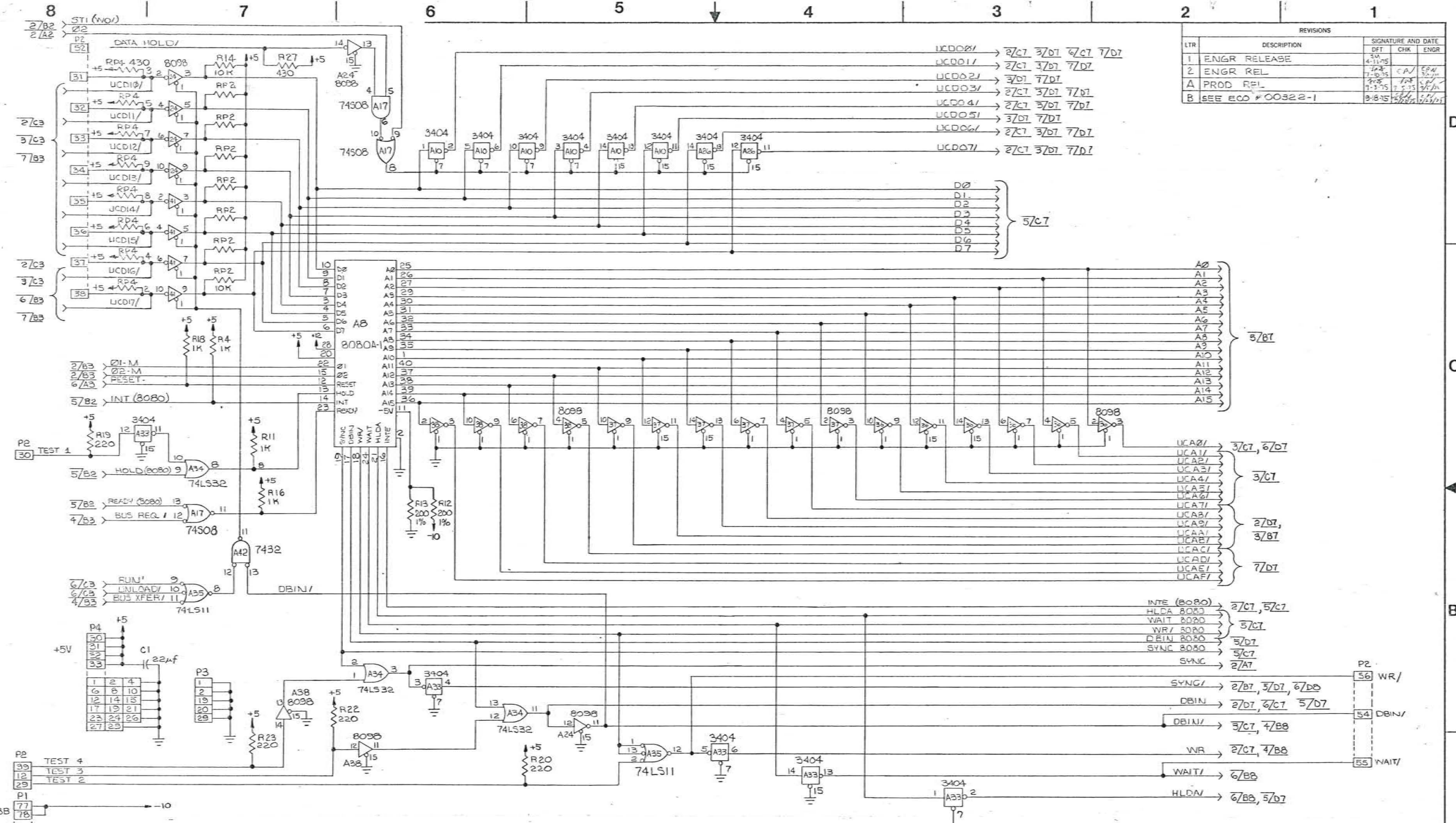


MDS-ICE-80

Reference
Schematic
Drawings

© Intel Corporation 1975

intel[®]



REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
1	ENGR RELEASE	SW		
2	ENGR REL	4-11-75		
A	PROD REL	7-10-75	CPJ	SPJ
B	SEE ECO #00322-1	7-31-75	SPJ	SPJ

UCD08/	2/77	3/07	6/07	7/07
UCD01/	2/77	3/07	7/07	
UCD02/	3/07	7/07		
UCD03/	2/77	3/07	7/07	
UCD04/	2/77	3/07	7/07	
UCD05/	3/07	7/07		
UCD06/	2/77	3/07	7/07	
UCD07/	2/77	3/07	7/07	

A0	
A1	
A2	
A3	
A4	
A5	
A6	
A7	
A8	
A9	
A10	
A11	
A12	
A13	
A14	
A15	

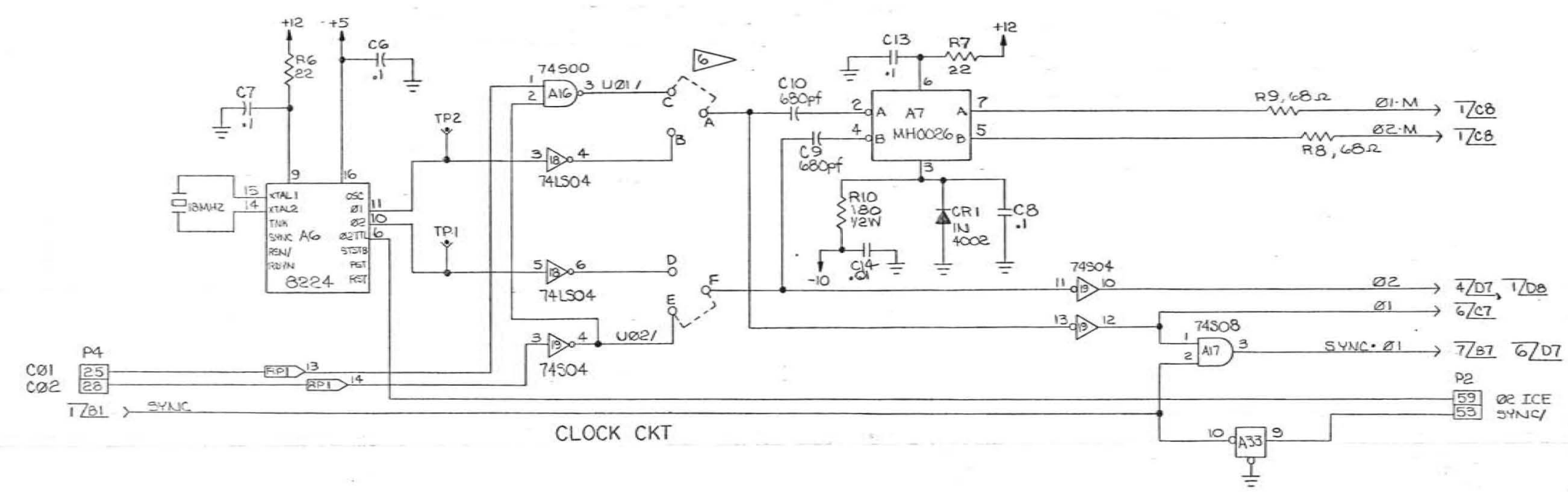
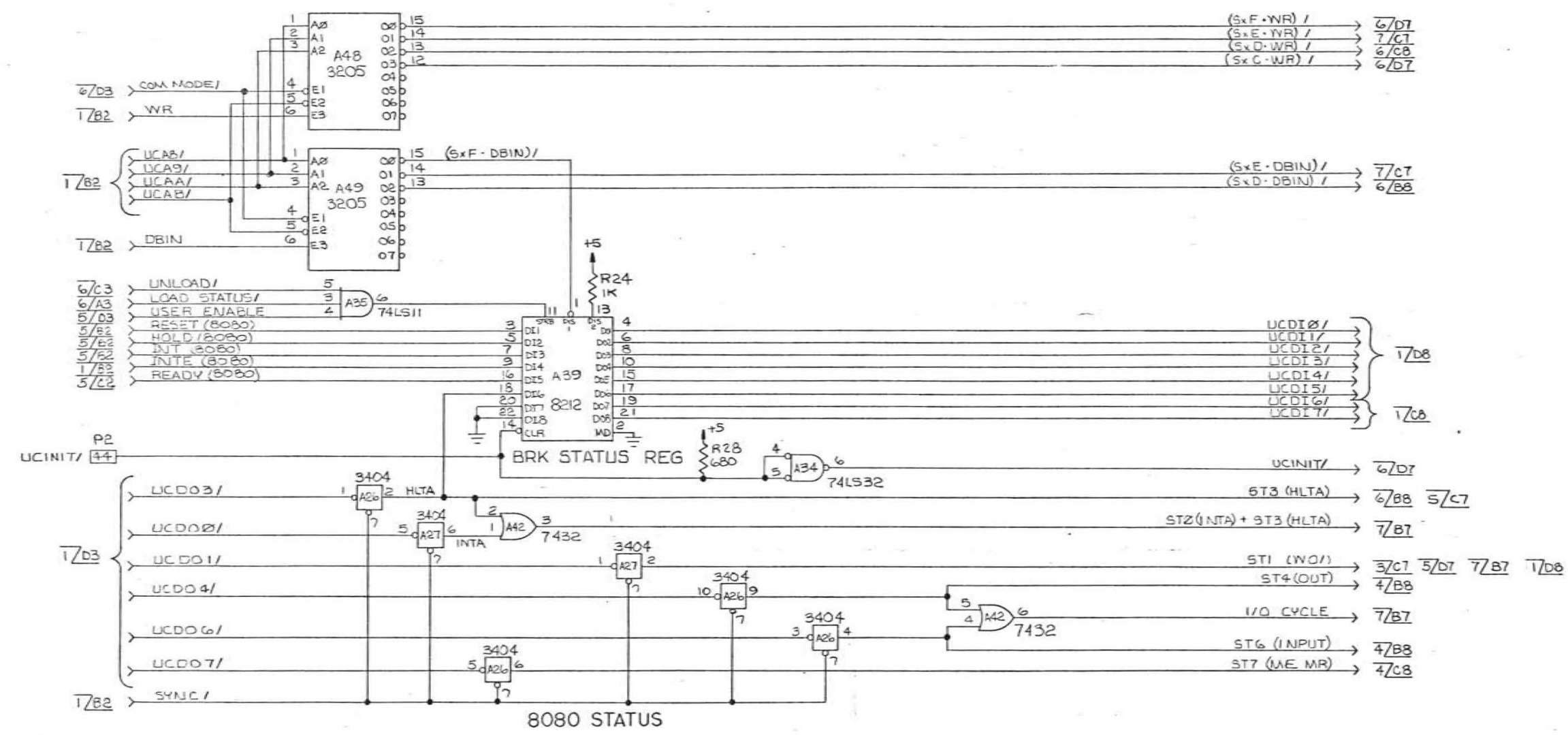
UCA2/	3/77	6/07
UCA1/		
UCA2/		
UCA3/		
UCA4/		
UCA5/		
UCA6/		
UCA7/		
UCA8/		
UCA9/		
UCAA/		
UCAB/		
UCAC/		
UCAD/		
UCAE/		
UCAF/		

NOTES: UNLESS OTHERWISE SPECIFIED,
 1. THIS DOCUMENT REFLECTS ARTWORK REV. 'B'.
 2. ALL RESISTOR VALUES ARE IN OHMS, 1/4 W, ±5%.
 3. ALL 14 PIN IC'S HAVE GND ON 7 AND VCC ON 14.
 4. ALL 16 PIN IC'S HAVE GND ON 8 AND VCC ON 16.
 5. (RP3) SYMBOLIZES TERMINATING RESISTOR, I.E.
 (SEE PG 2) STRAPS SHOWN FOR EXTERNAL CLOCK.

