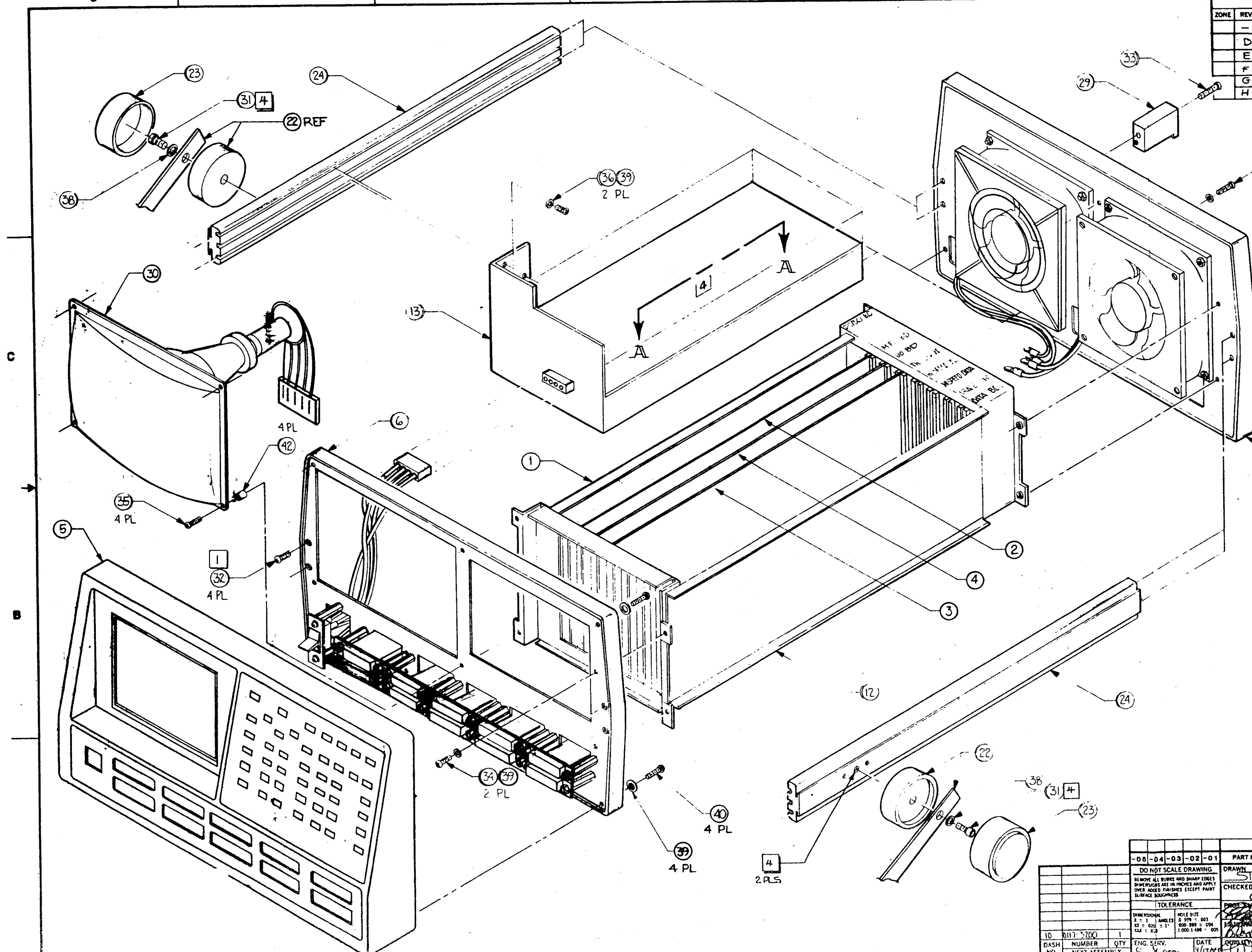


ZONE	REV	ECO #	DESCRIPTION	DWN	CHK
	-	-	SEE HISTORY		MW
D	A022		REVISED PER ECO		MW
E	4107		DELETE ITEM 19 FROM L/M		2M
F	4118		REVISED PER ECO NO		WVC
G	4203		REVISED PER ECO 4203		2M
H	4473		REVISED PER ECO		2M



NOTE: UNLESS OTHERWISE SPECIFIED.

