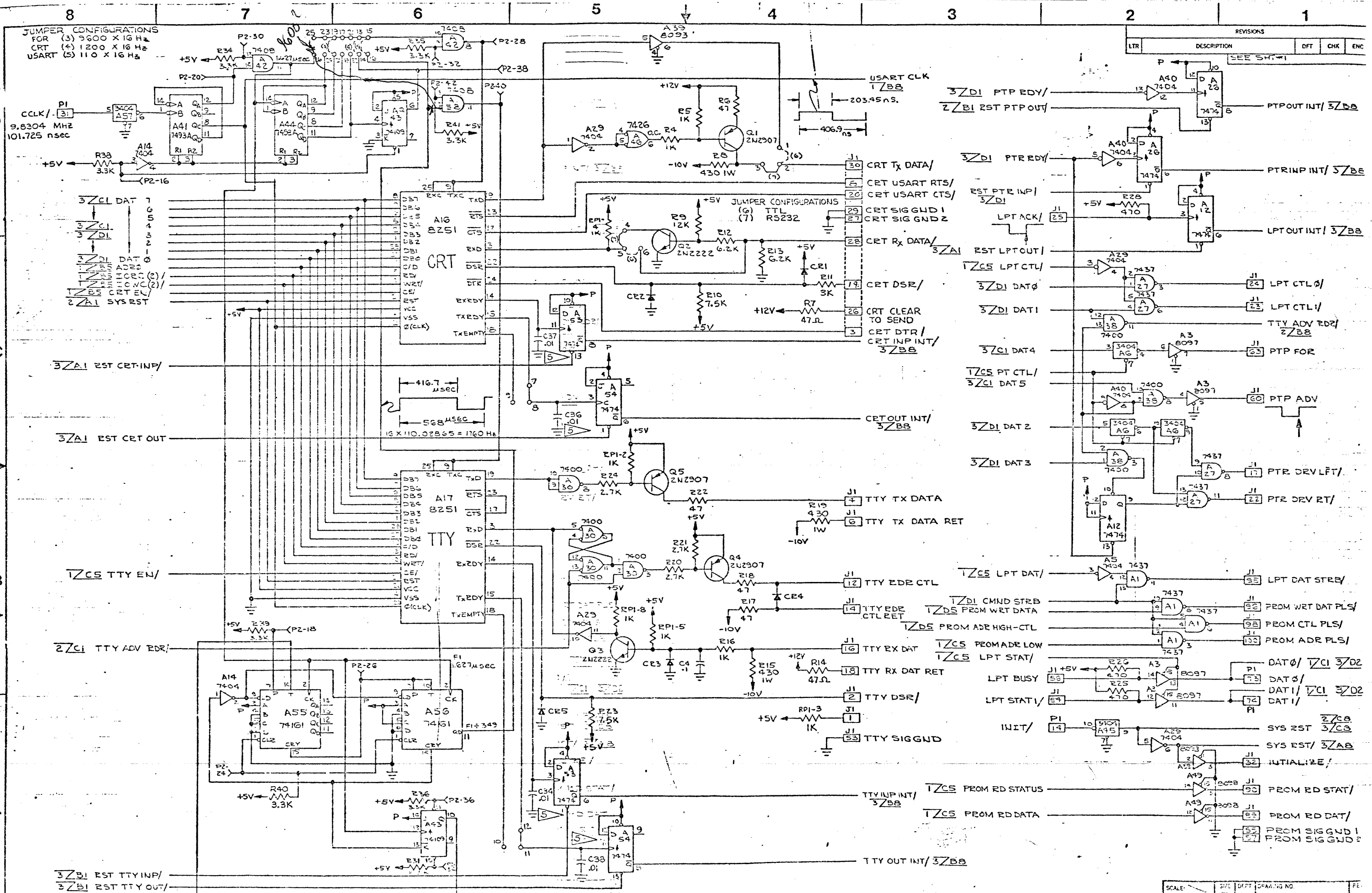






JUMPER CONFIGURATIONS  
 FOR (3) 9600 X 16 Hz  
 CRT (4) 1200 X 16 Hz  
 USART (5) 110 X 16 Hz

REVISIONS			
LTR	DESCRIPTION	DFT	CHK
	SEE SH-1		







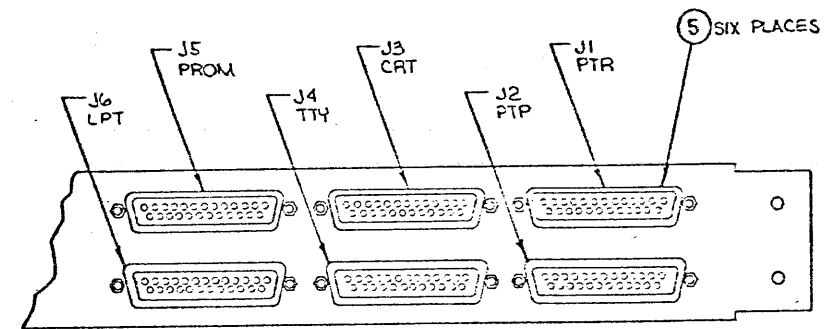
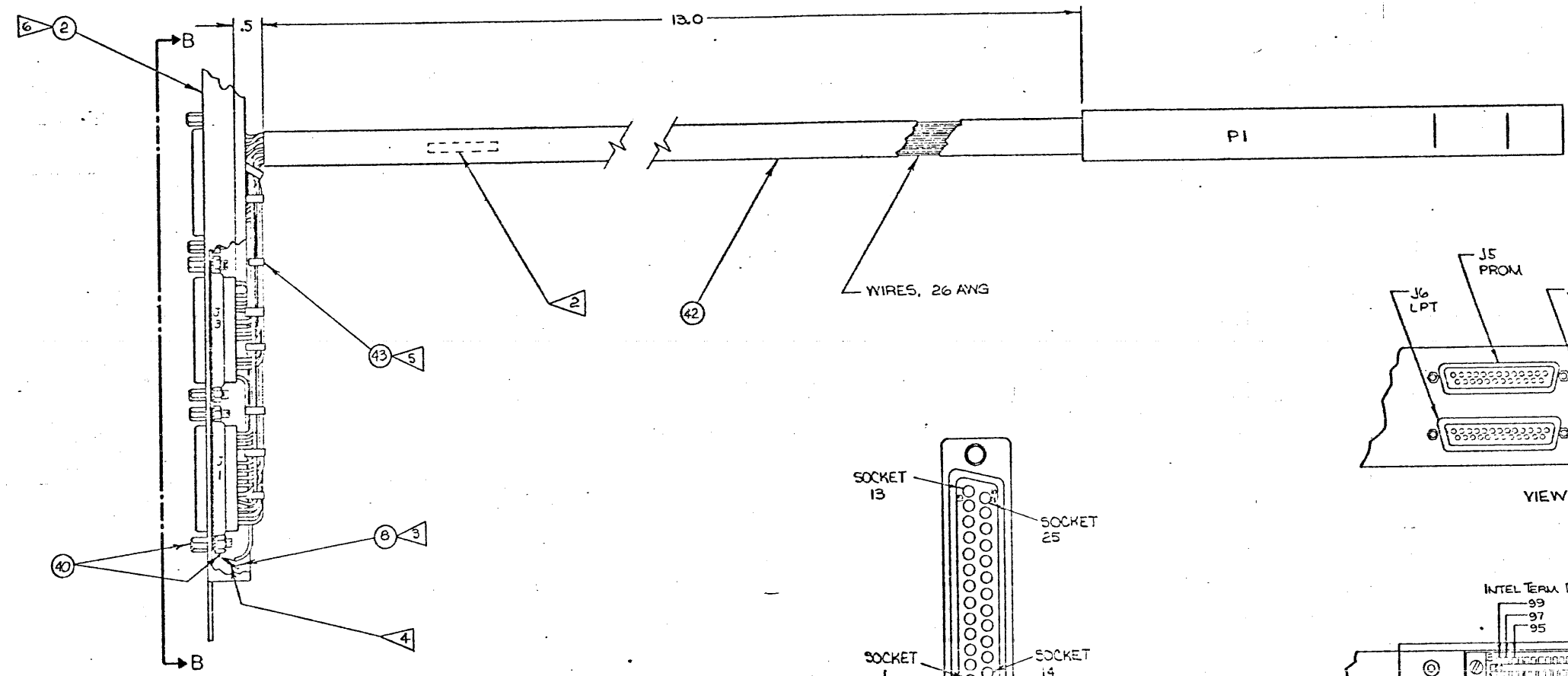
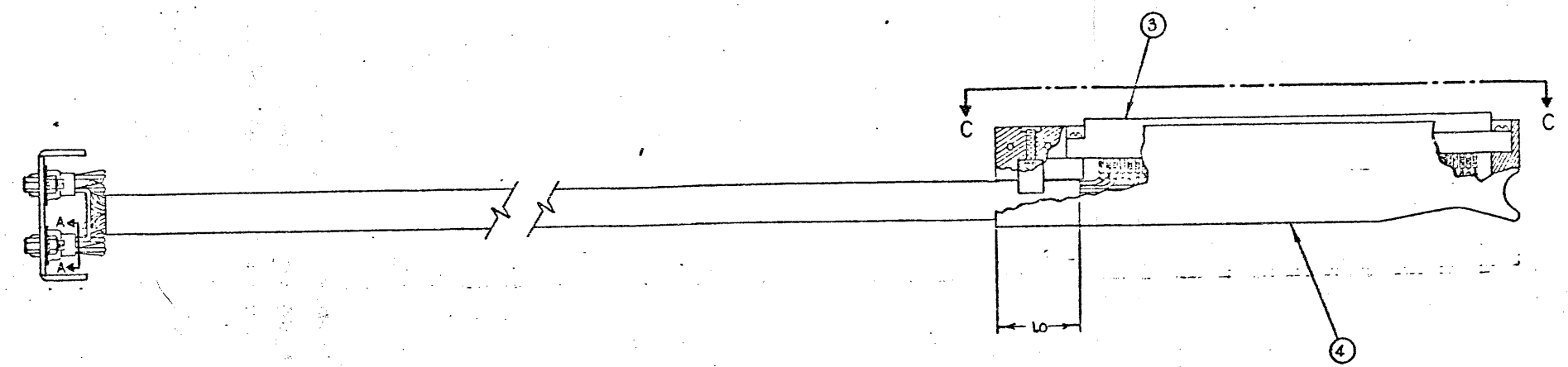
SECTION 2

HARNESS AND CABLE ASSEMBLIES

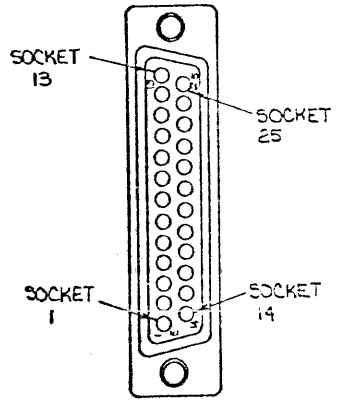
4000376 }  
2000377 } - MONITOR HARNESS

4000415 - TELETYPE CABLE ASSEMBLY

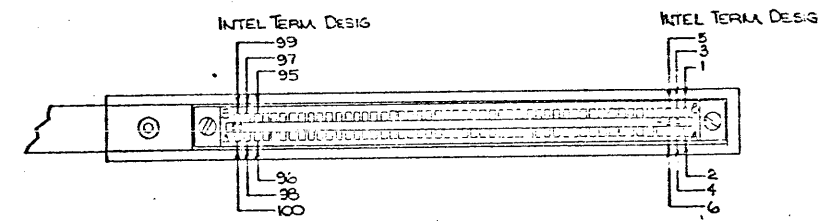
REVISIONS		
LTR	DESCRIPTION	SIGNATURE AND DATE
1	ENG. RELEASE	
A	PROD RELEASE	
B	SEE ECD 00222-2 AND DOES NOT AFFECT	
C	SEE ECD 00413-4	
C1	ADDED N/A-USED ON	



VIEW B-B (SCALE 1/1)



VIEW A-A (SCALE: 2/1) (TYP OF CONN J1-36)



VIEW C-C (SCALE: 1/1)

- NOTES:  
UNLESS OTHERWISE SPECIFIED,
1. ASSY NO IS 4000376-01.
  2. MARK ASSY NO & REV LETTER IN INK APPROXIMATELY WHERE SHOWN.
  3. INSTALL TERM LUGS BETWEEN NUT AND WASHER OF SCREW ASSY (ITEM 40) AS SHOWN.
  4. STRIP BACK ENDS OF WIRES 17, 39, 39, 52, 63, & 118 (SEE WIRE LEAD LIST), APPROX. 1/4" & SOLDER TO TERM LUGS (ITEM 8) AS SHOWN.
  5. INSTALL TIE WRAPS AS NEEDED APPROX WHERE SHOWN.
  6. ONLY PARTIAL LENGTH OF BULKHEAD SHOWN.