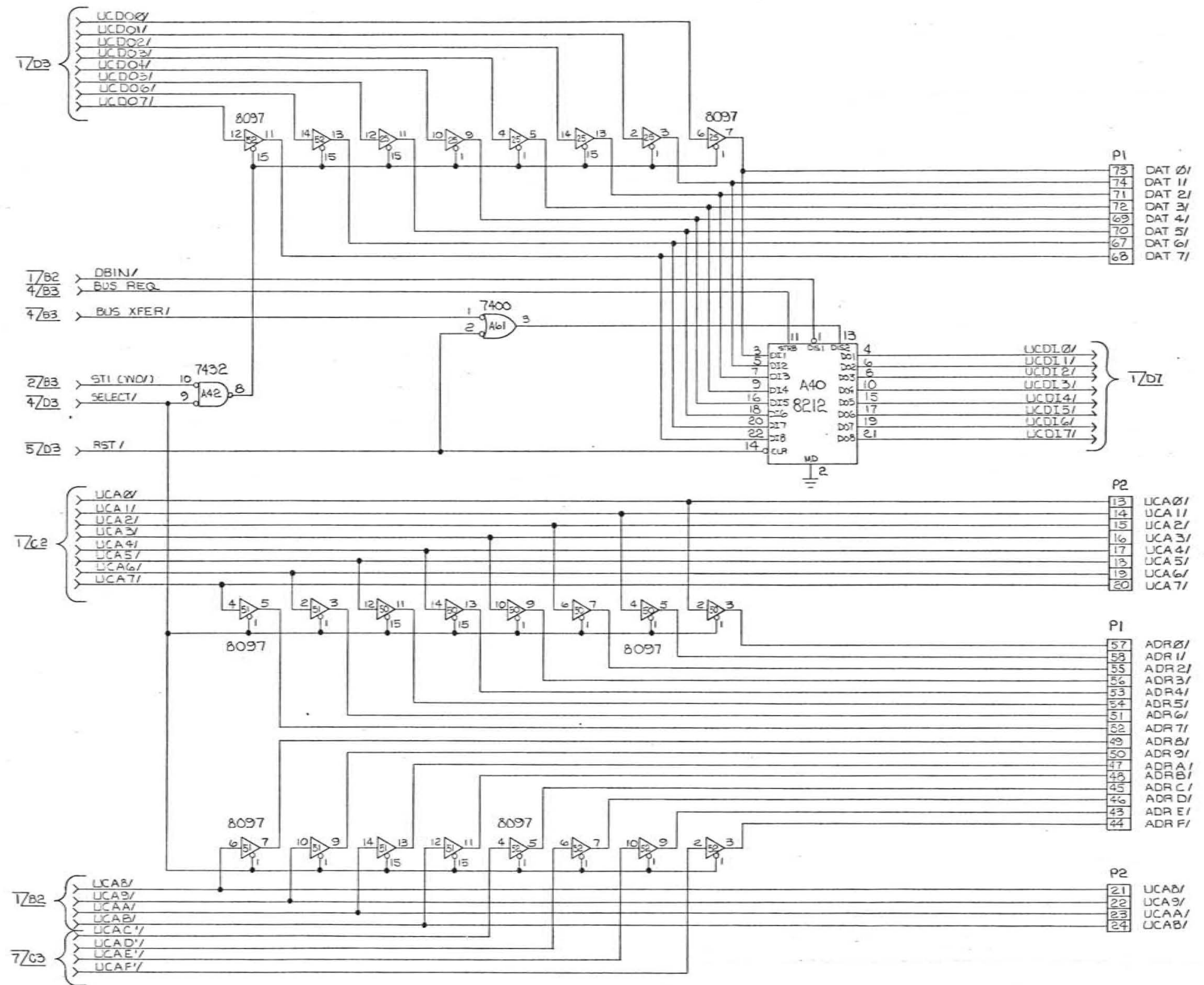
REF	DESIGN	NOT USED	TYPE	QTY
P 4				
Y 1				
CR 2				
C 58				
R 29				
A 64				
A 27			3404	3
A 18			74LS04	2
REF DES				

QUANTITY PER DASH NO.	ITEM NO.	PART NUMBER	DESCRIPTION
SCALE:	SIGNATURE	DATE	intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL. = 2 PLC 3 PLC ANGLE	DRN BY	4-11-75	TITLE SCHEMATIC
MATERIAL:	CHK BY	3/1/75	ICE 80
FINISH:	DFT APPD	11/5/75	PROCESSOR
4000#7.2	ENGR APPD	7/1/75	SIZE DEPT DRAWING NO. REV
NEXT ASSY	AUTH BY	11/5/75	D 410 2000 480 B
	CODE:	SHEET 1 OF 7	

REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHEET ONE.	SAL 4-11-75		

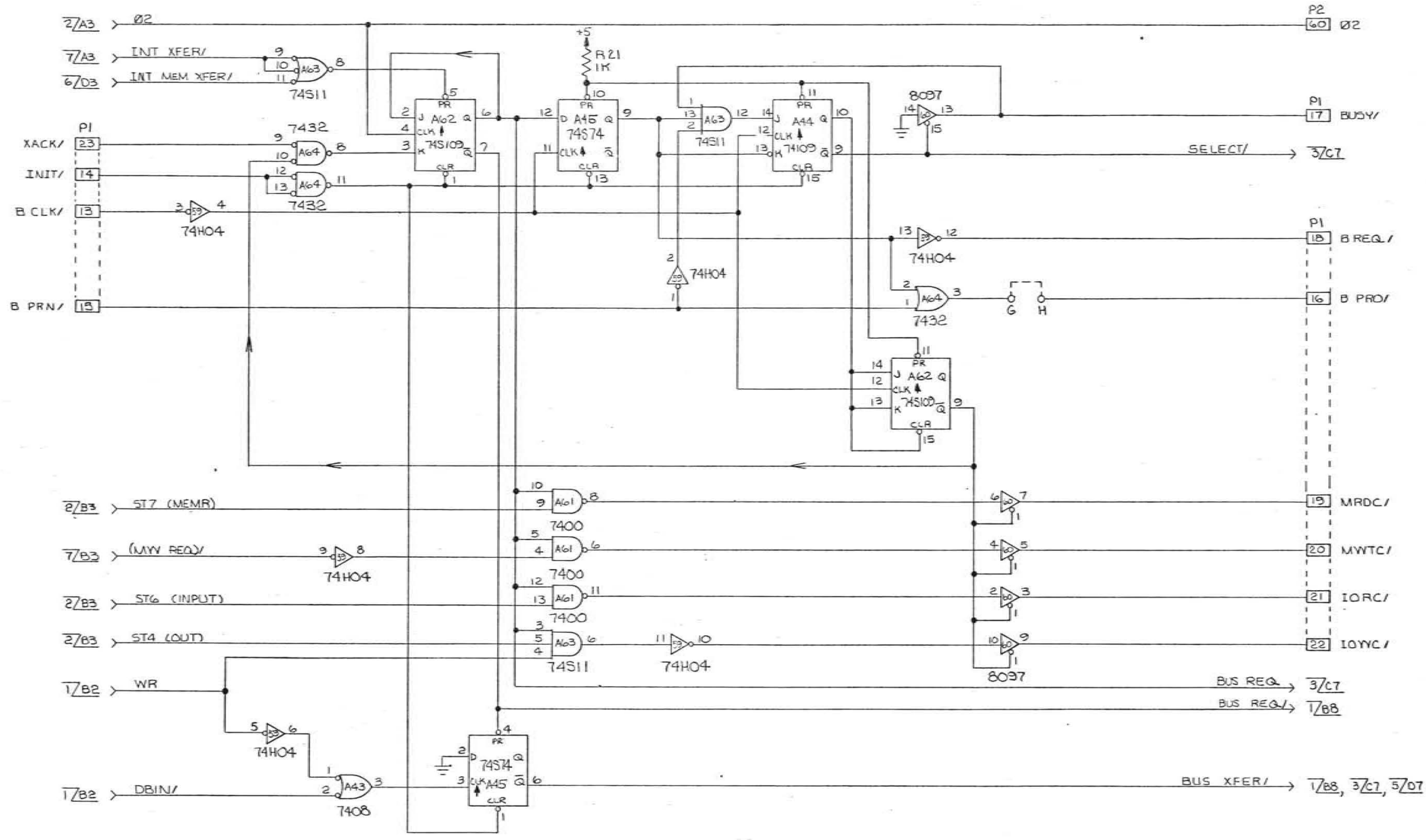


REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
---	SEE SHEET 1	SKA		
		4-14-85		



mds BUS DRIVERS AND RECIEVERS

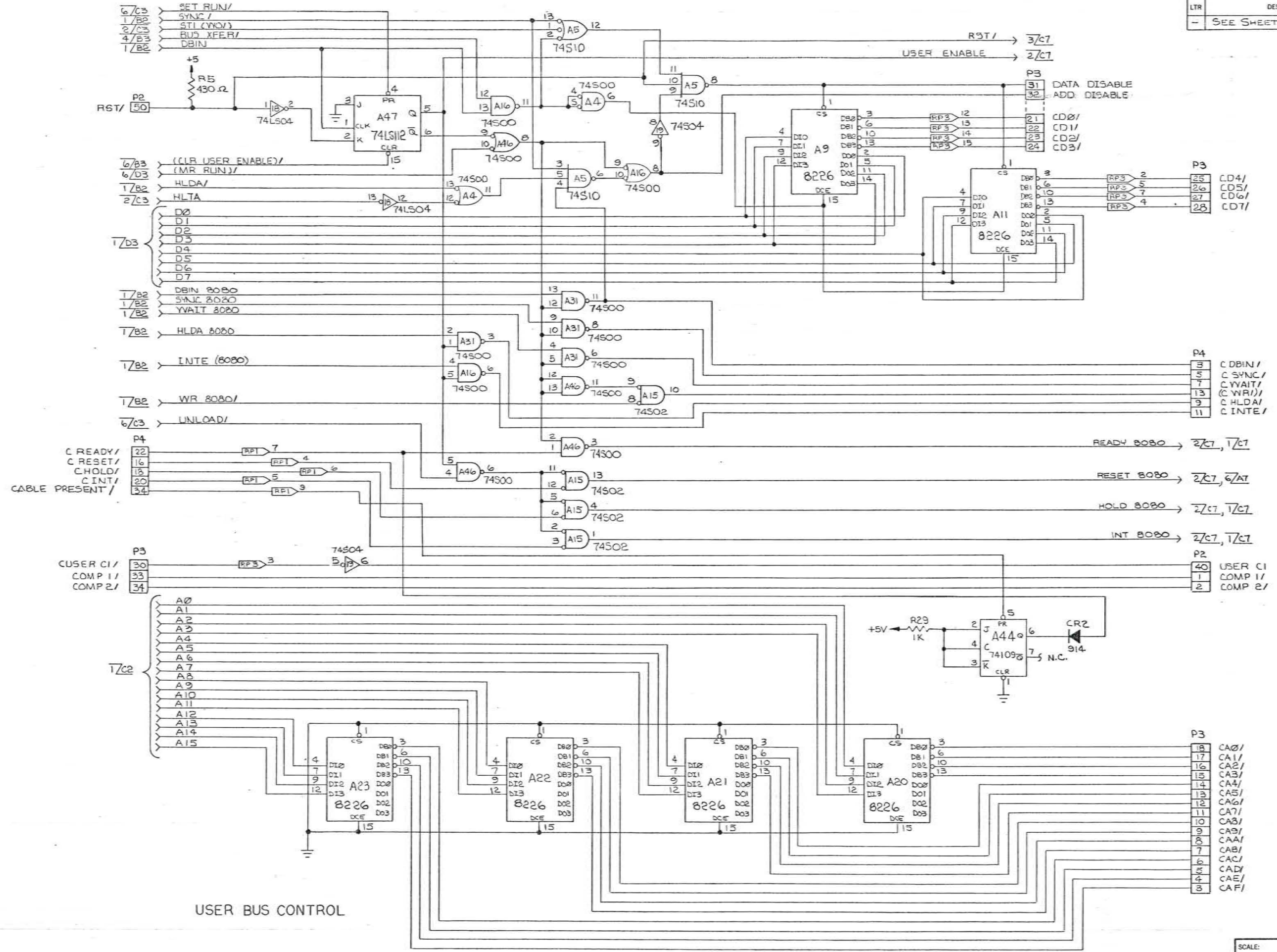
REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHEET 1	EX 4-14-85		