- ITEM (32) ATTACHES ITEM (24) TO ()
- LOCATES IN POWER SUPPLY
- TYPE ASSY N^o DASH N^o, REVISION LETTER, AND SERIAL N^o.
- APPLY A CONTINUOUS LINE OF THREE LOCK ITEM 43 APPROXIMATELY .51 LONG ON THE THREADED PART OF 34 AND ONE DROP OF ITEM 43 .1 INCH DIA ON THE THREADED PART ITEM 24 (2PLS) BEFORE ASSY. V EXCESS THREAD LOCK OFF AFTER

-05-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION
DO NOT SCALE DRAWING		DRAWN SIM	DATE 10/15/82	GOULD Instruments C Santa Clara C
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE BOUNCES.		CHECKED [Signature]	DATE 4/13/83	
TOLERANCE		TITLE		CHASSIS TOP ASSY
DIMENSIONAL: .125 - .001		SCALE		NONE
ANGLE: 0.500 - .003		SIZE		D
SURFACE: 1000 1.000 - .005		PART NUMBER		0117-0003
DASH NO		MODEL		K105
NUMBER		SHEET		1
QTY		DATE		4/13/83
ENG. SERV.		DATE		4/13/83
NEXT ASSEMBLY		DATE		4/13/83

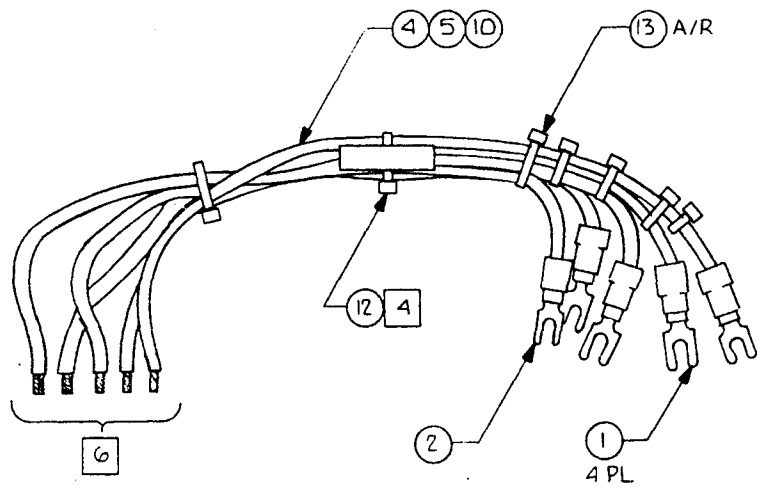
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3

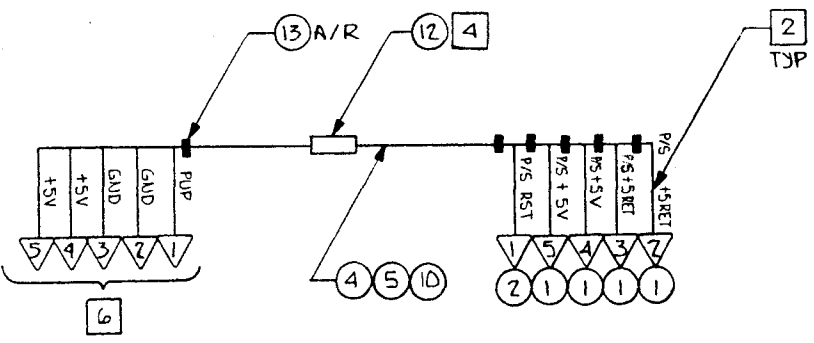
2

1

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
	5D		PILOT REL PER ERN 372	STM		3/23/83
	5I	3873	REVISED PER ECO	JWC	DGM	7/12/83
	A	3957	PROD. REL PER ECO # 4	STM	DGM	9/16/83