QUANTITY PER DASH NO.	ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: FULL		SIGNATURE	DATE
TOL: 2 PLC	3 PLC	ANGLE	ORN BY
MATERIAL: SEE P.L.		CHK BY	TITLE
FINISH:		OFF APPD	DATE
NEXT ASSY USED ON		ENGR APPD	DATE
		AUTH BY	DATE
		CCDE:	SHEET 1 OF 1
4000853 1/28/81 4000442 1/28/81			3265 BOWERS AVE. SANTA CLARA CALIF. 95051
MONITOR HARNESS ASSEMBLY			D 40 4000376

REVISIONS				
LTR	DESCRIPTION	DATE	SIGNATURE AND DE	BY
1	ENG. RELEASE			
A	PROD RELEASE			
B	SEE ECO 00290			
C	SEE ECO 00323-1			
D	SEE ECO 00413-2			

MONITOR MODULE  
ASSY 1000351

- J1
- 1 PTR DATA 0/ 71
- 2 PTR DATA 1/ 73
- 3 PTR DATA 2/ 69
- 4 PTR DATA 3/ 65
- 5 PTR DATA 4/ 67
- 6 PTR DATA 5/ 68
- 7 PTR DATA 6/ 65
- 8 PTR DATA 7/ 64
- 9 PTR READY/ 82
- 10 PTR SIG GND 1 79
- 11 PTR SIG GND 2 77
- 12 PTR SIG GND 3 75
- 13 PTR SYS RDY/ 60
- 14 PTR DRY RT/ 22
- 15 PTR DRY LFT/ 17
- 16 PTR SIG GND 4 73

MONITOR HARNESS

- P1
- 1 71
- 2 70
- 3 69
- 4 68
- 5 67
- 6 66
- 7 65
- 8 64
- 9 63
- 10 62
- 11 61
- 12 60
- 13 59
- 14 58
- 15 57
- 16 56
- 17 55
- 18 54
- 19 53
- 20 52
- 21 51
- 22 50
- 23 49
- 24 48
- 25 47

PAPER TAPE READER  
CABLE ASSY 4000430

- P1
- 1 DATA TRACK 1
- 2 DATA TRACK 2
- 3 DATA TRACK 3
- 4 DATA TRACK 4
- 5 DATA TRACK 5
- 6 DATA TRACK 6
- 7 DATA TRACK 7
- 8 DATA TRACK 8
- 9 DATA READY/
- 10 GND
- 11 GND
- 12 GND
- 13 GND
- 14 SYSTEM READY/
- 15 DR
- 16 DL
- 17 GND
- 18 CHASIS GND

MONITOR MODULE  
ASSY 1000351

- J4
- 13 CUR LP TX DATA +
- 14 CUR LP TX DATA -
- 15 CUR LP RX DATA +
- 16 CUR LP RX DATA -
- 17 CUR LP ADR CTL +
- 18 CUR LP RDR CTL -
- 19 PROTEC GND
- 20 (UNASSIGNED)
- 21 SIGNAL GND

MONITOR HARNESS

- P1
- 1 13
- 2 14
- 3 15
- 4 16
- 5 17
- 6 18
- 7 19
- 8 20
- 9 21
- 10 19
- 11 18
- 12 17
- 13 16
- 14 15
- 15 14
- 16 13
- 17 12
- 18 11
- 19 10
- 20 9
- 21 8
- 22 7
- 23 6
- 24 5
- 25 4
- 26 3
- 27 2
- 28 1

TELETYPE  
CABLE ASSY 4000415

- P1
- 1 CUR LP TX DATA +
- 2 CUR LP TX DATA -
- 3 CUR LP RX DATA +
- 4 CUR LP RX DATA -
- 5 CUR LP ADR CTL +
- 6 CUR LP RDR CTL -
- 7 PROTEC GND
- 8 (UNASSIGNED)
- 9 SIGNAL GND

- J2
- 1 PTP DAT 0/ 38
- 2 PTP DAT 1/ 39
- 3 PTP DAT 2/ 36
- 4 PTP DAT 3/ 37
- 5 PTP DAT 4/ 35
- 6 PTP DAT 5/ 33
- 7 PTP DAT 6/ 34
- 8 PTP DAT 7/ 3
- 9 PTP FOR 63
- 10 PTP ADV 60
- 11 PTP READY 65
- 12 PTP SYS RDY/ 72
- 13 PTP SIG GND 1 63
- 14 TAPE CHAD ERR/ 14
- 15 TAPE LOW 2
- 16 PTP SIG GND 2 64
- 17 PTP SIG GND 3 61

PAPER TAPE PUNCH  
CABLE ASSY 4000418

- P1
- 1 DATA TRACK 1
- 2 DATA TRACK 2
- 3 DATA TRACK 3
- 4 DATA TRACK 4
- 5 DATA TRACK 5
- 6 DATA TRACK 6
- 7 DATA TRACK 7
- 8 DATA TRACK 8
- 9 DIRECTION
- 10 PUNCH COMMAND
- 11 PUNCH READY
- 12 SYSTEM READY
- 13 SIGNAL GND
- 14 TAPE CHAD ERR/
- 15 TAPE LOW
- 16 SIGNAL GND
- 17 SIGNAL GND
- 18 CHASSIS GND
- 19 CHASSIS GND
- 20 INPUT MODE SELECT
- 21 OUTPUT MODE SELECT

- J5
- 1 PROM DATA 0/ 85
- 2 PROM DATA 1/ 86
- 3 PROM DATA 2/ 87
- 4 PROM DATA 3/ 83
- 5 PROM DATA 4/ 84
- 6 PROM DATA 5/ 91
- 7 PROM DATA 6/ 92
- 8 PROM DATA 7/ 93
- 9 PROM RD DATA/ 89
- 10 PROM RD STAT/ 90
- 11 PROM RD ACK/ 10
- 12 PROM WRT DATA PLS/ 96
- 13 PROM CTL PLS/ 98
- 14 PROM ADR PLS/ 100

PROM  
CABLE ASSY 4000416

- P1
- 1 PROM DATA 0/ 12
- 2 PROM DATA 1/ 11
- 3 PROM DATA 2/ 10
- 4 PROM DATA 3/ 9
- 5 PROM DATA 4/ 8
- 6 PROM DATA 5/ 7
- 7 PROM DATA 6/ 6
- 8 PROM DATA 7/ 5
- 9 PROM RD DATA/ 4
- 10 PROM RD STAT/ 3
- 11 PROM RD ACK/ 2
- 12 PROM WRT DATA PLS/ 25
- 13 PROM CTL PLS/ 24
- 14 PROM ADR PLS/ 23
- 15 OUT DATA 7/ 15
- 16 OUT DATA 6/ 16
- 17 OUT DATA 5/ 17
- 18 OUT DATA 4/ 18
- 19 OUT DATA 3/ 19
- 20 OUT DATA 2/ 20
- 21 OUT DATA 1/ 21
- 22 OUT DATA 0/ 22
- 23 INITIALIZE/ 14
- 24 PROM SIG GND 1 13
- 25 PROM SIG GND 2 7

- J3
- 1 CRT R x DATA / 29
- 2 CRT SIG GND 1 29
- 3 CRT SIG GND 2 27
- 4 CRT Tx DATA/ 30
- 5 CRT CLEAR TO SEND 26
- 6 CRT DSR/ 19
- 7 CRT DTR/ 6
- 8 CRT USART RTS/ 8
- 9 CRT USART CTS/ 20

CRT CONSOLE  
CABLE ASSY 4000417

- P1 RS232
- 1 BA TRANSMITTED DATA
- 2 AB SIGNAL GND
- 3 CF DATA CARRIER DETECTOR
- 4 CC DATA SET READY
- 5 CB RECEIVED DATA
- 6 CB CLEAR TO SEND
- 7 CD
- 8 AA PROTECTIVE GND

- J6
- 1 OUT DATA 0/ 56
- 2 OUT DATA 1/ 42
- 3 OUT DATA 2 RET 52
- 4 OUT DATA 1 RET 51
- 5 OUT DATA 2/ 40
- 6 OUT DATA 3/ 53
- 7 OUT DATA 2 RET 45
- 8 OUT DATA 3 RET 51
- 9 OUT DATA 4/ 50
- 10 OUT DATA 5/ 44
- 11 OUT DATA 4 RET 43
- 12 OUT DATA 5 RET 43
- 13 OUT DATA 6/ 48
- 14 OUT DATA 7/ 42
- 15 OUT DATA 6 RET 47
- 16 OUT DATA 7 RET 44
- 17 LPT DATA STROBE/ 35
- 18 LPT ACK/ 31
- 19 LPT BUSY 30
- 20 LPT CTL 0/ 24
- 21 LPT CTL 1/ 23
- 22 LPT STAT 1/ 54
- 23 LPT GND 97

LINE PRINTER  
CABLE ASSY 4000413

- P1
- 1 DATA 1
- 2 DATA 2
- 3 DATA 1, DATA 2 RET'S
- 4 DATA 3
- 5 DATA 4
- 6 DATA 3, DATA 4 RET'S
- 7 DATA 5
- 8 DATA 6
- 9 DATA 5, DATA 6 RET'S
- 10 DATA 7
- 11 DATA 8
- 12 DATA 7, DATA 8 RET'S
- 13 DATA STROBE
- 14 ACKNOWLEDGE
- 15 BUSY
- 16 NO CONN
- 17 NO CONN
- 18 SELECT
- 19 CHASSIS GND
- 20 ± 0V

QUANTITY PER CASH NO	ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NONE	SIGNATURE	DATE	
TOL = 2 PLC 3 PLC 4 PLC	DRN BY	DATE	
MATERIAL:	CHK BY	DATE	
4000376	REV 200	FIN. NO.	
NEXT ASSY	USED ON	COOD	SHEET