mds BUS CONTROL

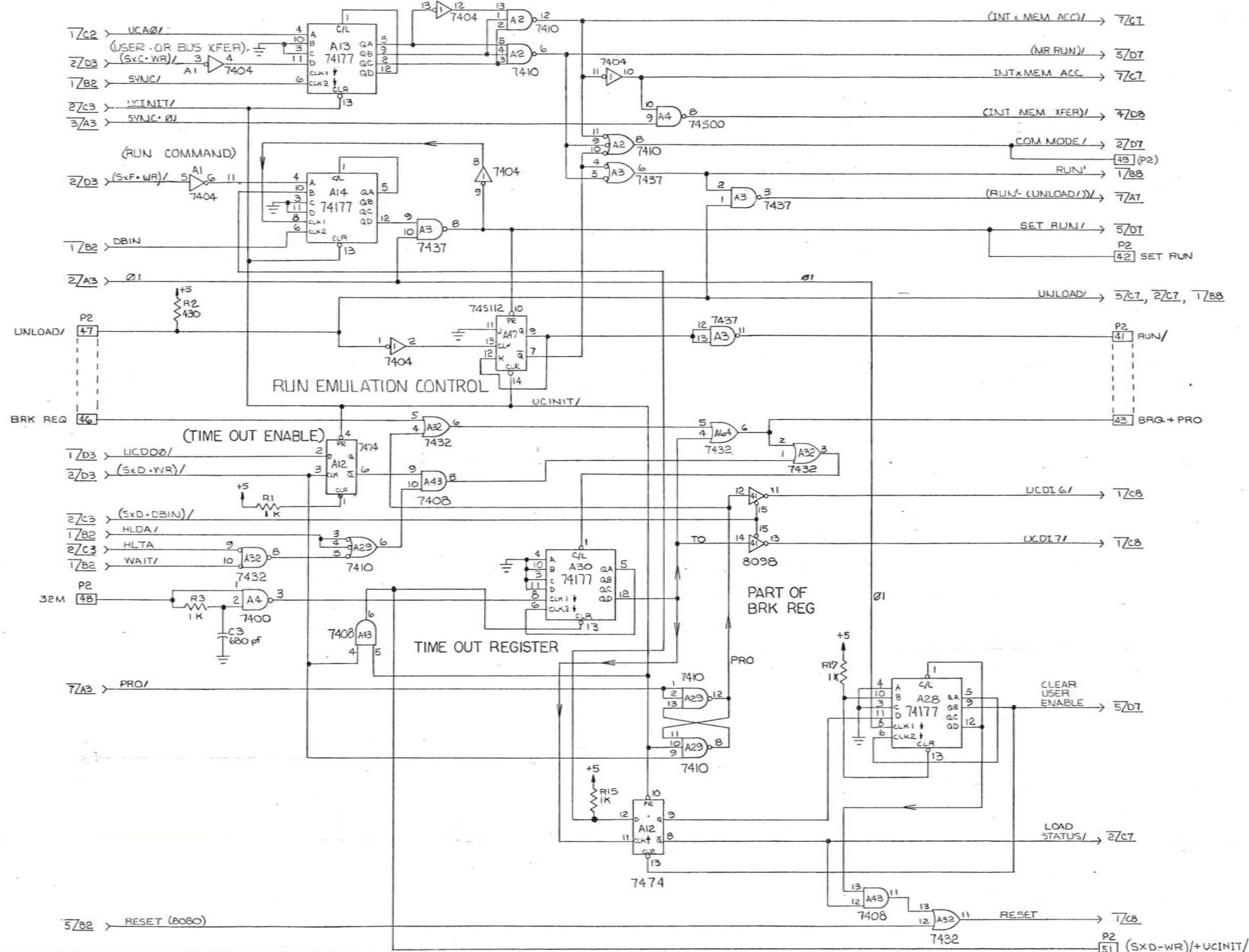
SCALE:	SIZE	DEPT	DRAWING NO.	REV
SHEET 4 of 7	D	410	2000480	B

REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHEET 1	SW 4-15-75		



USER BUS CONTROL

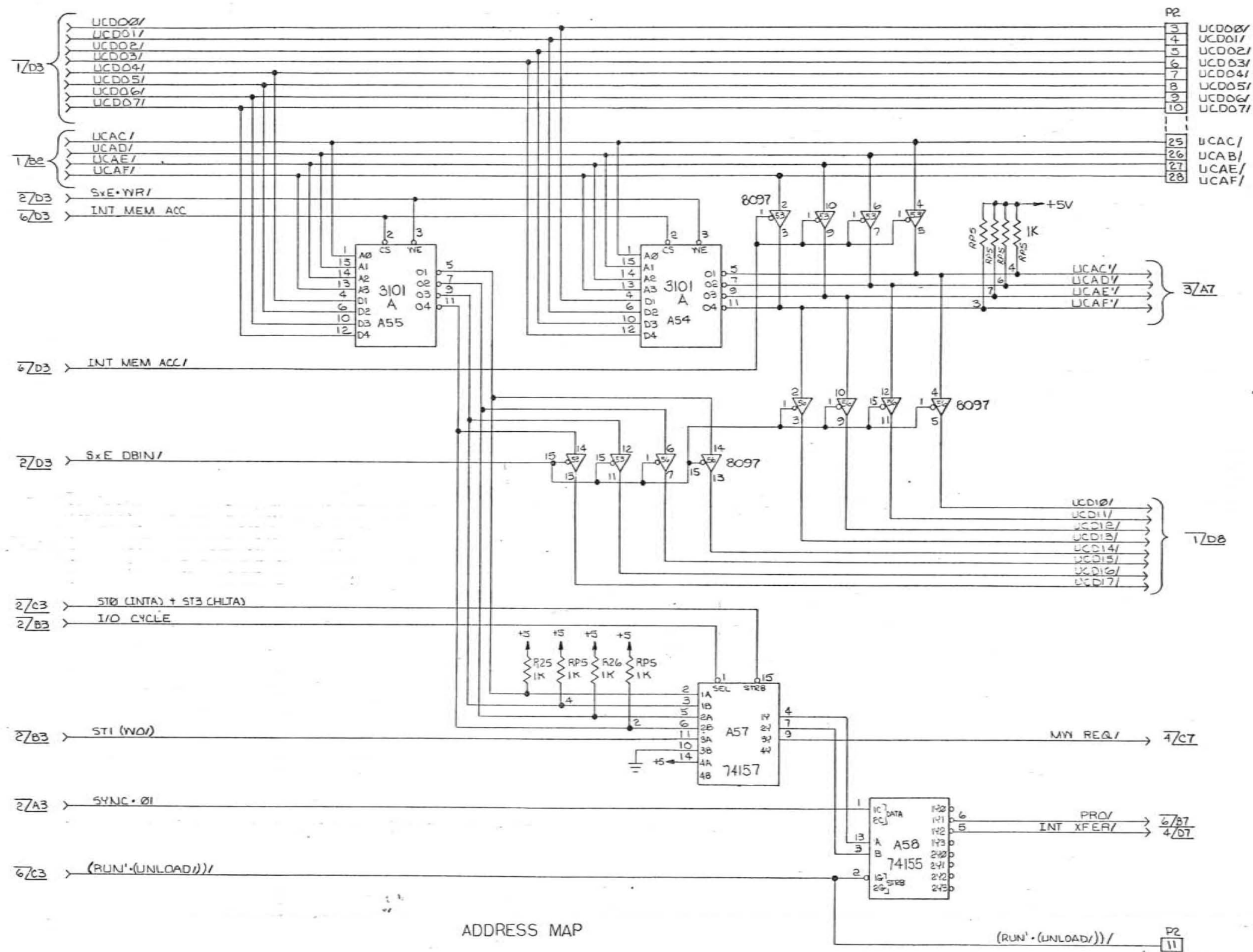
REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHEET 1	STA	4-10-75	