WIRE NO.	FROM	TO	AWG	COLOR	LENGTH
1	P/S RST	PUP	16	WHT	6.5"
2	P/S+5VRET	GND	12	BLK	7.5"
3	P/S+5VRET	GND	12	BLK	7.5"
4	P/S+5V	+5V	12	RED	7.5"
5	P/S+5V	+5V	12	RED	7.5"



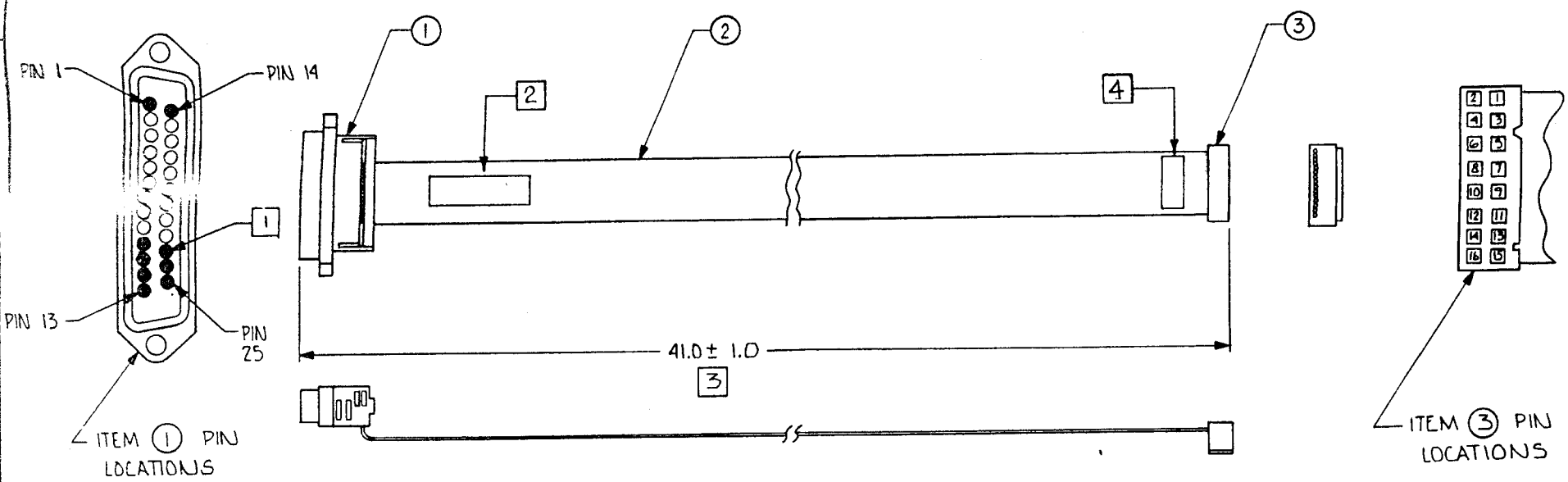
- 6 STRIP INSULATION .25"
- 5. ▽ TERMINATION TRIANGLE INDICATES WIRE NO.
○ CIRCLE INDICATES ITEM NO. ON PARTS LIST.
- 4 TAG HARNESS WITH ASSY NO. 0117-0144 DASH NO. AND REV. LEVEL AS SHOWN.
- 3. TIP OF TERMINATION TRIANGLE DENOTES END OF LUT WIRE BEFORE LUGGING.
- 2 IDENTIFY PLUGS AND ENDS OF WIRES WITH DESTINATION AS SHOWN.
- 1. DRAWING IS TO SCALE AND MAY BE USED AS A TEMPLATE.
- NOTES: UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING		DRAWN	DATE	GOULD biomation	
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE ROUGHNESS.		CHECKED	3/23/83	TITLE	
TOLERANCE		PROJ. ENG.	3/23/83	HARNESS, MOTHER BOARD	
DIMENSIONAL: HOLE SIZE		MANUFACTURING	3-23-83	SCALE	SIZE
X = .020 ± .001		QUALITY ASSUR	3-23-83	1:1	C
ID	0117-0145	ENG. SERV.	DATE	PART NUMBER	REV
DASH NO.	NUMBER	R. Kiper	3/13/83	0117-0144	A
	QTY			CODE	K105
	NEXT ASSEMBLY				SHEET 1 OF 1