SCALE	SIGNATURE	DATE	TITLE	DEPT	OFFICE	STATION NO.
NONE	J. H. H. H.		SCHEMATIC			
			MONITOR HARNESS			

REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK
1	ENGR RELEASE		
A	PRODUCTION RELEASE		
B	SEE ECO# 00722		

MONITOR HARNESS  
ASSY 2000377

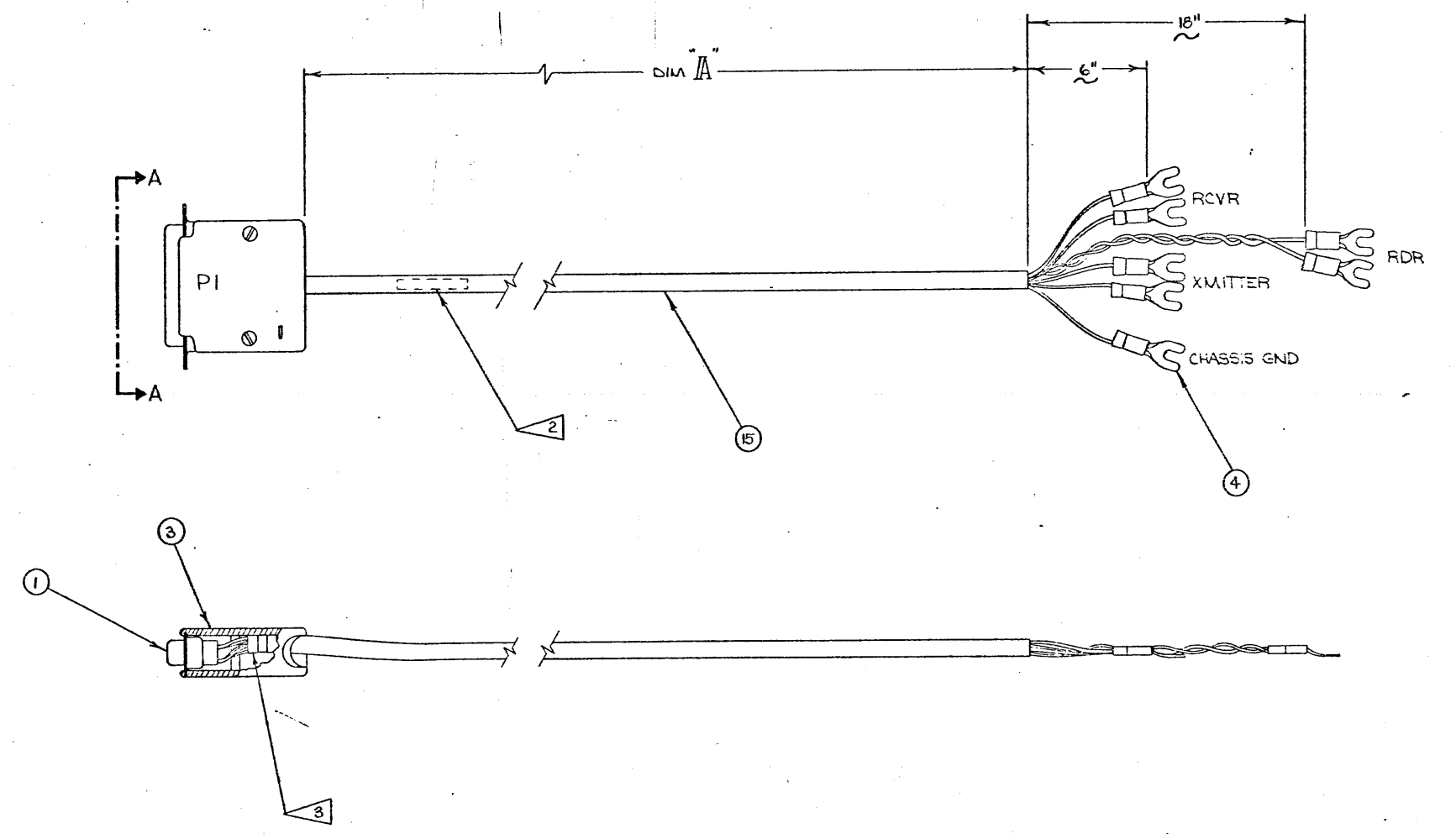
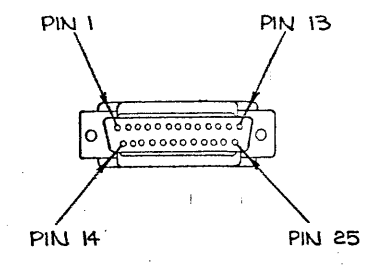
J4	
13	TTY TX DATA
25	TTY TX DATA RET
12	TTY RX DATA
24	TTY RX DATA RET
16	TTY RDR CTL
21	TTY RDR CTL RET
1	CHASSIS GND
14	TTY DSR/
7	TTY SIG GND

TELETYPE  
CABLE ASSY

P1	
13	BRN
25	RED
12	GRN
24	YEL
16	GRN
21	WHT
1	BLK
14	BLU
7	

TELETYPE

7	TTY RCVR	} PRINTER
6	TTY RCVR	
3	TTY XMITTER	} KEY BOARD
4	TTY XMITTER	
	TTY RDR	} RDR CTL
	TTY RDR	
	CHASSIS GND	



- NOTES:  
UNLESS OTHERWISE SPECIFIED,
1. ASSY NO IS 4000415-XX.
  2. MARK ASSY NO & REV LTR IN INK APPROX WHERE SHOWN.
  3. BRING INSULATION INSIDE HOOD & BEYOND TIE WRAP APPROX 1/8" AS SHOWN.

VERSION	DIM A
-01	5 FT
-02	10 FT

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 1/1		SIGNATURE		DATE
TOL. ±	2 PLC .02	3 PLC .010	ANGLE	DRN BY S. HEU
MATERIAL: SEE P.L.		CHK BY		DATE
FINISH:		DFT APPD		DATE
AUTH BY S. Heu		ENGR APPD		DATE
4000320	INT MDS.	CODE:	SHEET 1	REV B
NEXT ASSY USED ON		SIZE D		DEPT 410
		DRAWING NO. 4000415		REV B

SOCK - P112

SECTION 3

MAJOR ASSEMBLIES

- 4000370 - FRONT PANEL
- 4000374 - FRONT PANEL CABLE & DISPLAY
- 4000389 - REAR PANEL ASSEMBLY
- 3000390 - REAR PANEL
- 4000442 - CHASSIS

8

7

6

5

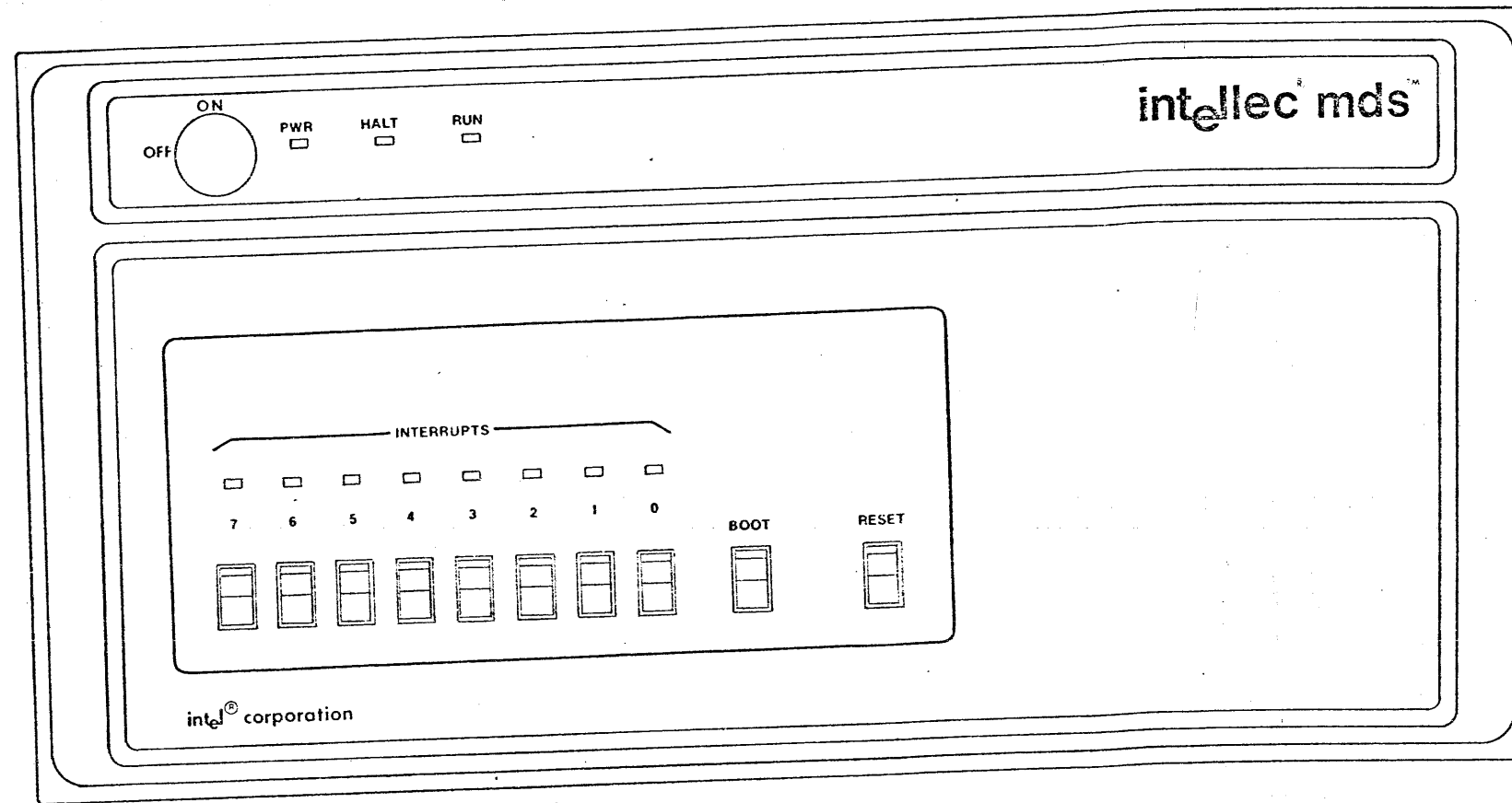
4

3

2

1

REVISIONS		SIGNATURE AND DATE	
REV	DESCRIPTION	BY	DATE
A	PZDD RELEASE	MAA	12/1/74



NOTES: UNLESS OTHERWISE SPECIFIED

1. ASSEMBLY NUMBER IS 4000370-01.
2. MARK ASSEMBLY NUMBER WITH PREFIX 'ASSY'.
3. PRIOR TO INSTALLING ITEM #4 CLEAN AND DEGREASE MOUNTING SURFACE OF ITEM 2.