8080 RESET TIMING

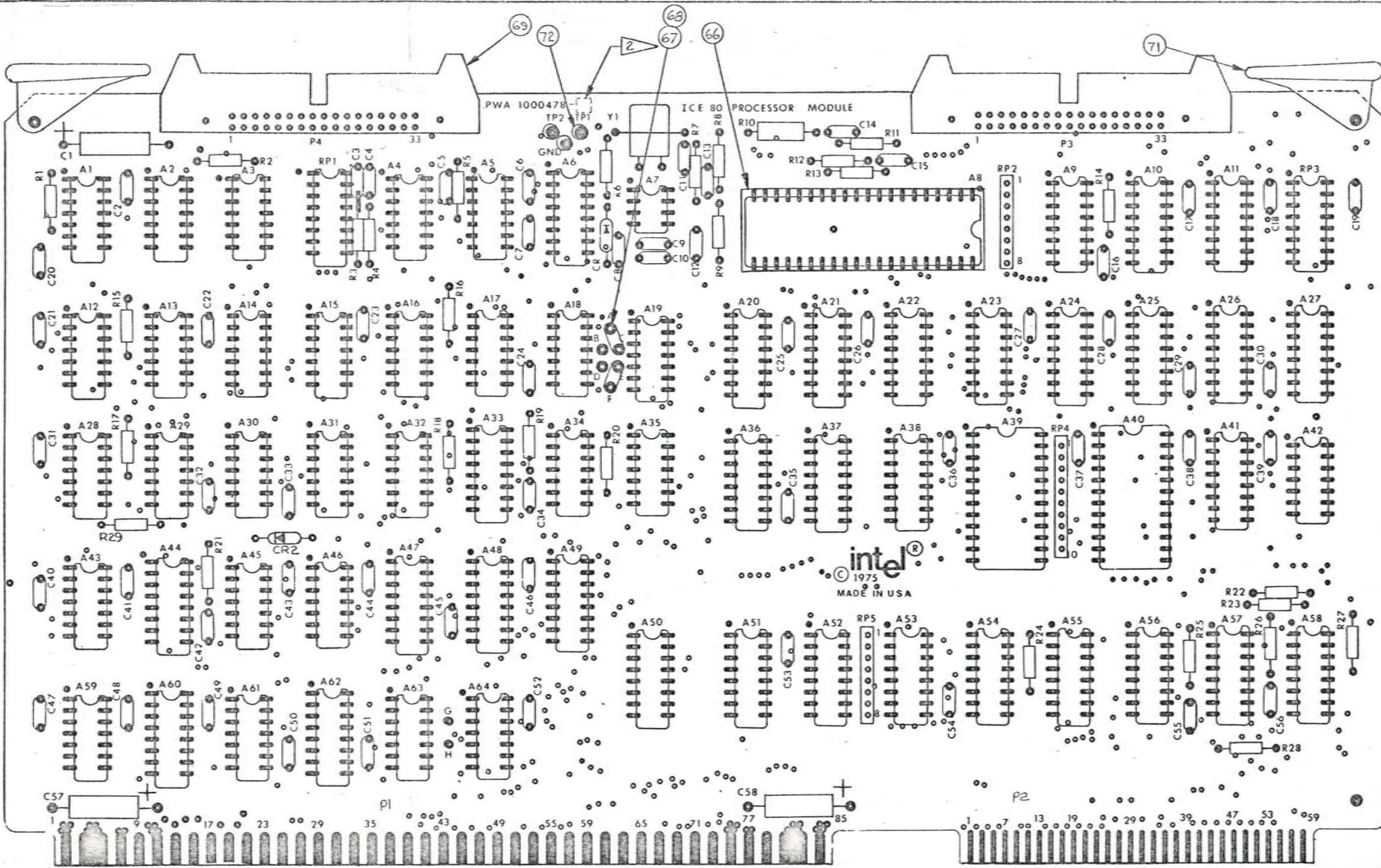
SCALE:	SIZE	DEPT	DRAWING NO.	REV
SHEET 6 OF 7	D	410	2000480	B

REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHEET 1	GA		
		4-16-85		



ADDRESS MAP

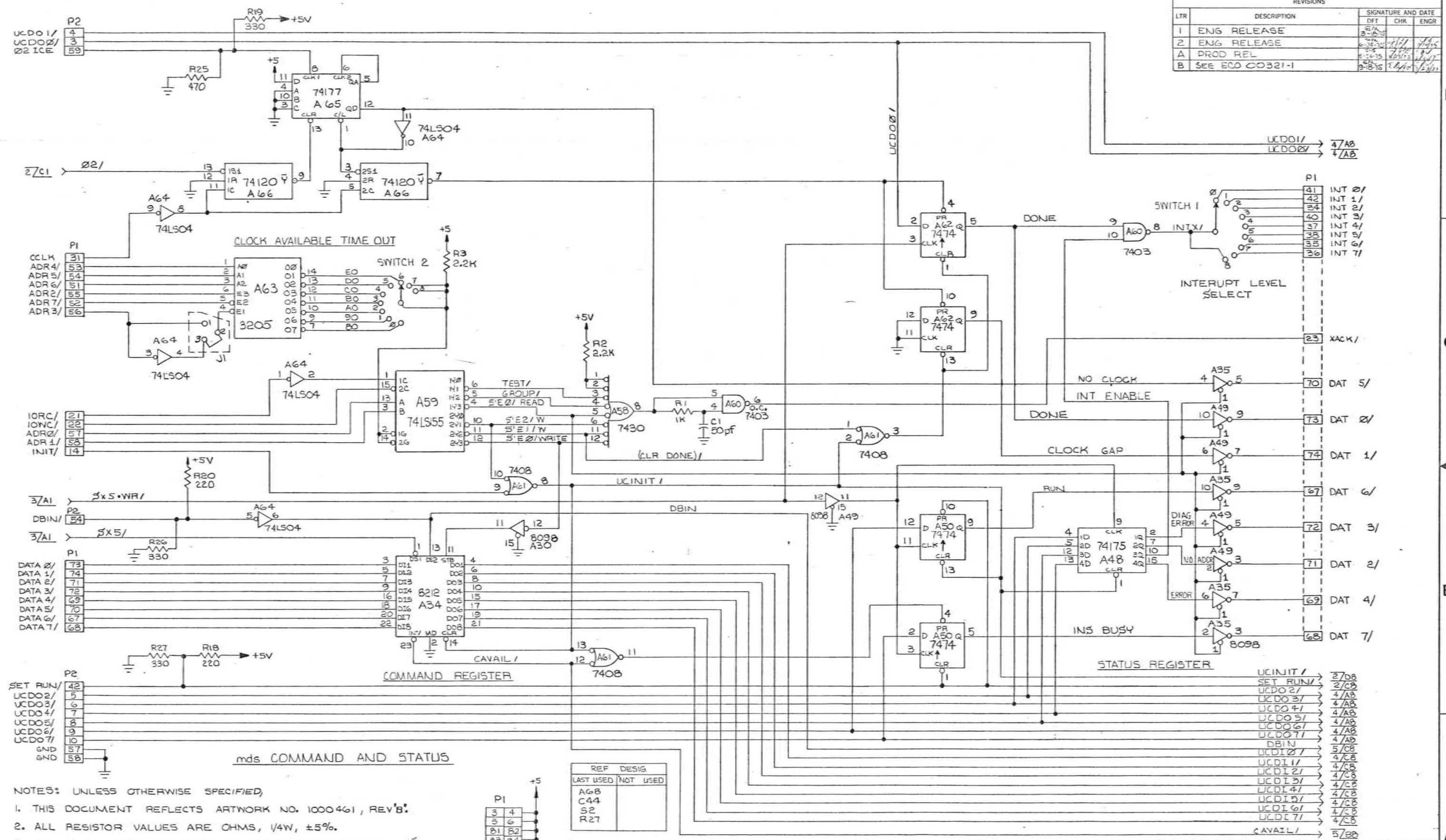
REVISIONS		DATE	BY	CHKD
2	ENG REL	7-15-75		
A	PROD REL	7-15-75		
B	SEE ECO # 00322-3	9-18-75		



NOTE: UNLESS OTHERWISE SPECIFIED
 1. ASSEMBLY NO. IS 1000478-01
 2. MARK DASH NO. IN POSITION SHOWN.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 2:1	TOL ±	SIGNATURE	DATE	intel® 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
2 PLC	3 PLC	DRN BY L FRESE	7/15/75	TITLE PRINTED WIRING ASSEMBLY ICE 80 PROCESSOR
MATERIAL: SEE P.LIST.		CHK BY	7/15/75	SIZE DEPT DRAWING NO. REV
4000550 MDSICE 80		DFT APP'D	7/15/75	D 410 1000478 B
NEXT ASSY USED ON		ENGR APP'D	7/15/75	
		AUTH BY	7/15/75	
		CODE	SHEET 1 OF 1	

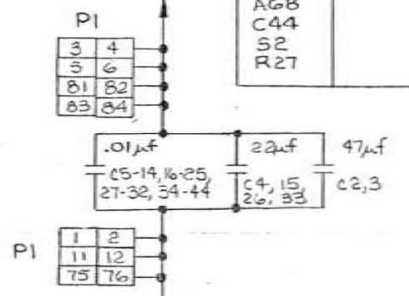
REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	ENGR
1	ENG RELEASE	3-25-75	
2	ENG RELEASE	6-24-75	
A	PROD REL	8-28-75	
B	SEE ECO CO321-1	8-28-75	



mds COMMAND AND STATUS

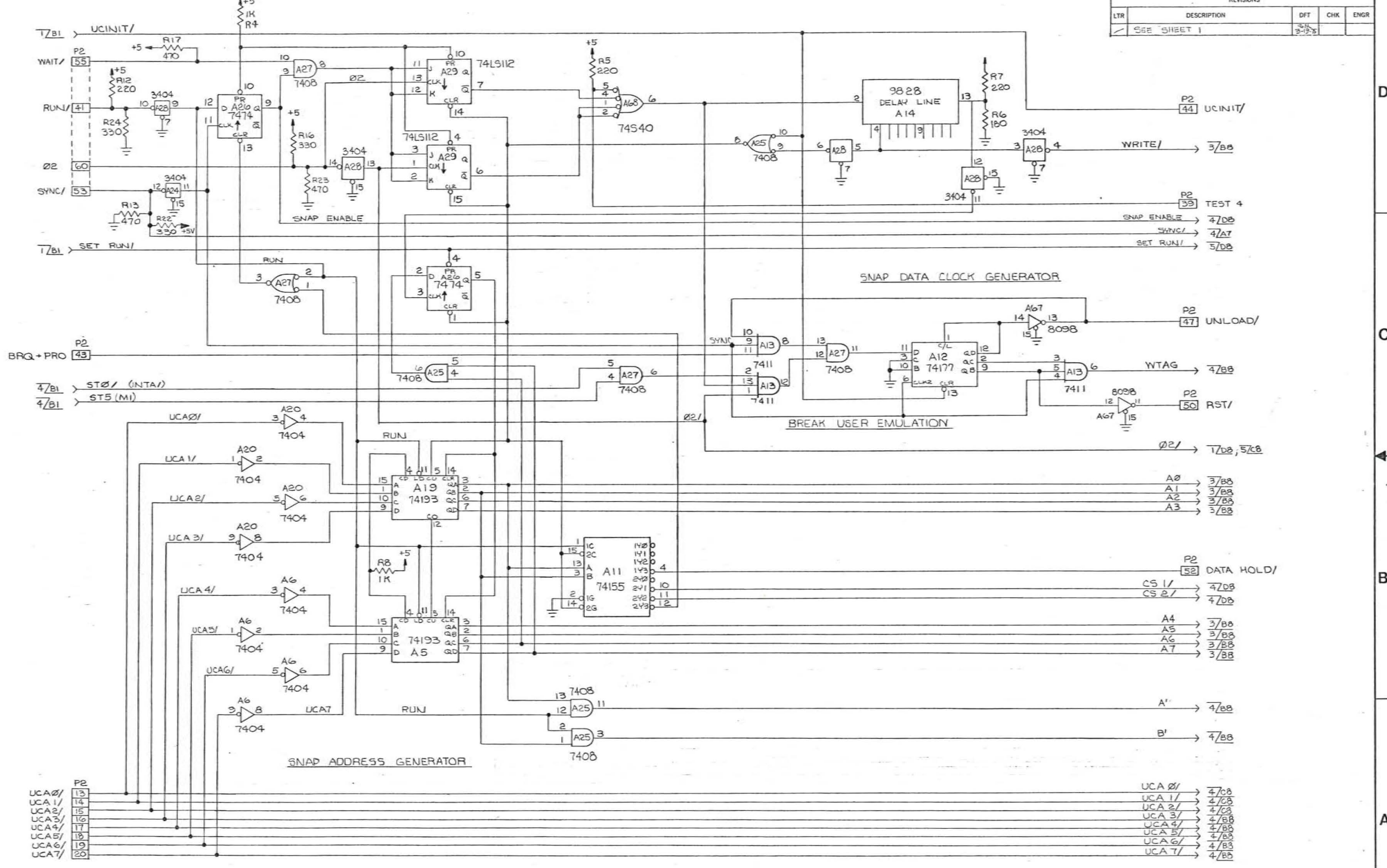
- NOTES: UNLESS OTHERWISE SPECIFIED,
1. THIS DOCUMENT REFLECTS ARTWORK NO. 1000461, REV'B.
 2. ALL RESISTOR VALUES ARE OHMS, 1/4W, ±5%.
 3. ALL 14-PIN I.C.'S HAVE GND ON PIN 7 & VCC ON PIN 14.
 4. ALL 16-PIN I.C.'S HAVE GND ON PIN 8 & VCC ON PIN 16.
 5. [Symbol] SYMBOLIZES A TERMINATING RESISTOR, EG

REF DESIG	
LAST USED	NOT USED
A68	
C44	
S2	
R27	



SCALE:				SIGNATURE		DATE		intel	
TOL	2 PLC	3 PLC	ANGLE	DRN BY	DATE	3065 BOWERS AVE. SANTA CLARA CALIF. 95051		TITLE	
±				S.M.AULEY	7-14-75	SCHEMATIC		ICE-80 TRACE BOARD	
MATERIAL:				DFT APPD		ENGR APPD		FINISH:	
				[Signature]		[Signature]		SIZE DEPT DRAWING NO. REV	
				[Signature]		[Signature]		D 410 2000466 B	
1000461				1000461		1000461		CODE: SHEET 1 OF 5	
SPARE GATES		SPARE GATES		NEXT ASSY		USED ON			