ITEM	QUANTITY PER ASSEMBLY							PART NUMBER	PART NAME / DESCRIPTION	REFERENCE DESIGNATION	L/M
	-90	-80	-70	-60	-50	-40	-30				
1								6200-0055-10	FORK LUG 10-12 AWG		
2								6200-0054-10	FORK LUG 14-16 AWG		
3											
4								7150-0012-02	WIRE 12 AWG RED		
5								7150-0012-10	WIRE 12 AWG BLK		
6											
7											
8											
9											
10								7150-0016-09	WIRE 16 AWG WHT		
11											
12								7200-0039-10	MARKER, TIE WRAP 4" LUG		
13								7200-0008-10	CABLE TIE 4" LUG		

REV	DESCRIPTION	DATE	DWN	CKD	DWN	DATE	LIST OF MATERIAL MOTHERBOARD HARNESS	GOULD biomation
					STM	1-20-83		
					R. Wood	3/23/83		
					R. Wood	3/23/83		
					R. Wood	3-23-83		
A	PROD. REL PER ECO 3957	9-16-83	STM	DGM	ID	0117-0045		
5I	REVISED PER ECO 3873	7-12-83	JWC	DGM	DASH NO.	NUMBER		
5D	PILOT REL PER ERN		STM		NO.	NEXT ASSEMBLY		
					QTY			
								REV
								A
								MODEL
								K105
								SHEET 1 OF 1

ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
	01		PROTOTYPE	STM		2/14/83
	50		PRD: REL PER ECO 3957	STM	DGW	3/30/83
	51	5168	REV'D PER ECO	MW	DGW	5/23/83
	A	3791	PRD: REL PER ECO	STM	DGW	9/16/83
	B	4003	REVISED PER ECO	JWK		12/14/83



WIRE LIST				
ITEM NO.	PIN NO.	COLOR	PIN NO.	ITEM NO.
1	2	BRN	1	3
	15	BIEGE	2	
	3	RED	3	
	16	BIEGE	4	
	4	ORN	5	
	17	BIEGE	6	
	5	YEL	7	
	18	BIEGE	8	
	6	GRN	9	
	19	BIEGE	10	
	7	BLU	11	
	20	BIEGE	12	
	8	VIO	13	
	21	BIEGE	14	
	9	GRY	15	
	22	BIEGE	16	3