QUANTITY	APP. DASH. NO.	ITEM NO.	PART NUMBER	DESCRIPTION
SCALE	1/1	SIGNATURE	DATE	3055 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL.	0.010 0.005 0.002 0.001	CHK BY	DATE	
MATERIAL	SEE D/L	CHK BY	DATE	FRONT PANEL ASSEMBLY
FINISH		CHK BY	DATE	
1000142 INT. MDS		APPROV.	DATE	SIZE: 4 1/2" DRAWING NO: 4000370
		DATE	DATE	1A

5

4

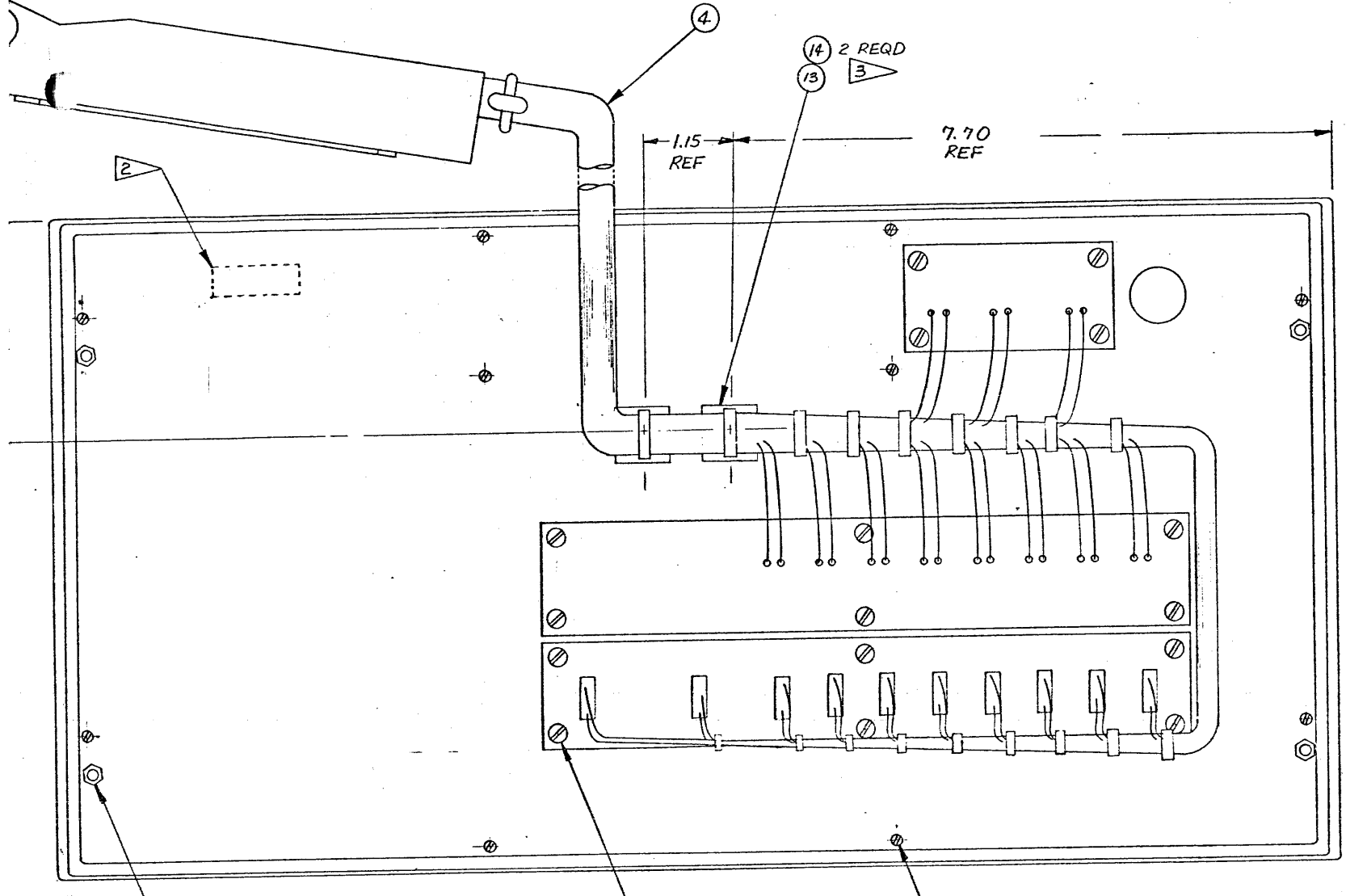
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2

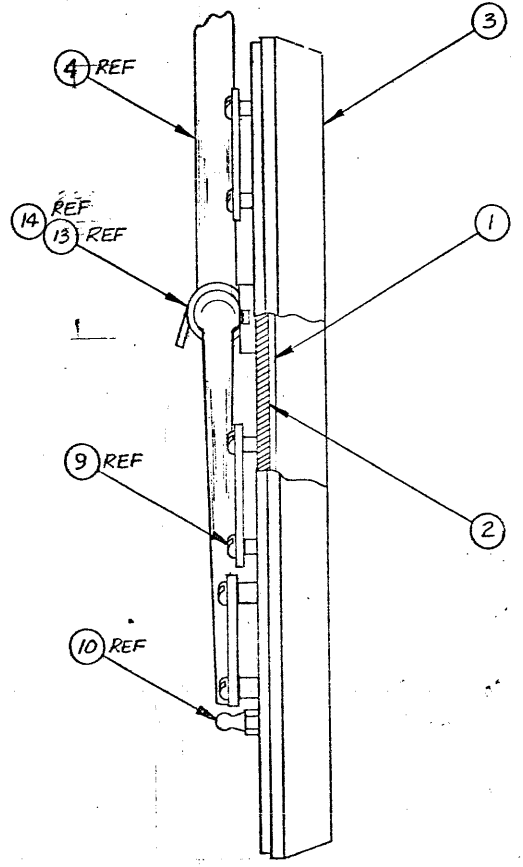
1

7 6 5 4 3 2 1

REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
A	SEE SHEET 1			



D  
C  
B  
A

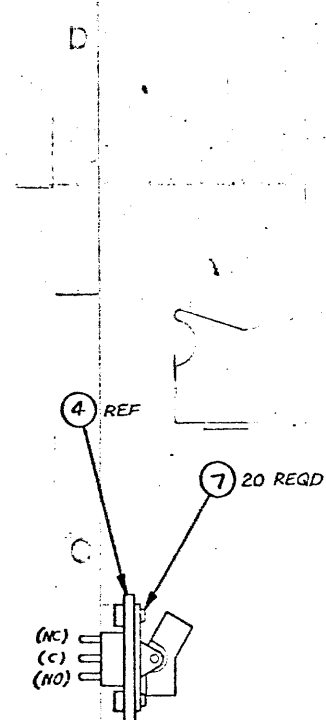
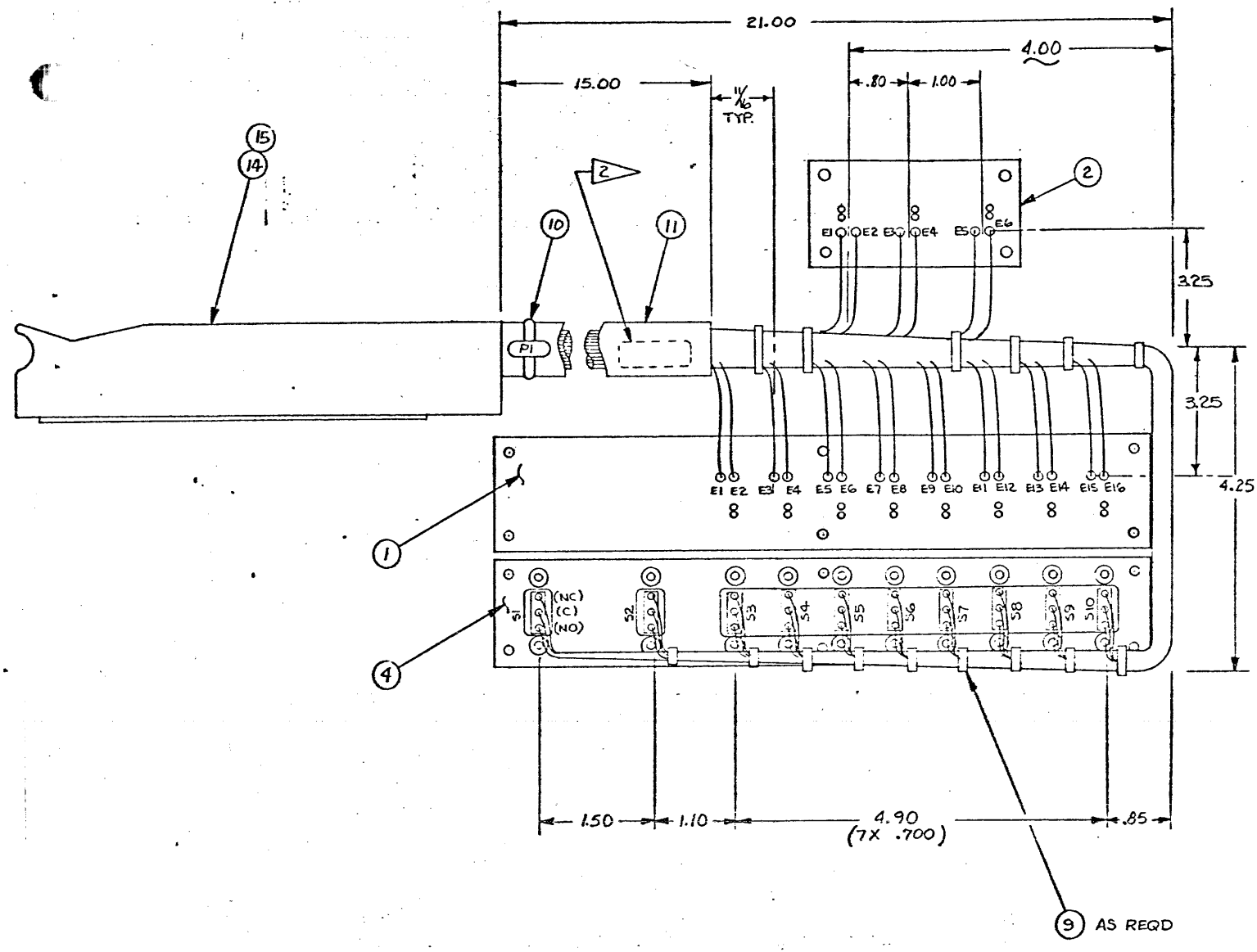


7 6 5 4 3 2 1

SCALE: 1:1	SIZE: D	DEPT: 410	DRAWING NO.: 4000370	REV: 1
SHEET 2 OF 2				

© 1977 1778 1

REVISIONS		
LTR	DESCRIPTION	SIGNATURE AND DS
1	ENGR REL	
A	PROD. RELEASE	
B	PARTS LIST CHANGE ONLY (ECO 00247)	
C	ECO 00258	
D	ECO #00472-3	
D	ADDED N/A - USED CU	