REVISIONS			
LTR	DESCRIPTION	DFT	CHK ENGR
✓	SEE SHEET 1	5/1	3-7-75



- P2 13 UCA0/
- P2 14 UCA1/
- P2 15 UCA2/
- P2 16 UCA3/
- P2 17 UCA4/
- P2 18 UCA5/
- P2 19 UCA6/
- P2 20 UCA7/

- A0 → 3/BB
- A1 → 3/BB
- A2 → 3/BB
- A3 → 3/BB

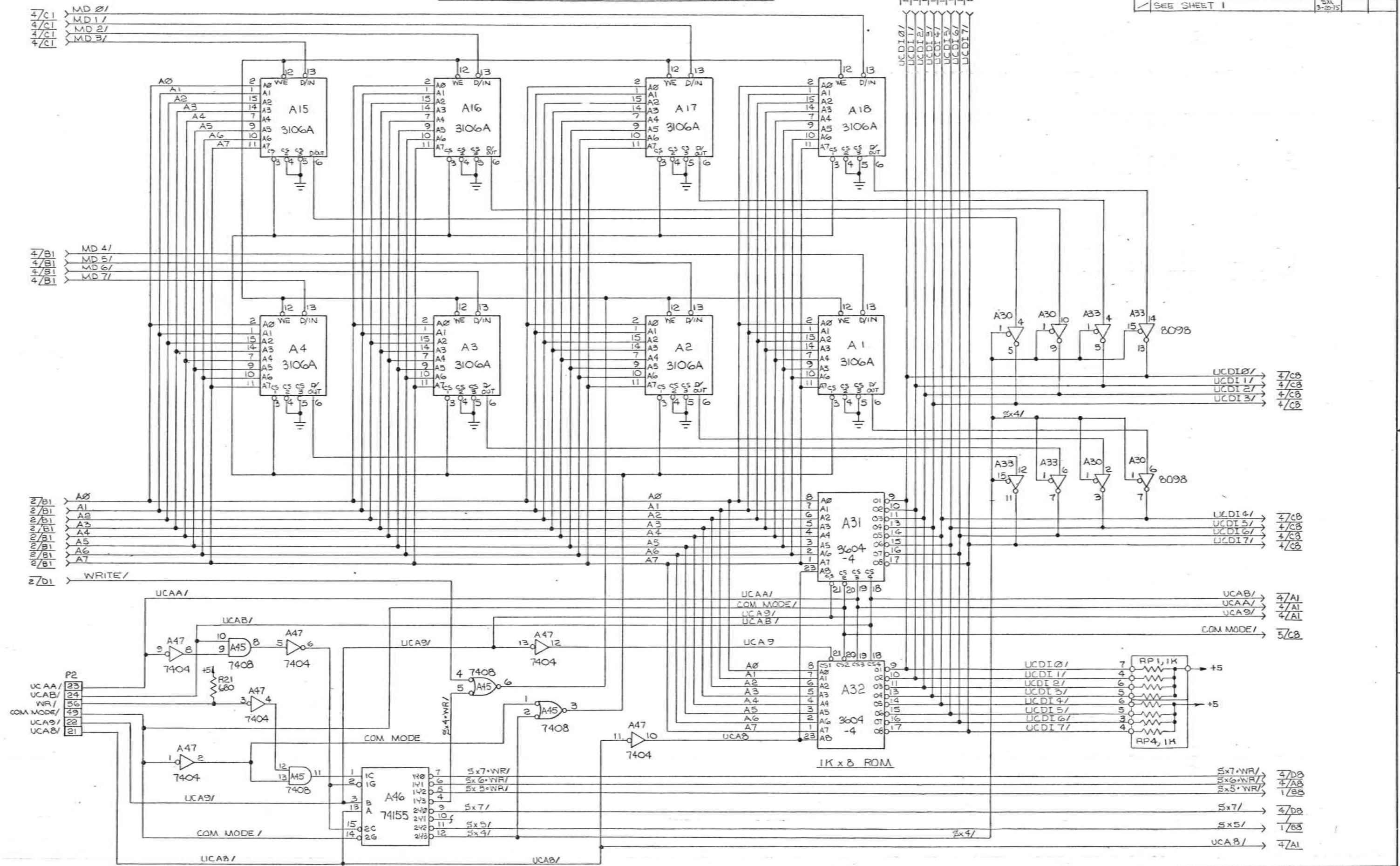
- P2 52 DATA HOLD/
- CS 1/ → 4/DB
- CS 2/ → 4/DB
- A4 → 3/BB
- A5 → 3/BB
- A6 → 3/BB
- A7 → 3/BB

- A' → 4/BB
- B' → 4/BB

- UCA 0/ → 4/BB
- UCA 1/ → 4/BB
- UCA 2/ → 4/BB
- UCA 3/ → 4/BB
- UCA 4/ → 4/BB
- UCA 5/ → 4/BB
- UCA 6/ → 4/BB
- UCA 7/ → 4/BB

256 x 8 RAM CONTROL RAM AND SNAP DATA

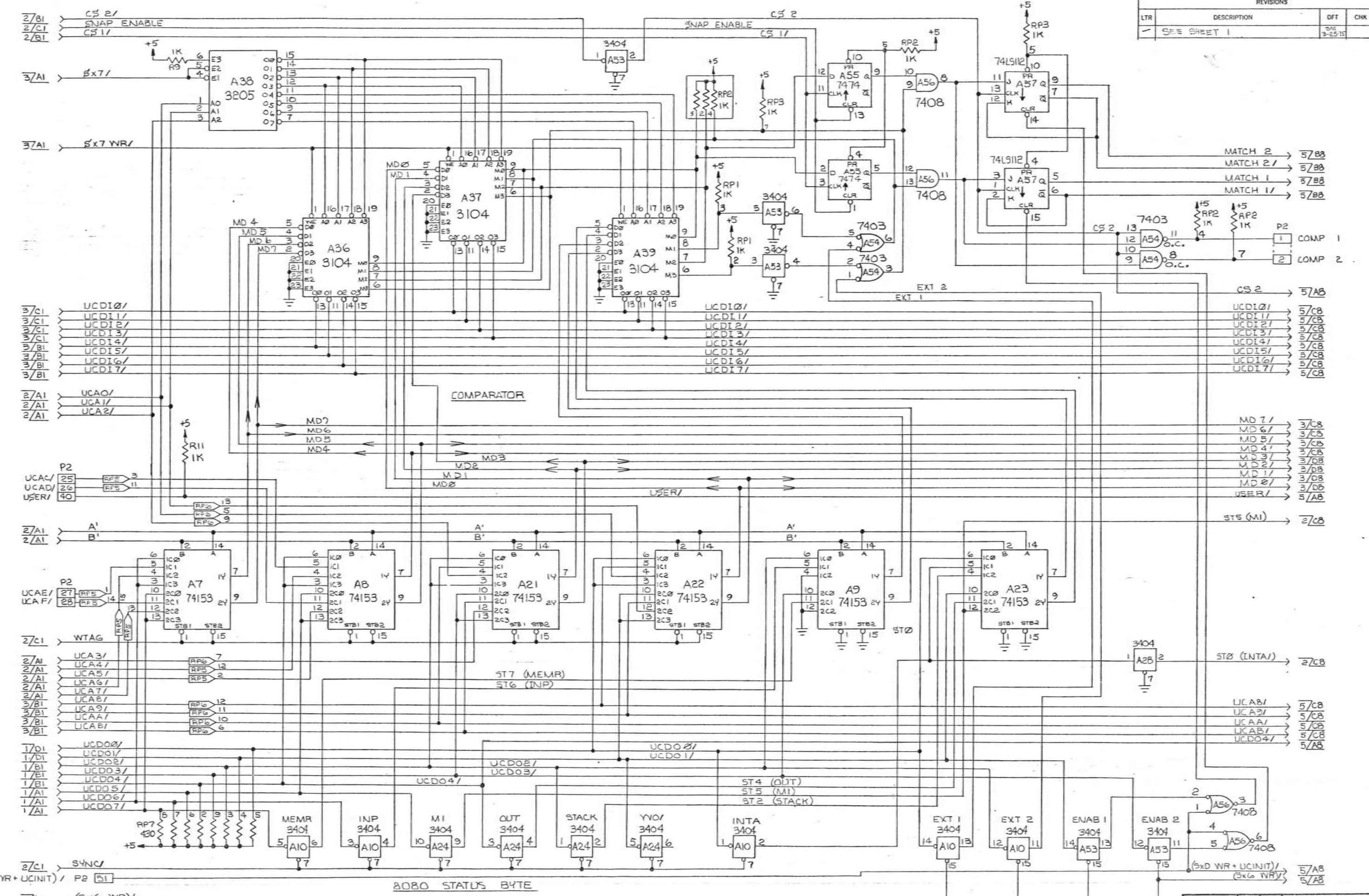
REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
✓	SEE SHEET 1	SM		
		3-22-75		