DASH#	DESTINATION
01	I/O J2
02	I/O J3

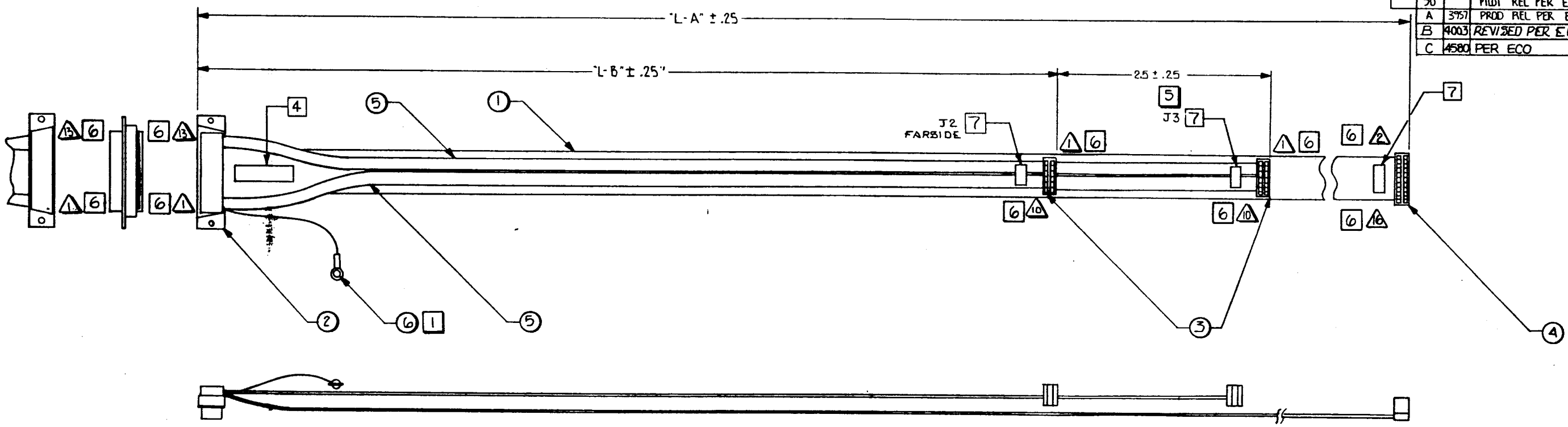
- 4 LABEL DESTINATION OF CABLE PER P/N CHART
 - 3 OR NEXT CLOSEST FLAT PORTION OF CABLE.
 - 2 IDENTIFY WITH ASSY NO. 0117-0157 DASH NO. AND REV. LEVEL.
 - 1 PINS NO 1, 14, 10, 23, 11, 24, 12, 25 AND 13 ON CONN. ITEM 1 ARE NO CONNECTION
- NOTES: UNLESS OTHERWISE SPECIFIED

-50 -40 -30 -20 -10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING		DRAWN STM	DATE 2/14/83	GOULD biomation	
REMOVE ALL BURRS AND SHARP EDGES		CHECKED STM	DATE 4/13/83	TITLE HARNESS ASSY, RS232C, K105	
DIMENSIONAL		ENG. SERV.	DATE 4/13/83	SCALE NONE	SIZE C
DASH NO. 01		NUMBER 0117-0120	QTY 1	PART NUMBER 0117-0157	RVF B
NEXT ASSEMBLY		ENG. SERV. R. J. J. J.	DATE 4/13/83	CODE K105	SHEET 1 OF 1

ITEM	QUANTITY PER ASSEMBLY									PART NUMBER	PART NAME / DESCRIPTION	REFERENCE DESIGNATION	L/M
	-90	-80	-70	-60	-50	-40	-30	02	01				
1								1	1	6000-0559-10	CONN. 25 PIN, SOCKET		
2								3	3	7100-0068-08	RIBBON CABLE, 8 PAIRS		
3								1	1	6000-0352-10	CONN. 16 CONTACT SOCKET		