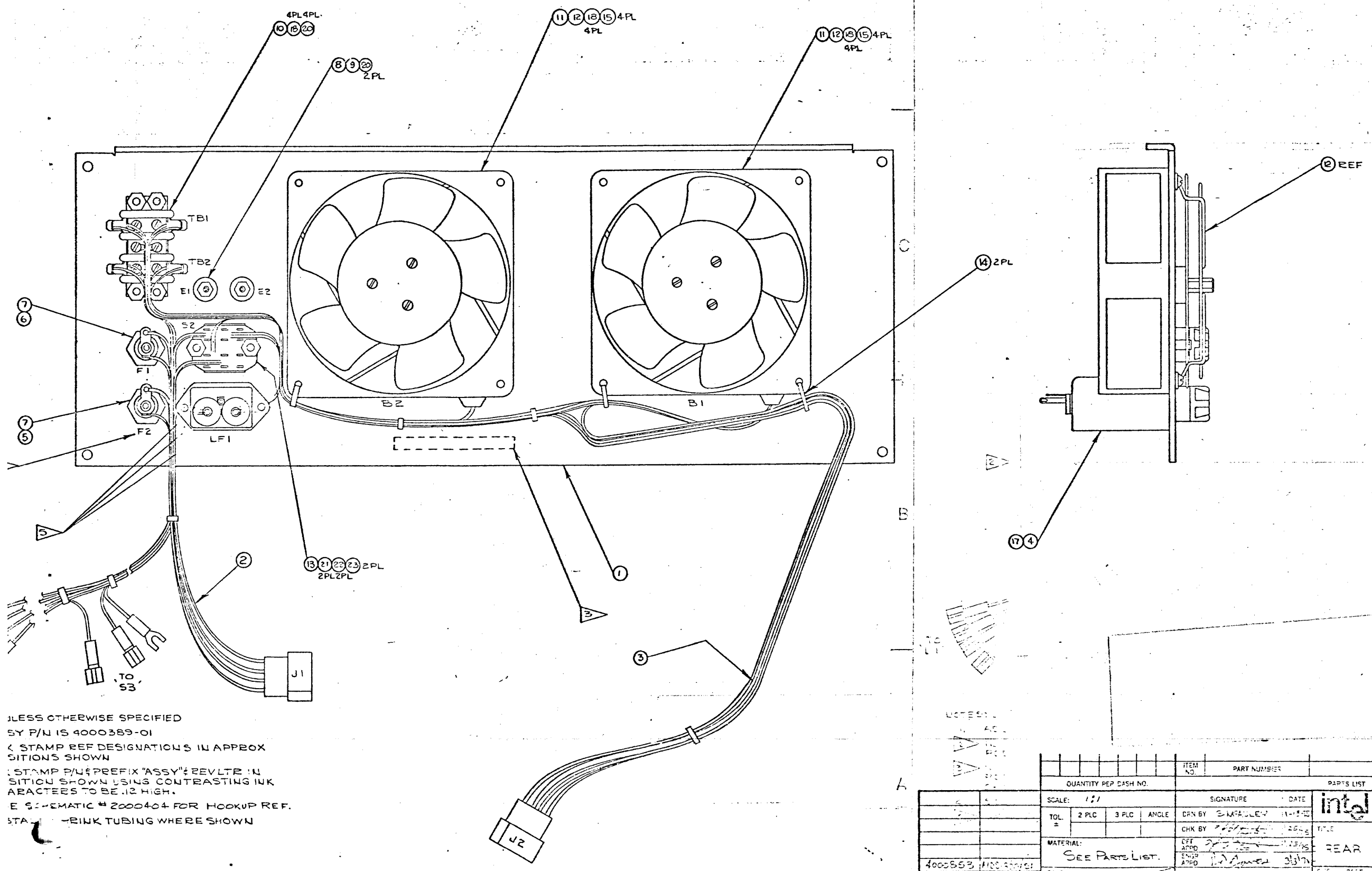


- NOTE: UNLESS OTHERWISE SPECIFIED
- PART NUMBER IS 4000374-01.
  - MARK P/N AND REV LETTER ON ITEM 11 WHERE SHOWN.
  - WORKMANSHIP TO CONFORM TO MCS STD - QAWS - 006.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: NOT TO SCALE		SIGNATURE		DATE
TOL	2 PLC	3 PLC	ANGLE	CHK BY L. FRESE
	1/2			DATE
MATERIAL:		DEF APPD		DATE
SEE PARTS LIST		ENGR APPD		DATE
FINISH:		AUTH BY S. HILL		DATE
NEXT ASSY		USED ON		CODE:
		SHEET 1 OF 1		SIZE DEPT DRAWING NO.
				D 410 4000374



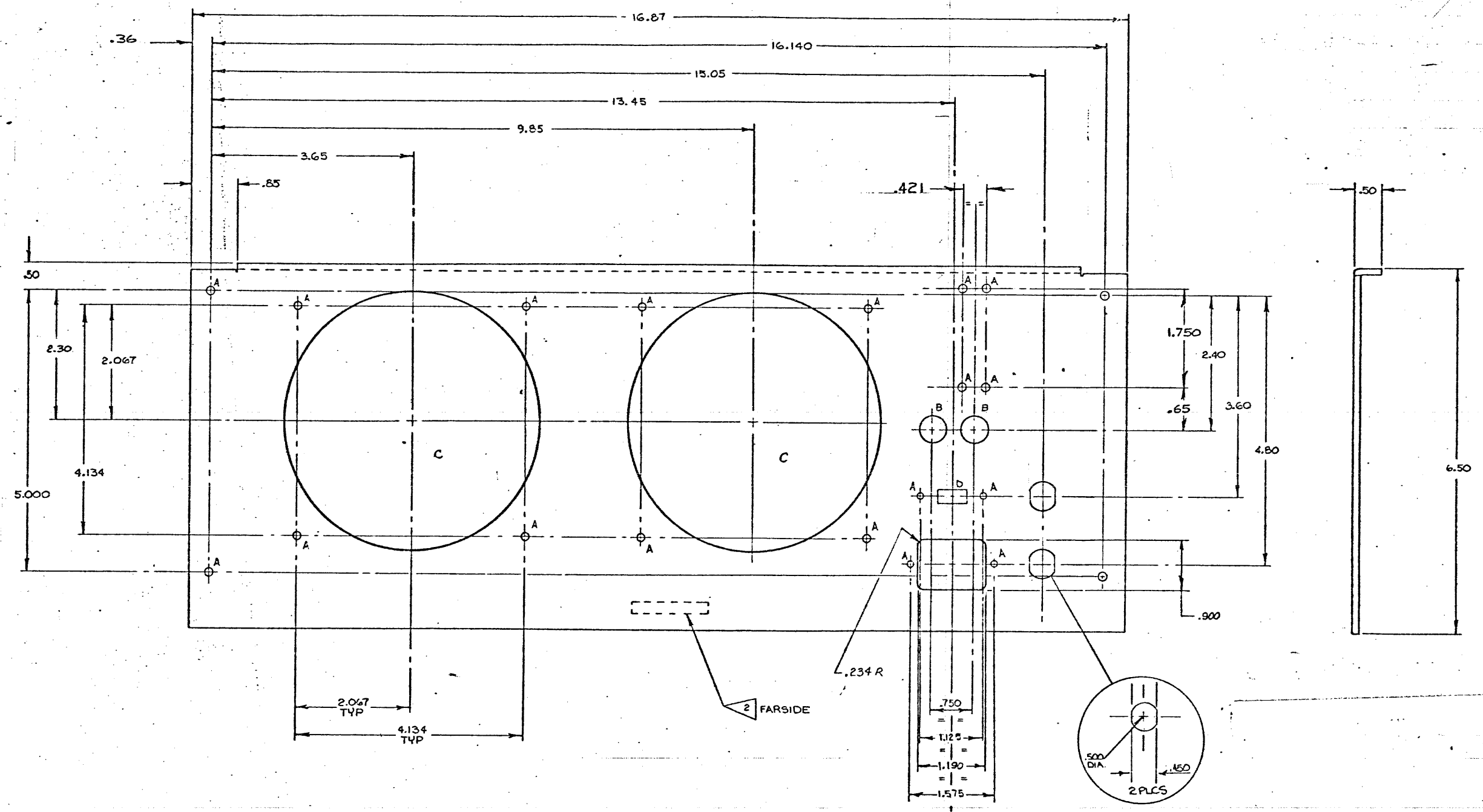
REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK
I	ENG. RELEASE		
A	PROD RELEASE		
B	SEE ECO 00300-2	CLB	8-29-71
C	ECO 00372		
D	SEE ECO 00404		
D1	ADDED N/A-USED ON		



UNLESS OTHERWISE SPECIFIED  
 BY P/N IS 4000389-01  
 STAMP REF DESIGNATIONS IN APPROX POSITIONS SHOWN  
 STAMP P/N PREFIX "ASSY" REV LTR IN POSITION SHOWN USING CONTRASTING INK CHARACTERS TO BE .12 HIGH.  
 SEE SCHEMATIC # 2000404 FOR HOOKUP REF.  
 STAMP TUBING WHERE SHOWN

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 1/1	SIGNATURE		DATE	<b>intel</b> 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL: 2 PLC 3 PLC ANGLE	DRN BY: S.M. GALEW		11-1-70	
MATERIAL: SEE PARTS LIST.		CHK BY: [Signature]	DATE: 11-25-70	TITLE: REAR PANEL ASSEMBLY
4000389 (MDS 800)	DFT: [Signature]		DATE: 11-25-70	FILE: DEPT: DRAWING NO.
4000442 (MDS 800)	ENGR: [Signature]		DATE: 11-25-70	D: 410 4000389
NEXT ASSY: USED ON:	FINISH:		AUTH BY: S. [Signature]	DATE: 11-25-70
		CODE: SHEET OF 1		

REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK
1	ENG. RELEASE		
2	POSITION OF TEEN BLOCK HOLES CHANGED ZONE 3C		
A	PRODUCTION RELEASE		
B	SEE ELO 00300-1	CLB	3-28-51
C	SEE EDO # 00487		