ICE-80 CONTROL MEMORY

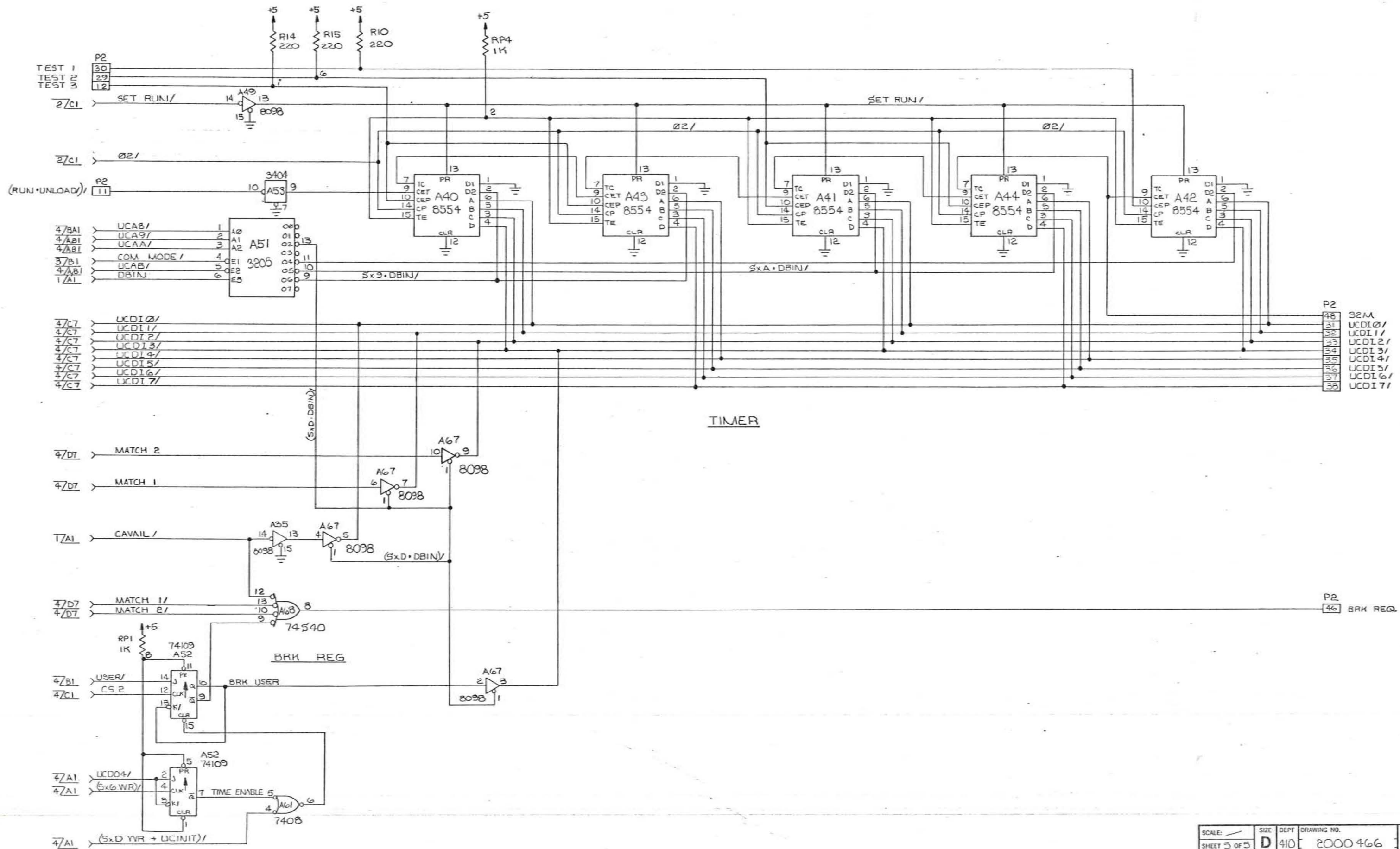
SCALE	SIZE	DEPT	DRAWING NO.	REV
SHEET 3 OF 5	D	410	2000466	B

REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHEET 1	DAI	3-25-15	



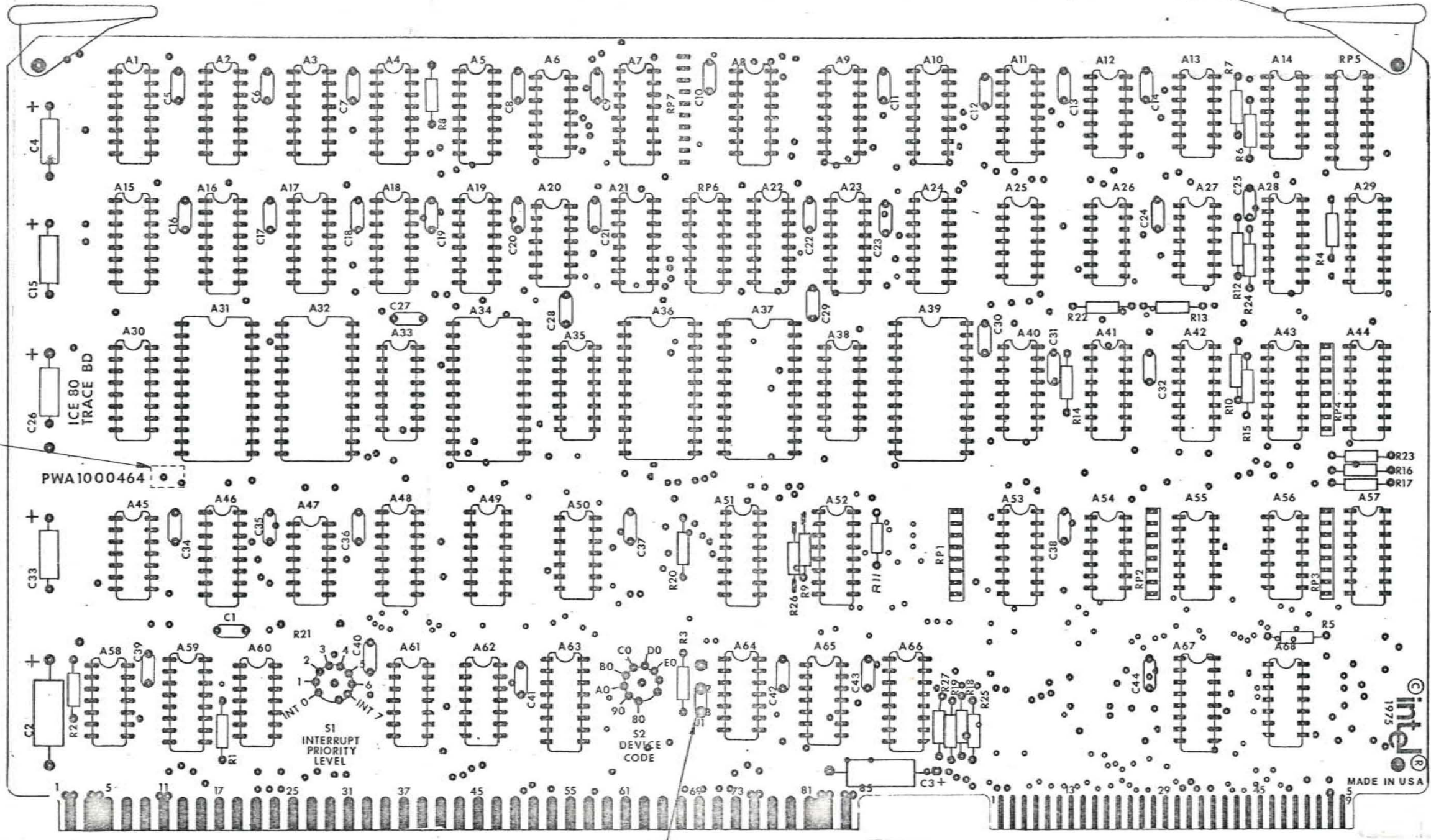
SCALE:	SIZE	DEPT	DRAWING NO.	REV
SHEET 4 OF 5	D	410	2000466	B

REVISIONS				
LTR	DESCRIPTION	DFT	CHK	ENGR
-	SEE SHT. 1.			



8 7 6 5 4 3 2 1

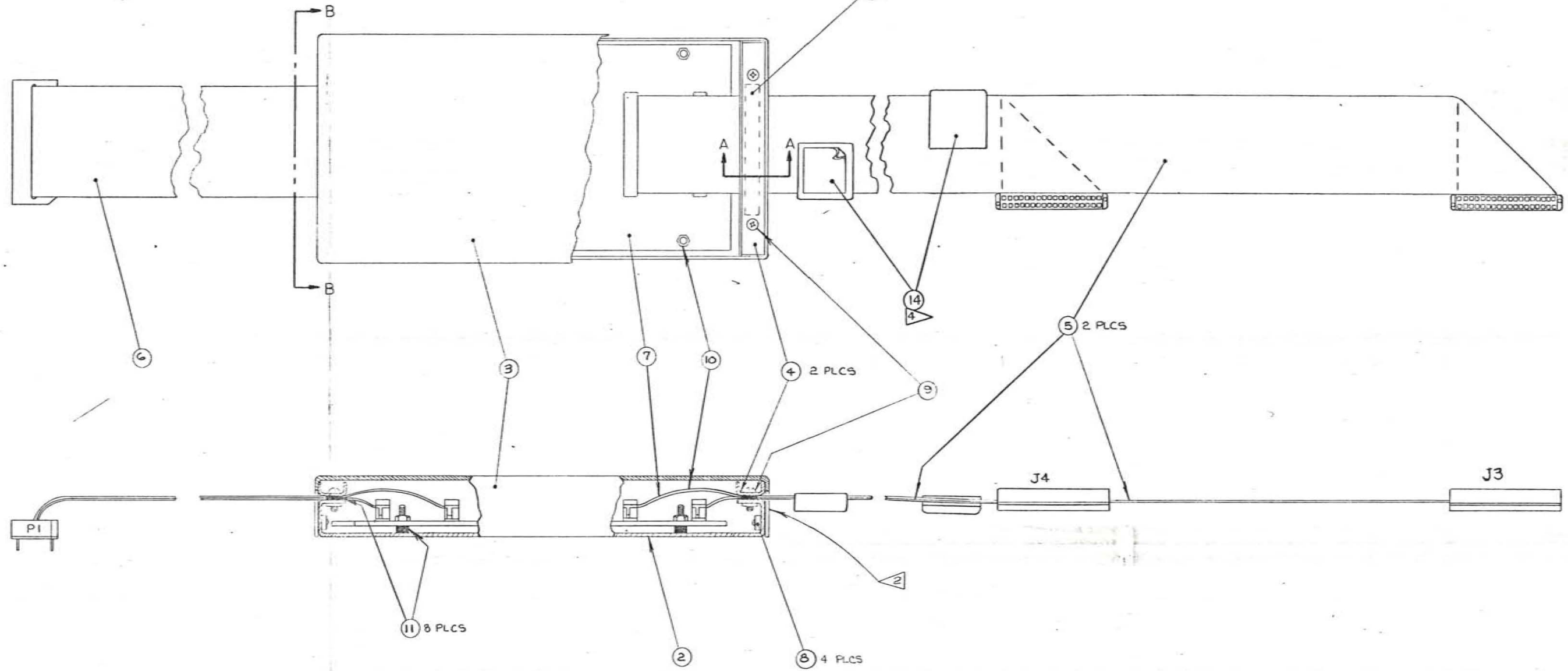
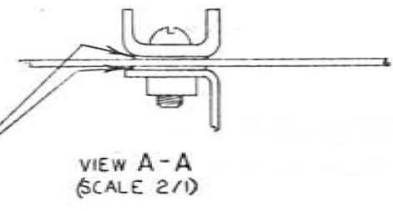
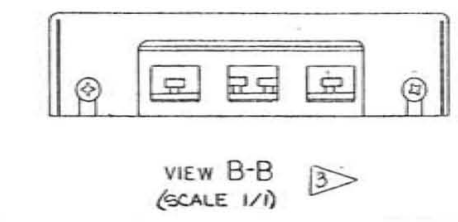
REVISIONS		SIGNATURE AND DATE	
ITEM	DESCRIPTION	DATE	INITIALS
A	PROD REL.	8-27-75	[Signature]
B	SEE ECO 00321-3	9-18-75	[Signature]



NOTE: UNLESS OTHERWISE SPECIFIED
 1. ASSEMBLY NO. IS 1000464-01
 2. MARK DASH NO. IN POSITION SHOWN.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 2:1	TOL: 2 PLC 3 PLC ANGLE	SIGNATURE: L. FRESE		DATE: 8/27/75
MATERIAL:	FINISH:	CHK BY: [Signature]		DATE: 8/27/75
4000550 MDS ICE 80	NEXT ASSY USED ON:	DFT APPD: [Signature]		DATE: 8/27/75
		ENGR APPD: [Signature]		DATE: 8/27/75
		AUTH BY: [Signature]		DATE: 8/27/75
		CODE: [Signature]	SHEET 1 OF 1	TITLE: PRINTED WIRING ASSEMBLY ICE 80 TRACE BD
				SIZE: D 410 DEPT: 1000464 REV: B