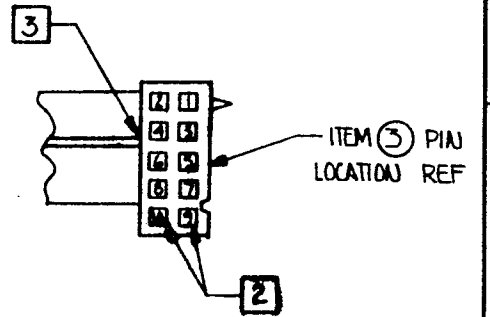
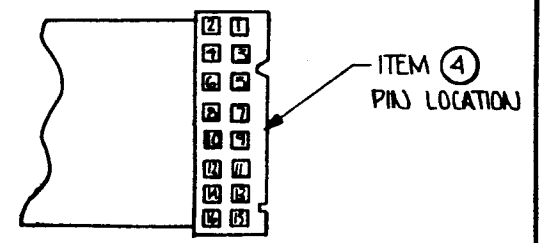
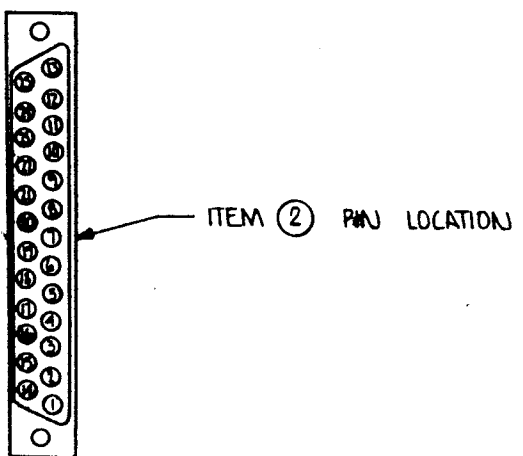
REV	DESCRIPTION	DATE	DWN	CKD	DWN	DATE	LIST OF MATERIAL HARNESS ASSY RS232C, K105	GOULD biomation B 0117-0157 MODEL K105	REV B SHEET 1 OF 1
					CHK	4/13/83			
					ENGR	4/13/83			
					MFG.	4/13/83			
					Q.A.	4/13/83			

ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
	01		PROTOTYPE	STM		2-1-83
	02		REVISED	STM		2-22-83
	03		REVISED PIN OUTS ADDED DETAILS	STM		2-11-83
	04		REVISED ENLG. ERROR	STM		2-11-83
	05		WIRE LIST HAD 2 PIN 10'S REVISED LENGTH CLARIFIED NOTE 3, REVERSED ITEM 4	STM		3-1-83
	50		PILOT REL PER ERAJ 333	STM		3-30-83
A	3757		PROD REL PER ECO#	STM		9-6-83
B	4003		REVISED PER ECO#	JWR		10-18-83
C	4580		PER ECO			11-14-83



DASH N°	L - A		L - B	
	LENGTH	DEST	LENGTH	DEST
01	80	HS CLK	40	J2, J3
02	80	HS F-B	40	J2, J3

CONN	ITEM NO	PIN NO	COLOR	PIN NO	CONN	ITEM NO.
2	1	GREEN	8	6		
	14	BIEGE	8	3		
	2	YEL	7	3		
	15	BIEGE	6	3		
	16	BRN	5	3		
	4	GRN	15	4		
	17	BIEGE	14	4		
	5	PURPLE	13	4		
	18	BIEGE	12	4		
	6	BLUE	11	4		
	19	BIEGE	10	4		
	7	GRN	9	4		
	20	BIEGE	8	4		
	8	YEL	7	4		
	21	BIEGE	6	4		
	9	BRN	5	4		
	22	BIEGE	4	4		
	10	RED	3	4		
	23	BIEGE	2	4		
	11	BRN	1	4		
	24	BIEGE	4	3		
	12	RED	3	3		
	25	BIEGE	2	3		
	13	BRN	1	3		
		N/C		3		



- 7 LABEL DESTINATION OF CABLES PER P/N CHART
 - 6 Δ DENOTES PIN NO. ON CONNECTOR
 - 3 PLACE CONN'S ITEM 3 ON FLAT PORTION OF CABLE.
 - 4 IDENTIFY WITH ASSY NO. 0117-0223, DASH NO. AND REV LEVEL
 - 3 PIN / WIRE LOCATION IS IDENTICAL ON BOTH CONNECTORS ITEM 3 EXCEPT CONDUCTOR LOCATED BETWEEN PIN 6 ON BOTH CONNECTORS IS CUT.
 - 2 PINS 9 AND 10 ARE NO CONNECTION
 - 1 REMOVE 1st CONDUCTOR (BIEGE) THEN PEEL AND CUT 2nd CONDUCTOR (GRN) TO LENGTH OF 4" AND INSTALL ITEM 6
- NOTES: UNLESS OTHERWISE SPECIFIED