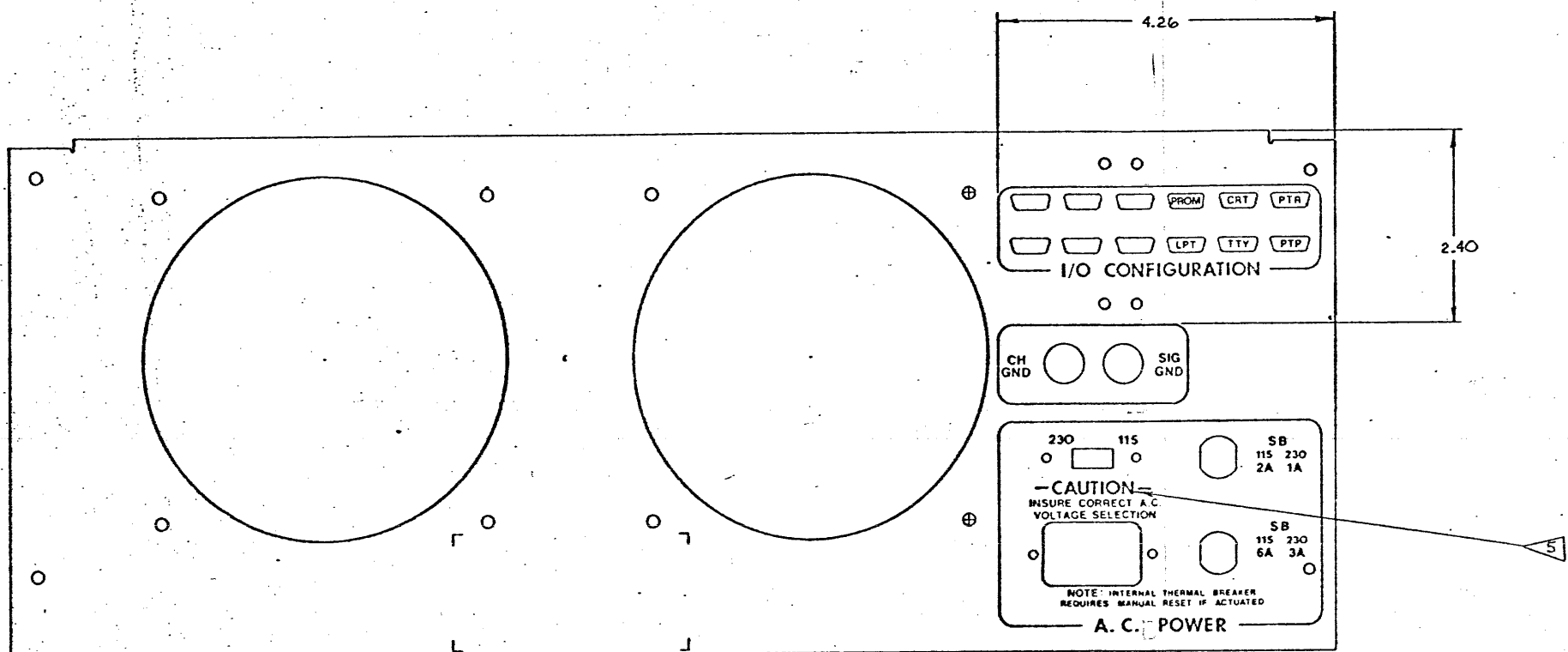
NOTES: UNLESS OTHERWISE SPECIFIED,

1. P/N IS 3000390-01.
2. INK STAMP P/N & REV LTR IN POSITION SHOWN USING CONTRASTING INK, CHARACTERS TO BE .12 HIGH.
3. BEND RADIUS TO BE MINIMUM.
4. SILKSCREEN ARTWORK REV 'B' AVAILABLE FROM MCS DRAFTING.
5. SILKSCREEN CHARACTERS TO BE NITRO BLUE WITH THE EXCEPTION OF THE WORD "CAUTION" WHICH WILL BE RED.

HOLE LEGEND.	
SYM	DESCRIPTION
A	.156 DIA
B	.500 DIA
C	4.587 DIA
D	CUT OUT .50 x .25

QUANTITY PER DASH NO		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 1:1		SIGNATURE		DATE
TOL: 2 PLC .02, 3 PLC .010, ANGLE 0°15'		DRN BY: E. W. JULEN		1-10-51
MATERIAL: 3052-H92 ALUM .12 THK		CHK BY: L. FRESE		1-18-51
FINISH: ALODINE, CLEAR		DFT APPD: [Signature]		1-18-51
4000339 INT. M.D.S.		ENGR APPD: [Signature]		1-17-51
NEXT ASSY: USED ON		AUTH BY: S. Hall		1-14-51
		CODE: SHEET 1 OF 2		
PARTS LIST				INTEL 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
REAR PANEL				TITLE
SIZE: D	DEPT: 410	DRAWING NO. 3000390		REV: 10

REV	DESCRIPTION	DATE	BY	CHK	EN
1	SEE SHEET ONE	12-19-75			

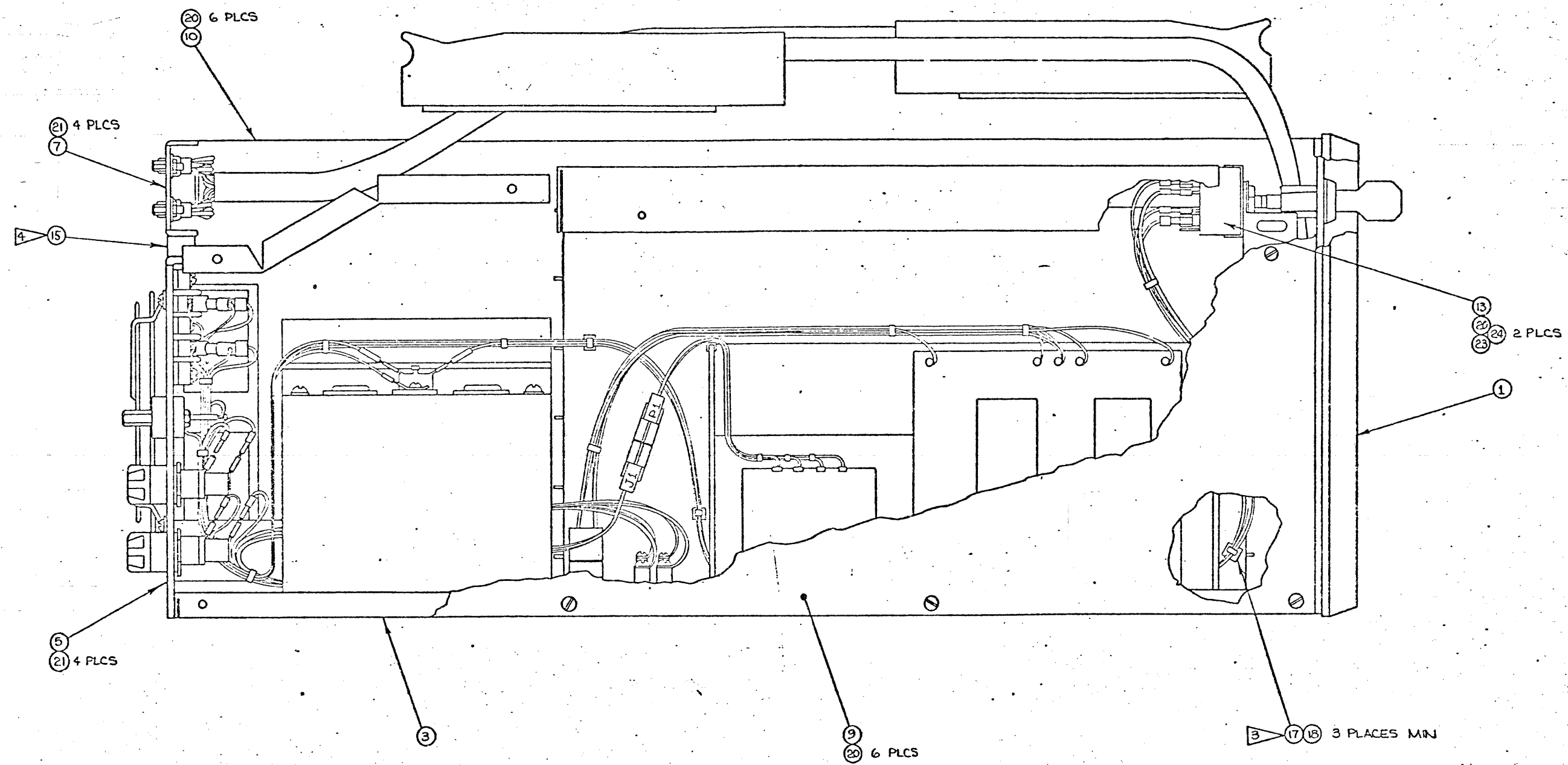


SCALE: 1/1	SIZE: D	DATE: 4.0	DRAWING NO.: 3000390
SHEET 2 OF 2		DATE: 12-19-75	

7                      6                      5                      4                      4                      3                      2                      1

8 7 6 5 4 3 2 1

REVISIONS		
LTR	DESCRIPTION	SIGNATURE AND DATE
1	ENG. RELEASE	[Signature] [Date]
A	PRODUCTION RELEASE	[Signature] [Date]



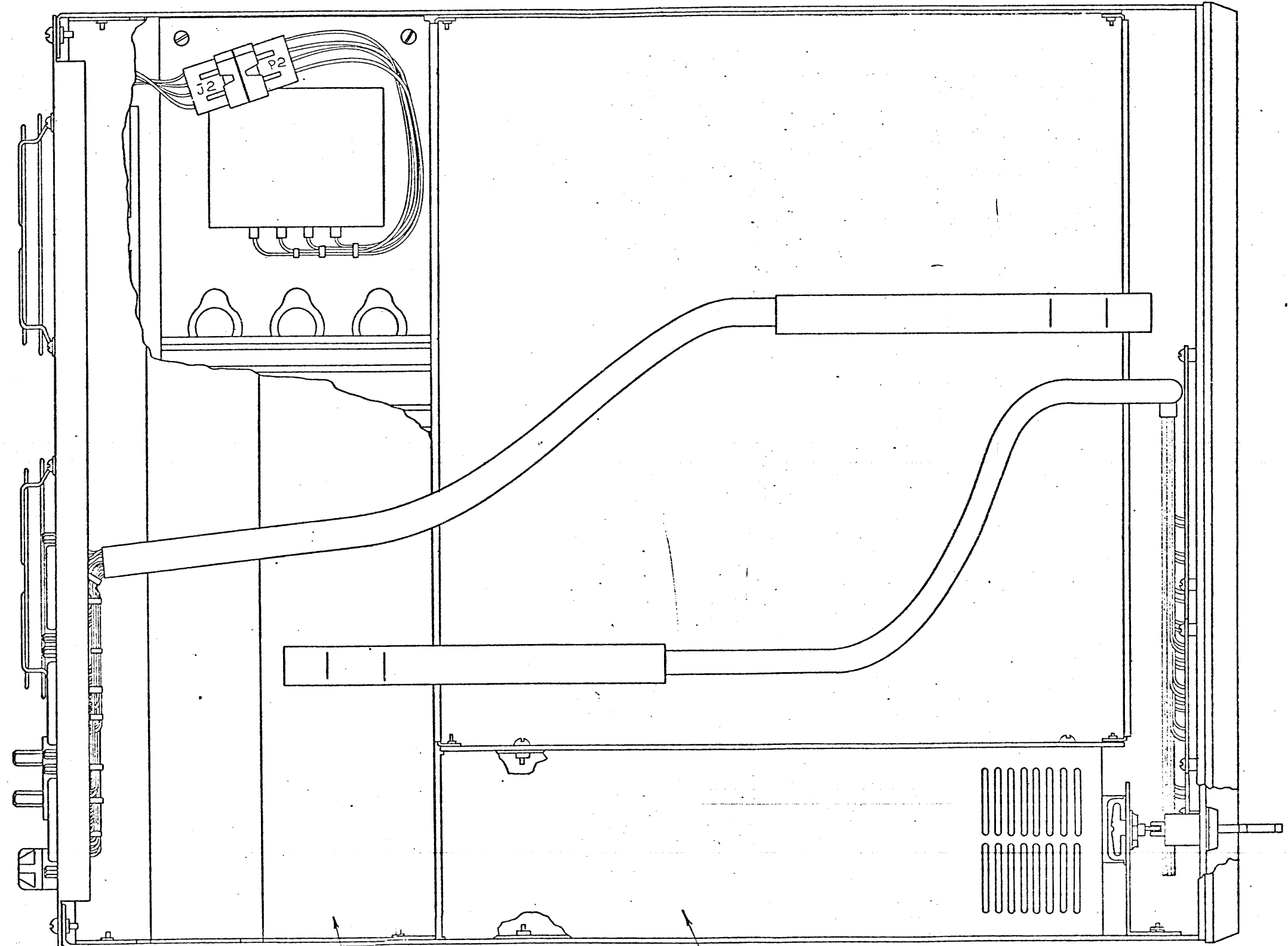
- NOTES: UNLESS OTHERWISE SPECIFIED
1. ASSY NO IS 4000442 -01.
  2. MARK ASSY NO AND REV LETTER IN INK ON ITEM 9 WHERE SHOWN USING CHARACTERS .12 HIGH.
  3. ATTACH CABLE TIE BRACKETS APPROX WHERE SHOWN.
  4. CLEAN SURFACE OF ITEM 5 BEFORE ATTACHING ITEM 15.
  5. WORKMANSHIP TO CONFORM TO MCS STD GAWS 006.