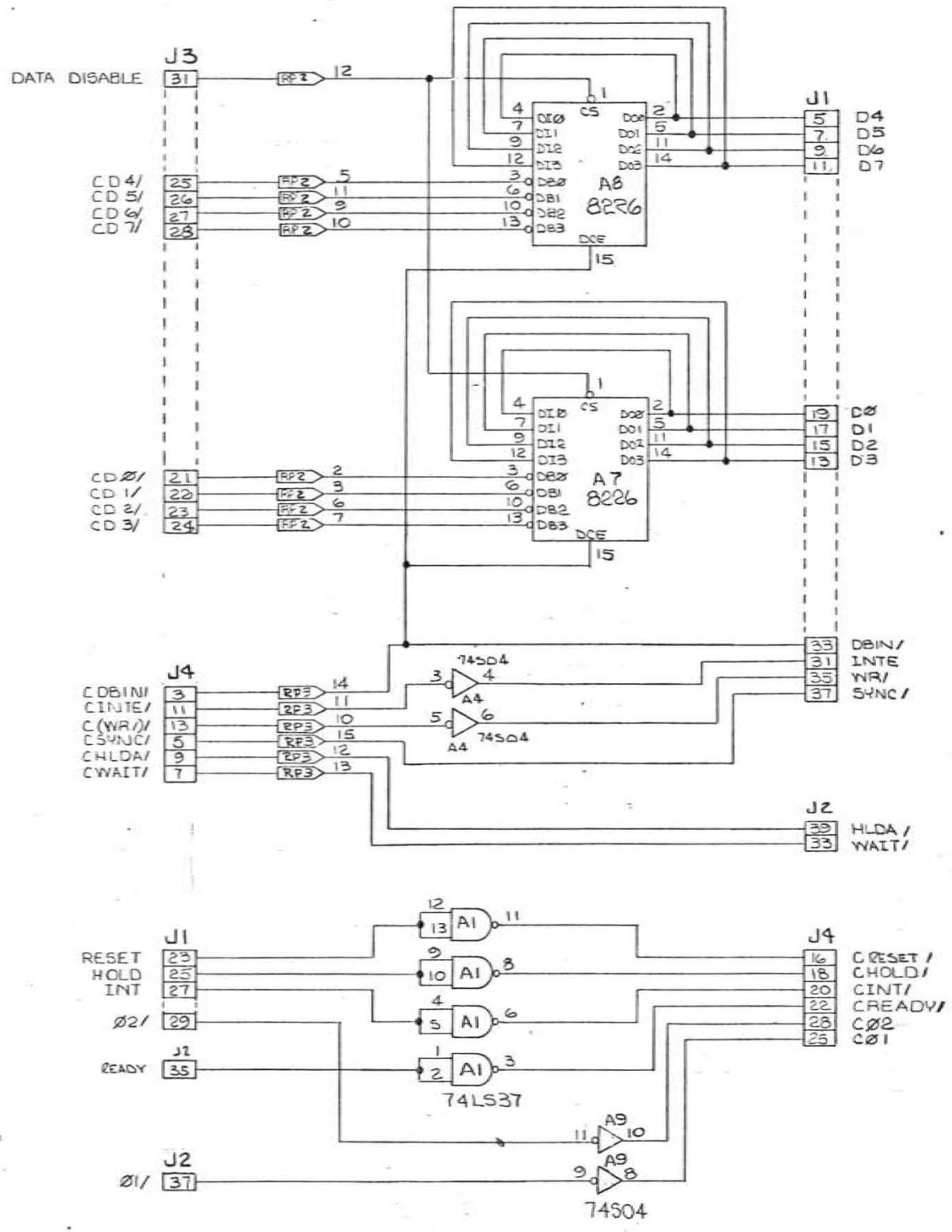
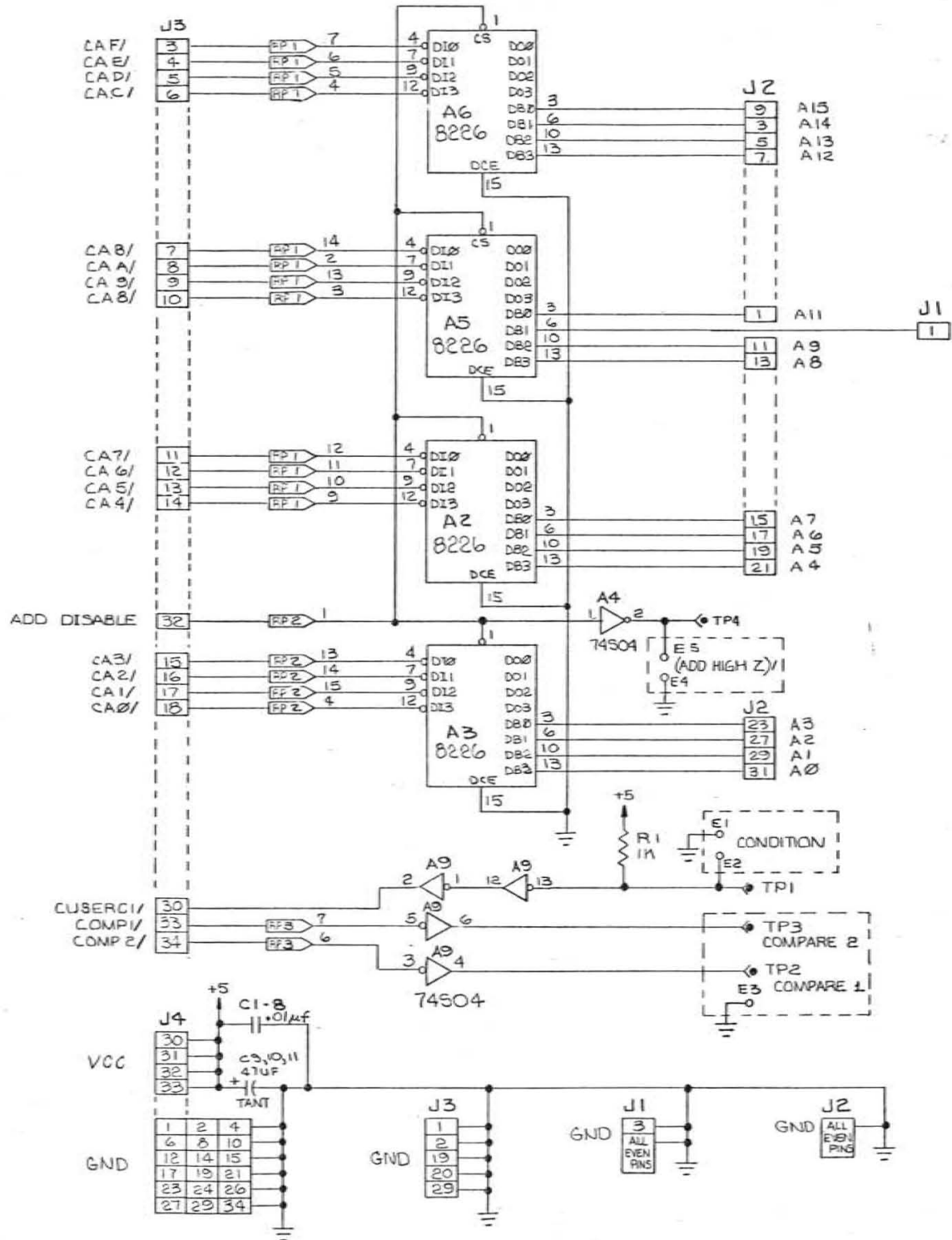
REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	ENGR
1	ENGR RELEASE		
2	ITEM 14 ADDED		
A	PROD RELEASE		



- NOTES:
1. ASSY NO IS 4000551-01
 2. INK STAMP ASSY NO AND REV LTR ON SIDE OF BOX (ITEM 2) USING A CONTRASTING COLOR INK AND #12 HIGH CHARACTERS.
 3. THE ENCLOSURE (ITEM 2) HAS CUT-OUTS ONLY ON ONE SIDE. BE SURE THESE CUT-OUTS APPEAR ON THIS SIDE, THE SIDE WITH THE USER CABLE (ITEM 6).
 4. PLACE ITEM 14'S ALTERNATELY ON EACH SIDE OF THE CABLE (ITEM 5) AND AT AN EVEN DISTRIBUTION ALONG THE LENGTH OF THE CABLE. PEEL OFF THE STICKY BACKING.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE: 1/1	SIGNATURE		DATE	intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051
TOL: 2 PLC 3 PLC ANGLE	DRN BY		6/26/75	
MATERIAL: SEE PARTS LIST	CHK BY		7/5/75	TITLE: BUFFER ASSY
4000551-01	DFT APPD		7/5/75	SIZE DEPT DRAWING NO. REV
NEXT ASSY USED ON	ENGR APPD		7/5/75	D 410 4000551 A
	AUTH BY	S. HAN	8/26/75	
	CODE:	SHEET 1 OF 1		

REVISIONS			
LTR	DESCRIPTION	SIGNATURE AND DATE	
		DFT	ENGR
1	ENGR RELEASE		
2	ENG RELEASE		
A	PROD RELEASE		
B	ECO 00309-1		



NOTES: UNLESS OTHERWISE SPECIFIED,
 1. THIS DOCUMENT REFLECTS ARTWORK REV B
 2. \square SYMBOLIZES TERMINATING RESISTOR, E6;



QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
R1	TP3			
A9				
J4				
E6				
C11				
TP4				

SCALE:	SIGNATURE	DATE	PARTS LIST	
TOL. 2 PLC 3 PLC ANGLE	DRN BY: <i>[Signature]</i>	4-7-75	intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051	
MATERIAL:	CHK BY: <i>[Signature]</i>	7/1/75	TITLE SCHEMATIC	
FINISH:	DFT APPD: <i>[Signature]</i>	7/1/75	ICE 80 CABLE CARD	
	ENGR APPD: <i>[Signature]</i>	7/1/75	SIZE DEPT	DRAWING NO.
	AUTH BY: S. H. H.	8/14/75	D 410	2000 495
	CODE:	SHEET 1 OF 1		REV B

AIO, A4	74504	3	REF. DESIGNATION	TYPE	QTY	LAST USED	NOT USED	1000493	INDS EC'S	80
SPACE	GATES		REF. DESIGNATION					NEXT ASSY		USED ON

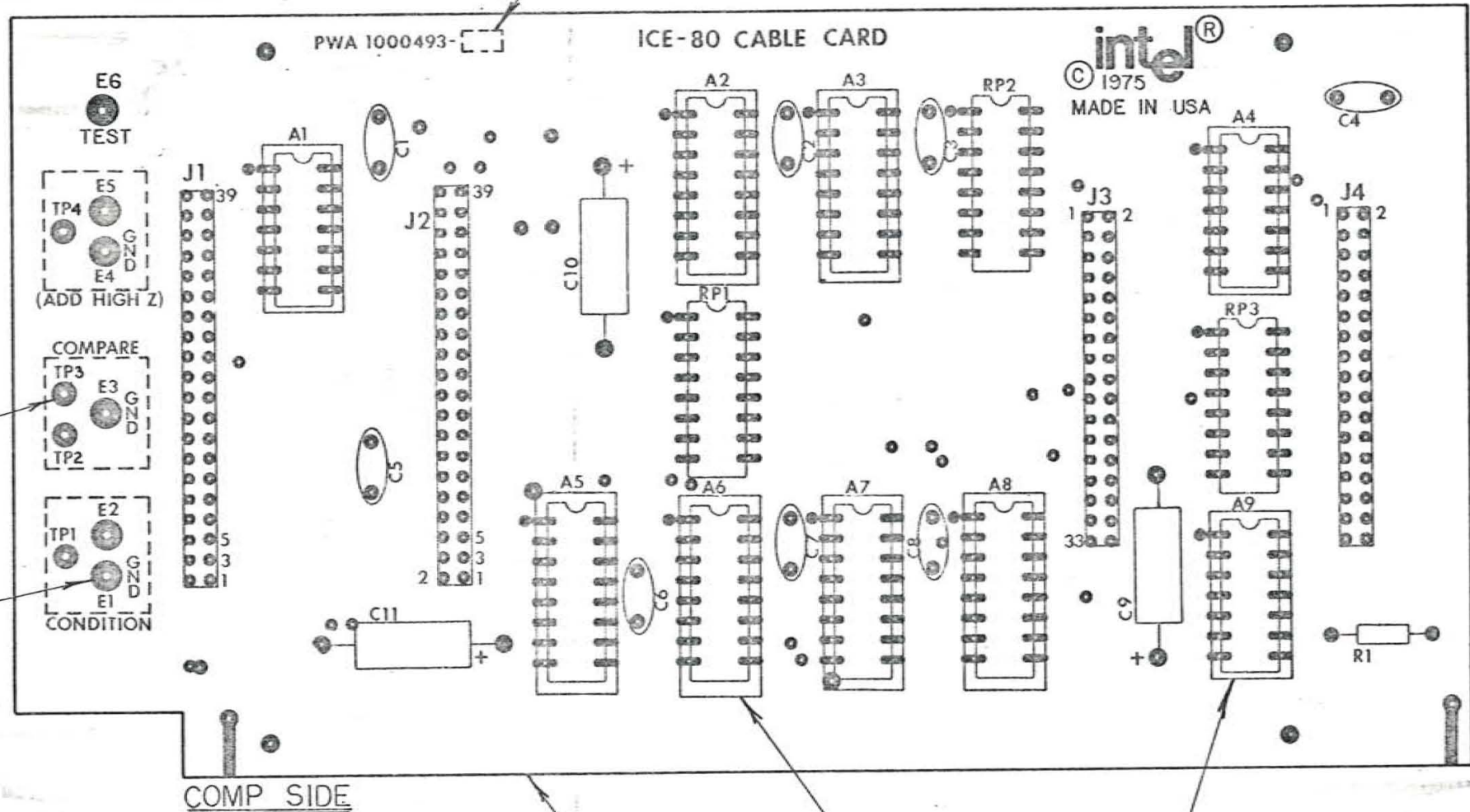
4

3

2

1

REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
A	PROD RELEASE, REDRAWN	8-24-75	[Signature]	[Signature]
B	ECO 00309-3	9-5-75	[Signature]	[Signature]



21
4 PLCS

17
6 PLCS

1

16
6 PLCS

20
3 PLCS

NOTES:
UNLESS OTHERWISE SPECIFIED,
1. ASSEMBLY NO IS 1000493-01.
2. MARK DASH NO. IN POSITION SHOWN.