-00-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING		DRAWN STM	DATE 2-1-83	GOULD Instruments Division Sente Clara Operations	
REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE BURNISHES		CHECKED STM	DATE 1/15/83	TITLE CABLE KIT, HI-SPEED	
TOLERANCE		SCALE NONE		SIZE D	
DIMENSIONAL: 1 = 1 INCHES		HOLE SIZE: 8-300 = .003		PART NUMBER 0117-0223	
2 = .020 ± .01		8-300 = .004		REV C	
3 = .010 ± .01		1.000-1.000 = .004		MODEL K105	
4 = .005 ± .005		1.000-1.000 = .004		SHEET 1 OF 1	
DASH NO.	NUMBER	QTY	DATE	DATE	
			1/15/83	1-1-83	
NEXT ASSEMBLY		DATE		DATE	
		1/15/83		1-1-83	

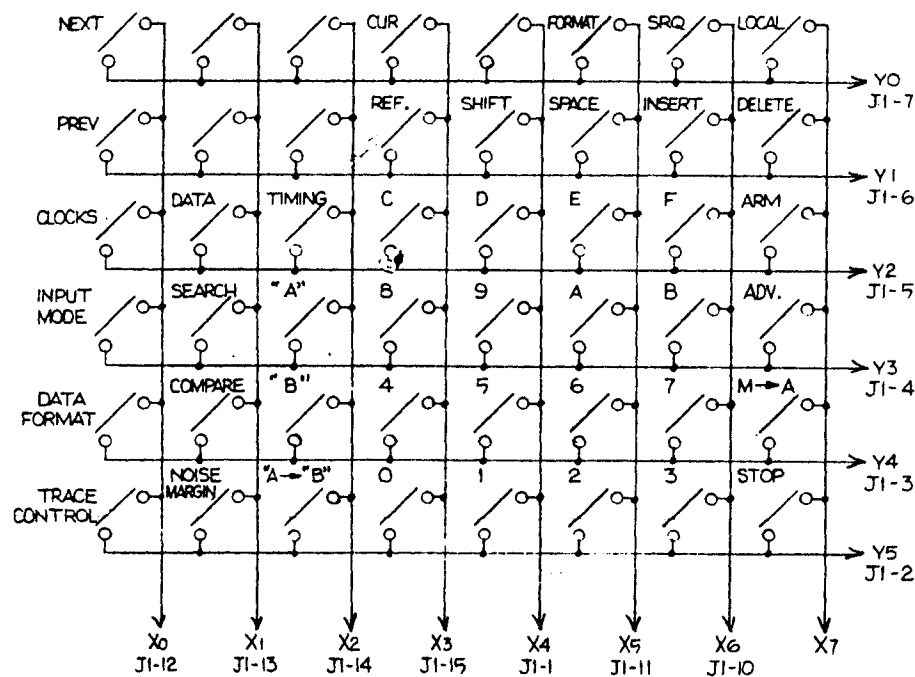
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3