QUANTITY PER DASH NO	ITEM NO	PART NUMBER	DESCRIPTION
SCALE: 1:1			
TOL: 2 PLC 3 PLC ANGLE		CHK BY: [Signature]	DATE: [Date]
MATERIAL: SEE P.L.		SIGNATURE: [Signature] DATE: [Date]	
FINISH:		TITLE: CHASSIS ASSY	
4000320 INT NDS	4000320	4000320	4000320
NEXT ASSY: USFO ON	CODE: [Code]	SHEET 1 OF 2	REV: A

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

REVISIONS			
LTR	DESCRIPTION	DFT	CHK ENGR
-	SEE SHEET 1	SM 2-2-75	PKY



(12)(20) 4 PLCS  
 (19) 2 PLCS  
 (11)(22) 2 PLCS

8 7 6 5 4 3 2 1

SCALE: 1/1	SIZE: D	DEPT: 40	DRAWING NO.: 4000442	REV: A
SHEET 2 OF 2		© INTEL 1973		1

SECTION 4

SYSTEM POWER

4000379 - POWER SUPPLY (5V)

4000380 - POWER SUPPLY (-10 ± 12V)

2000404 - AC/DC POWER DISTRIBUTION

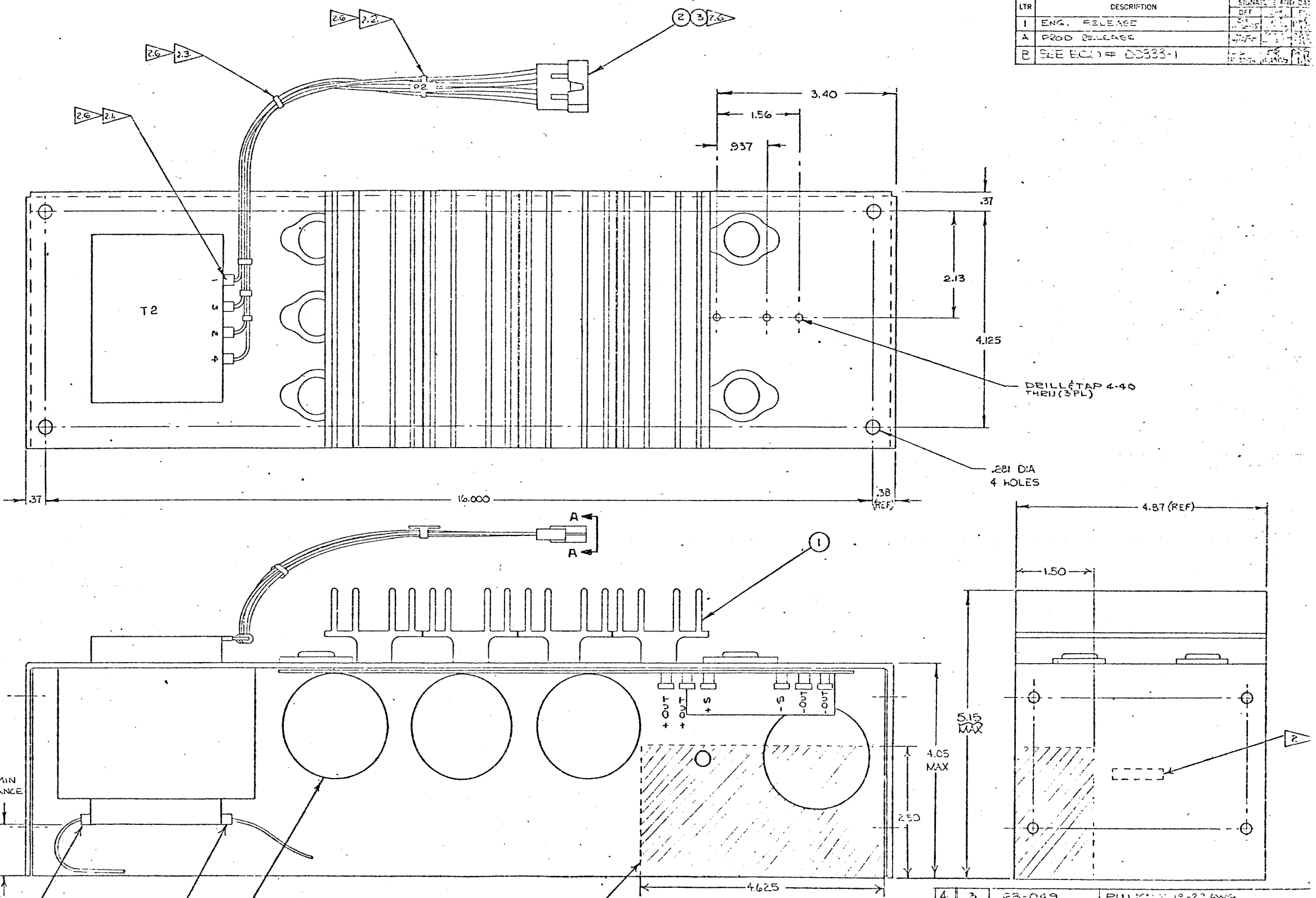
REVISIONS		
LTR	DESCRIPTION	SIGNATURE AND DATE
1	ENG. RELEASE	
A	PROD RELEASE	
B	SEE ECD# DD333-1	

1. ELECTRICAL SPECS:

- 1.1. AC INPUT:  
115-230 50-60HZ FIELD SELECTABLE.
- 1.2. DC OUTPUT:  
+5 VDC  
MAX LOAD 35A  
LINE REGULATION: ±0.01% FOR A ±10% INPUT VARIATION.  
LOAD REGULATION: ±0.02% FROM NO LOAD TO MAX LOAD.  
MAX RIPPLE: 10MV PP  
TRANSIENT RESPONSE: 50μ SEC MAX FOR A 50% LOAD CHANGE  
OVERVOLTAGE PROTECTION: 6.0 TO 6.3V  
REMOTE SENSING  
MINIMUM EFFICIENCY: 45%
- 1.3. ENVIRONMENT  
TEMPERATURE: FULL RATINGS APPLY IN MIN 75 CFM MOVING AIR AT 0-65°C.  
HUMIDITY: 90% MAX RELATIVE WITH NO CONDENSATION.  
WEIGHT: 25 LBS MAX
- 1.4. LIFE EXPECTANCY: 10 YEARS

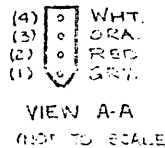
2. MECHANICAL SPECS:

- 2.1. INSTALL HEATSHRINK TUBING WHERE SHOWN.
- 2.2. IDENTIFY HARNESS "P2" AS SHOWN.
- 2.3. INSTALL TIE CLIPS WHERE SHOWN.
- 2.4. 2.20 DIA HOLES BEHIND CAPACITORS AS SHOWN (3 PLACES).
- 2.5. WIRE TO BE 20 AWG.
- 2.6. WORKMANSHIP TO CONFORM TO MCS STD Q AWS 007.



NOTES: UNLESS OTHERWISE SPECIFIED,

- 1. P/N IS 4500379-01.
- 2. INK STAMP P/N & REV LTR IN POSITION SHOWN USING CONTRASTING INK, CHARACTERS TO BE .12 HIGH.
- 3. FOR PROCUREMENT SEE L/M 4500379.



QTY	DESCRIPTION	UNIT	REVISION	DATE	BY	CHKD	DATE
1	J2-1	T2-1	3		GREEN		
1	J2-2	T2-2	1		RED		
1	J2-3	T2-3	1		ORANGE		
1	J2-4	T2-4	1		WHITE		
1	FRONT	TC	1		FRONT		

QTY	DESCRIPTION	UNIT	REVISION	DATE	BY	CHKD	DATE
4	3	23-049					
1	2	6A-037					
1	1	4500379					

QUANTITY PER DASH NO		PARTS LIST	
SCALE: 1/1	SIGNATURE	DATE	
TOL: 2 PLC 3 PLC ANGLE	CHK BY	DATE	
MATERIAL:	DATE	DATE	
FINISH:	DATE	DATE	

PARTS LIST		2525 BIVIER AVE. SANTA CLARA CALIF. 95051	
QTY	DESCRIPTION	DATE	
1	POWER SUPPLY (5V)		
DWG NO	4500379		

REVISIONS		
LTR	DESCRIPTION	SIGNATURE AND DATE
1	ENG. RELEASE	
2	PROD RELEASE	
B	SEE ECO 00217	

**1. ELECTRICAL SPECS:**

**1.1. A.C. INPUT**  
115/230 50-60 HZ FIELD SELECTABLE.

**1.2. D.C. OUTPUT**  
**+12 VDC**  
MAX LOAD 3A  
LINE REGULATION:  $\pm 0.01\%$  FOR A  $\pm 10\%$  INPUT VARIATION.  
LOAD REGULATION:  $\pm 0.02\%$  FROM NO LOAD TO MAX LOAD.  
MAX RIPPLE: 10 MV PP  
TRANSIENT RESPONSE: 30  $\mu$ SEC FOR A 50% LOAD CHANGE.  
OVERVOLTAGE PROTECTION:  $\pm 15 \pm 1V$

**-10V DC**  
MAX LOAD 3A  
LINE REGULATION:  $\pm 0.01\%$  FOR A  $\pm 10\%$  INPUT VARIATION.  
LOAD REGULATION:  $\pm 0.02\%$  FROM NO LOAD TO MAX LOAD.  
MAX RIPPLE: 10 MV PP  
TRANSIENT RESPONSE: 30  $\mu$ SEC MAX FOR A 50% LOAD CHANGE.  
OVERVOLTAGE PROTECTION:  $\pm 13 \pm 1V$

**-12V DC**  
MAX LOAD 0.25A  
LINE REGULATION:  $\pm 0.01\%$  FOR A  $\pm 10\%$  INPUT VARIATION.  
LOAD REGULATION:  $\pm 0.02\%$  FROM NO LOAD TO MAX LOAD.  
MAX RIPPLE: 10 MV PP  
TRANSIENT RESPONSE: 30  $\mu$ SEC FOR A 50% LOAD CHANGE.

NOTE: GND RETURNS OF +12V, -10V, AND -12V OUTPUTS ARE INDEPENDENT.

**1.3. ENVIRONMENT**  
TEMPERATURE: FULL RATINGS APPLY IN MIN 30 CFM MOVING AIR AT 0-65°C.  
HUMIDITY: 90% MAX RELATIVE WITH NO CONDENSATION.  
WEIGHT: 8 LBS MAX.