ITEM NO.	PART NUMBER	DESCRIPTION
QUANTITY PER DASH NO.		
SCALE: 2:1		
TOL.	2 PLC	3 PLC
±	—	—
MATERIAL: SEE PARTS LIST		
FINISH: —		
SIGNATURE		DATE
DRN BY S. M. Ouley		8/24/75
CHK BY [Signature]		8/25/75
DFT [Signature]		8/29/75
ENGR APPD [Signature]		8/29/75
AUTH BY S. Hou		8/28/75
CODE:	SHEET 1 OF 1	
PARTS LIST		
intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051		
TITLE: PWA ICE-80 CABLE CARD		
SIZE	DEPT	DRAWING NO.
C 410		1000493
		REV
		B

4

3

2

1

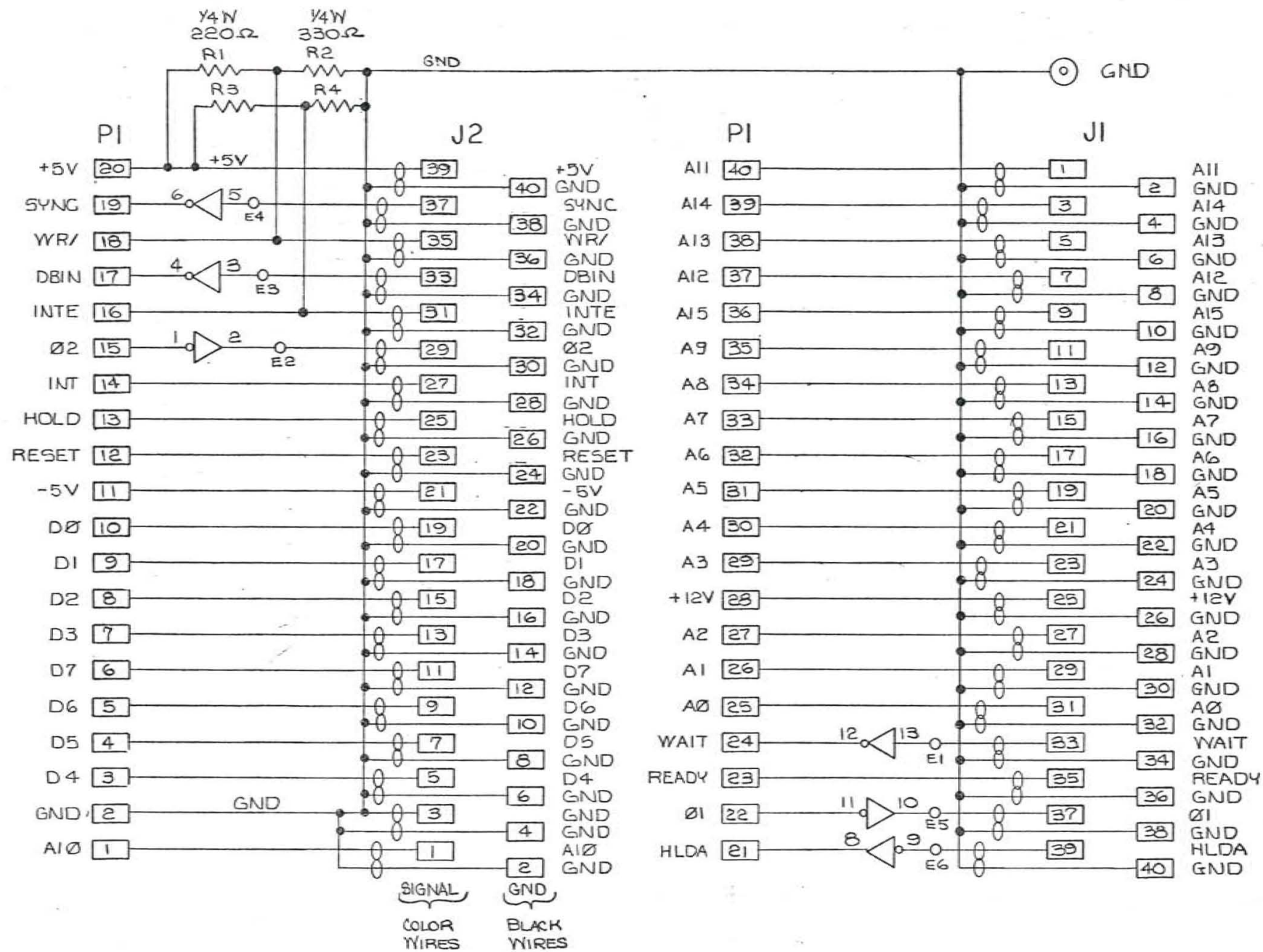
4

3

2

1

REVISIONS				
LTR	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
2	ENGR RELEASE	SRL 7-15-75	WLD 8/5/75	ENR 8/1/75
A	PROD. RELEASE	CLB 9-5-75	WLD 9-5-75	ENR 9/5/75



NOTES:

UNLESS OTHERWISE SPECIFIED,

1. THIS SCHEM REFLECTS ARTWORK NO 1000592 (CABLE TERMINATION BOARD) REV A AND CABLE ASSY NO 4000552 (USER CABLE) REV 1.

2. INVERTER SHOWN IS 9LS04.

QUANTITY PER DASH NO.		ITEM NO.	PART NUMBER	DESCRIPTION
SCALE:		SIGNATURE		DATE
TOL. ±	2 PLC	3 PLC	ANGLE	DRN BY S. N. D. 7/16/75
MATERIAL:		CHK BY [Signature]		2/5/75
FINISH:		DFT APPD [Signature]		8/1/75
NEXT ASSY USED ON		ENGR APPD [Signature]		4/1/75
4000592 MDS ICE-80		AUTH BY [Signature]		9/5/75
4000552 MDS ICE-80		CODE: [Signature]		SHEET 4 OF 1
		PARTS LIST		DESCRIPTION
		intel®		3065 BOWERS AVE. SANTA CLARA CALIF. 95051
		TITLE		SCHEMATIC
		SIZE		DEPT
		C 410		E 2000595
		DRAWING NO.		REV
				A

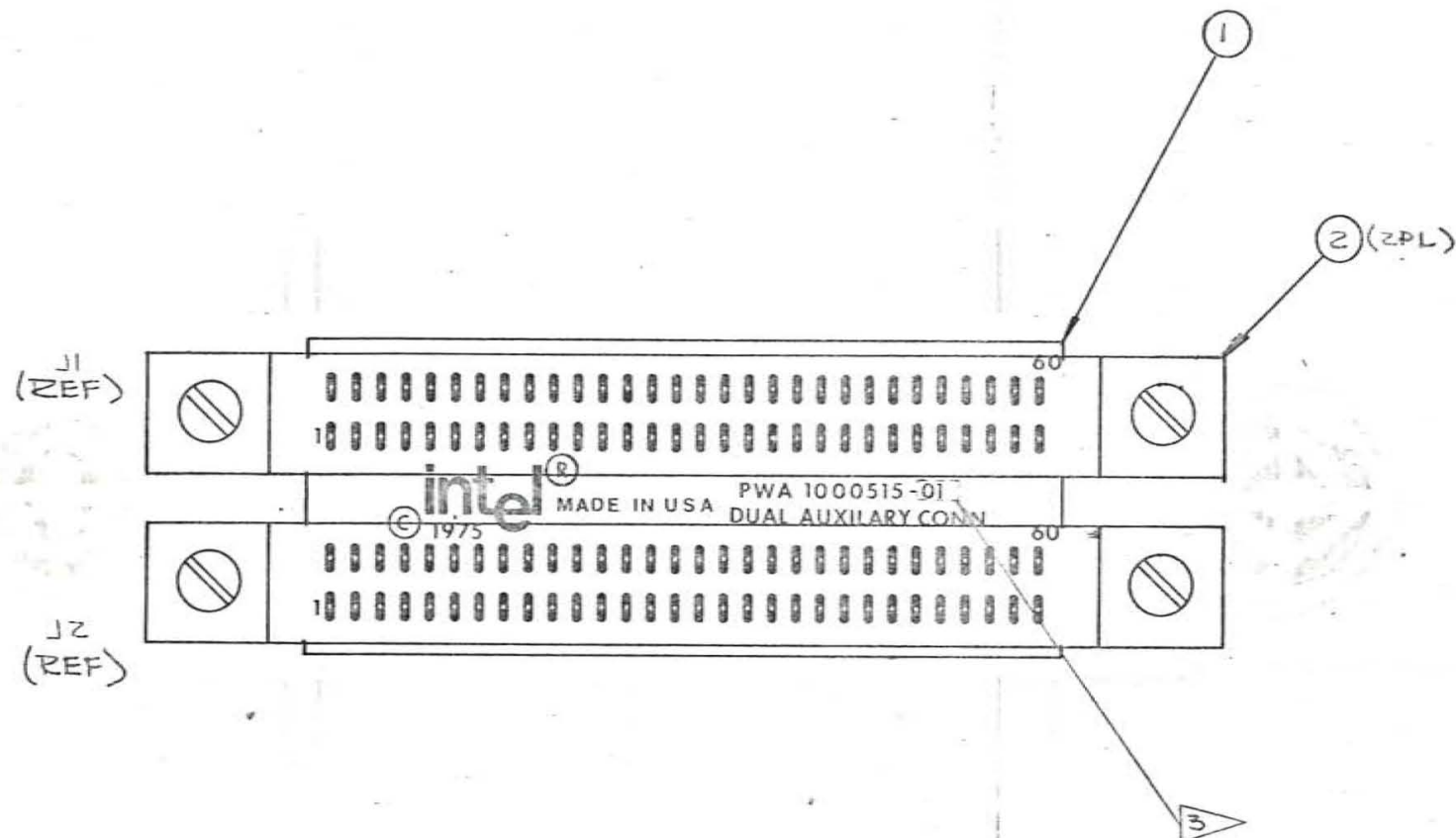
4

3

2

1

REVISIONS				
LTP	DESCRIPTION	SIGNATURE AND DATE		
		DFT	CHK	ENGR
1	ENG RELEASE	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	ARTWORK IS REV 2	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
A	PROD RELEASE	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>



SCHEMATIC

- NOTE; UNLESS OTHERWISE SPECIFIED:
- 1. ASSY NO. IS 1000515-01.
 - 2. SCHEMATIC REFLECTS ARTWORK REV A.
 - 3. STAMP DASH NO. IN POSITION SHOWN.

QTY	ITEM NO	PART NUMBER	DESCRIPTION
2	2	68-134	CONN, 30/60, DIP SOLDER
1	1	1000516-01	PWB DUAL AUX CONN

SCALE: 2:1 TOL: 2 PLC 3 PLC ANGLE MATERIAL: SEE P.L. FINISH:		SIGNATURE: <i>[Signature]</i> DATE: 5/1/75 DRN BY: <i>[Signature]</i> 5/1/75 CHK BY: <i>[Signature]</i> 5/1/75 DFT APPD: <i>[Signature]</i> 5/1/75 ENGR APPD: <i>[Signature]</i> 5/1/75 AUTH BY: <i>[Signature]</i> 5/1/75 CODE:		PARTS LIST intel 3065 BOWERS AVE. SANTA CLARA CALIF. 95051 TITLE: PWA, DUAL AUXILIARY CONNECTOR SIZE DEPT DRAWING NO. REV C 410 1000515 A	
4000350 MDS KE 20	4000320 MDS	NEXT ASSY USED ON			

4

3

2

1