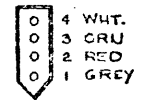
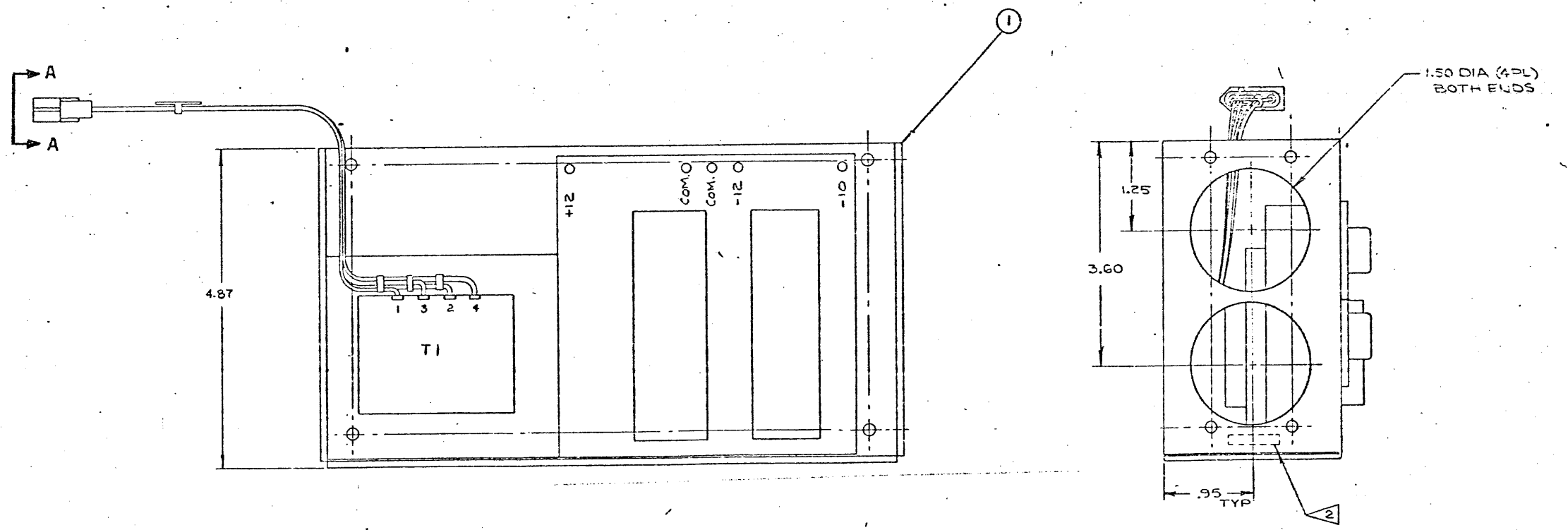
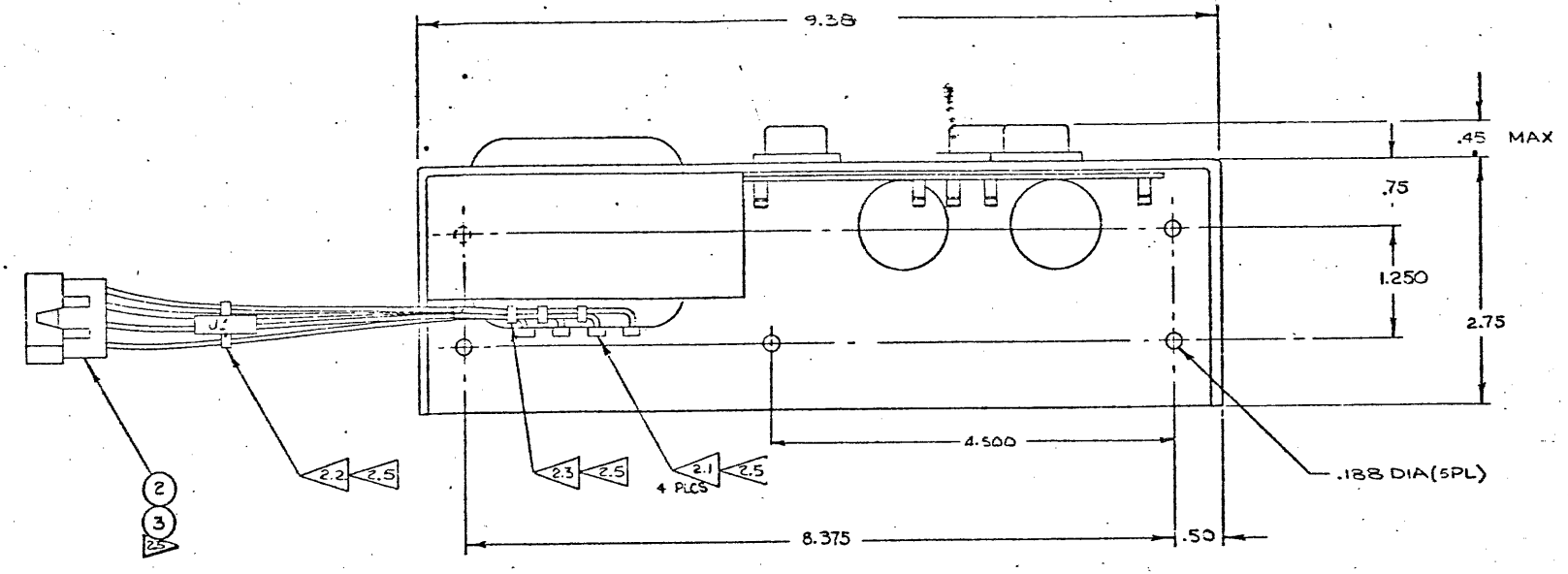
**1.4. LIFE EXPECTANCY: 10 YEARS**

**2. MECHANICAL SPECS:**

- 2.1 INSTALL HEATSHRINK TUBING WHERE SHOWN.
- 2.2 IDENTIFY HARNESS "P1" AS SHOWN.
- 2.3 INSTALL TIE CLIPS WHERE SHOWN.
- 2.4 ALL WIRE USED TO BE 22 AWG.
- 2.5 WORKMANSHIP TO CONFORM TO MCS STD QAWS 002

NOTES: UNLESS OTHERWISE SPECIFIED,

- 1. P/N IS 4500380-01.
- 2. INK STAMP P/N AND REV LETTER IN POSITION SHOWN USING CONTRASTING INK, CHARACTERS TO BE .12 HIGH.
- 3. FOR PROCUREMENT SEE L/Y 4500380.



VIEW A-A  
(NOT TO SCALE)

QUANTITY PER DASH NO		PART NUMBER		DESCRIPTION	
2	3			CONN. PIN, MOLEX, 02-09-2118	
1	2			CONN. MALE, MOLEX, 03-03-2042	
1	1			POWER SUPPLY (10V, 12V)	
01					

SCALE: 1/1		SIGNATURE		DATE	
VOL = 2 PLC	3 PLC	DRN BY		DATE	
1.32	1.00	CHK BY		DATE	
MATERIAL:		AUTH. BY		DATE	
FINISH:		GDD		DATE	

FROM	TO	LENGTH	COLOR	4000378	MOLEX
J1-1	T1-1	5.12"	GREY		
J1-2	T1-2		RED		
J1-3	T1-3		ORANGE		
J1-4	T1-4		WHITE		

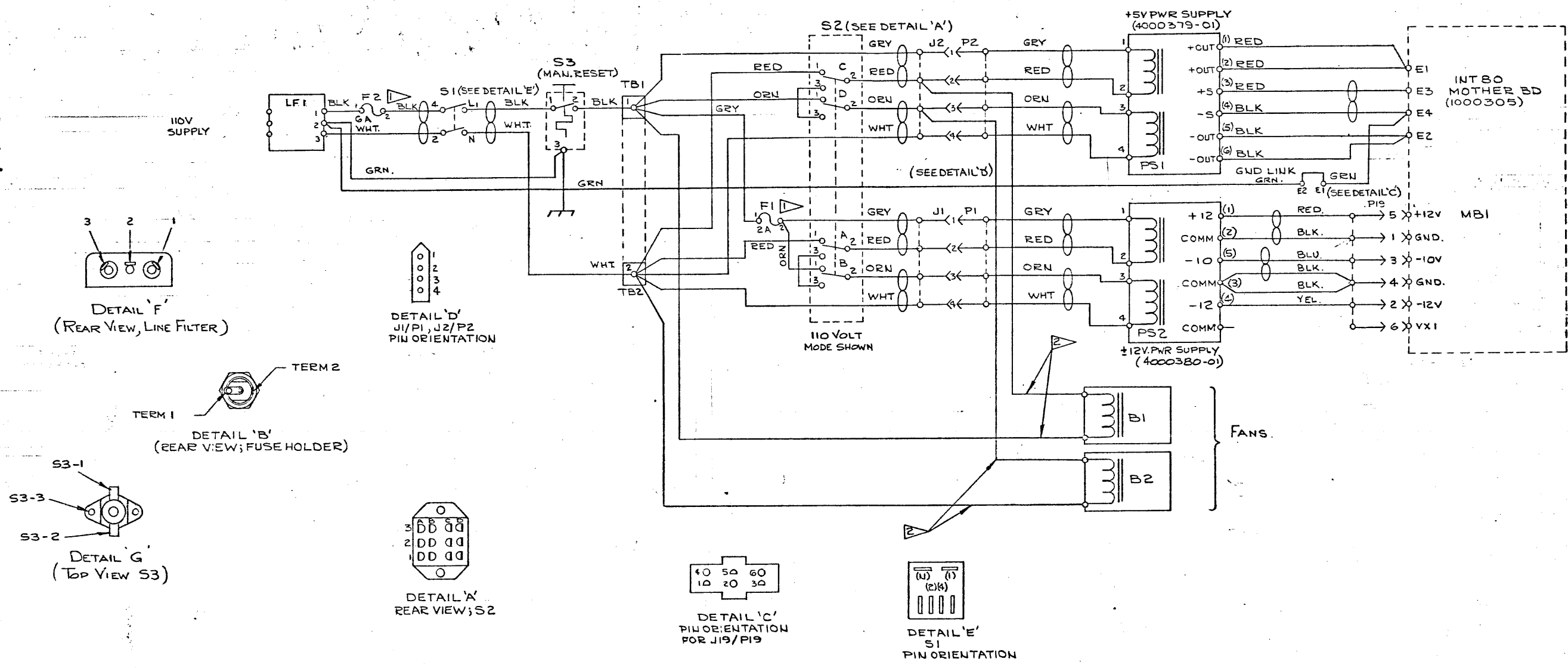
REV	DATE	DESCRIPTION
1		POWER SUPPLY (-10V, 12V)

REV	DATE	DESCRIPTION
1		POWER SUPPLY (-10V, 12V)



REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	CHK ENGR
I	ENG. RELEASE		
A	PROD. RELEASE		
A <sub>1</sub>	ADDED N/A-USED ON		



NOTES; UNLESS OTHERWISE SPECIFIED:

- ▷ FOR 220V FI= 1A, F2= 3A (SEE DETAIL 'B' FOR WIRING ORIENTATION).
- 2 THESE WIRES ARE A PRE MOLDED PLUG & CABLE ASSY.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE:	2 PLC 3 PLC ANGLE	SIGNATURE	DATE	3065 BOWERS AVE. SANTA CLARA CALIF. 95051 TITLE SCHEMATIC, AC/DC POWER DISTRIBUTION
TOL *		DRN BY	1/17/75	
MATERIAL:		CHK BY	1/27/75	
FINISH:		DFT APPD	2/5/75	
		ENGR APPD	3/15/75	
4000352	MDS, 300/51	AUTH BY		SIZE DEPT DRAWING NO. RT.
4000320	MDC	CODE:	SHEET 1 OF 1	D 410 2000404 A
NEXT ASSY	USED ON			