2

1

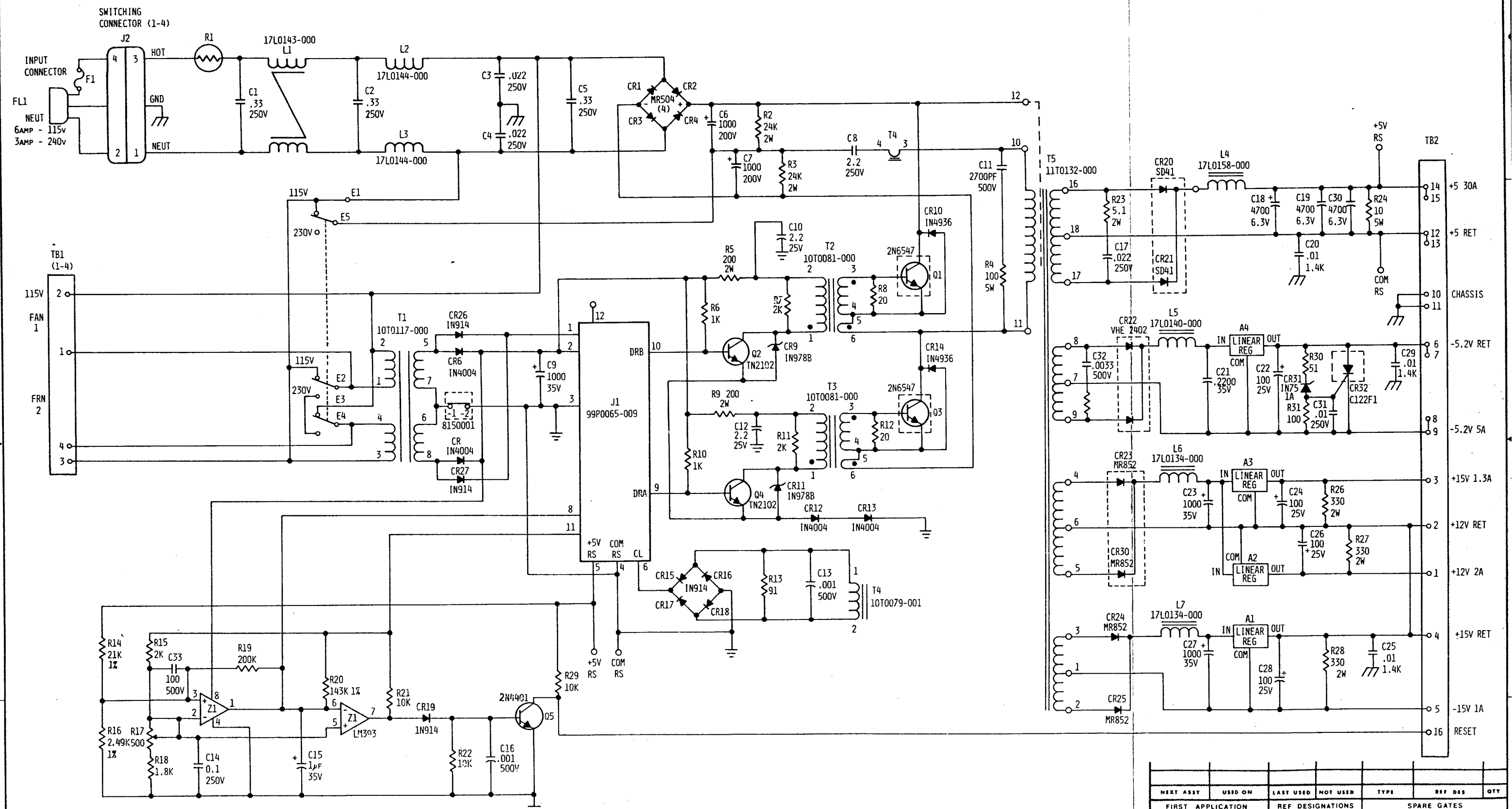
REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
	50		PILOT REL PER ERN #316	STM		2-3-83
	51		REV SKIPPED	MW		4-15-83
	52	3757	REV'D PER ECO	MW	DLW	5/4/83
	A	3957	PRDD REL PER ECO N6	SWC	DLW	7/4/83
	B	4290	PER ECO	DLW	DLW	11/17/84



-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING										DRAWN	DATE	GOULD biomation	
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT. SURFACE ROUGHNESS										CHECKED	2-15-83	TITLE	
TOLERANCE										PROJ. ENG.	2-18-83	KEYBOARD, K105	
DIMENSIONAL: 2 ± .1					HOLE SIZE: .0589 ± .002					SCALE	SIZE	PART NUMBER	REV
.01 ± .010					.0025 ± .001					-	C	0117-0041	B
.005 ± .010					1.000 ± .005					DATE	QUALITY ASSUR		
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE									
10	0117-0040	1	R. Wilson	1/14/83									
NEXT ASSEMBLY													

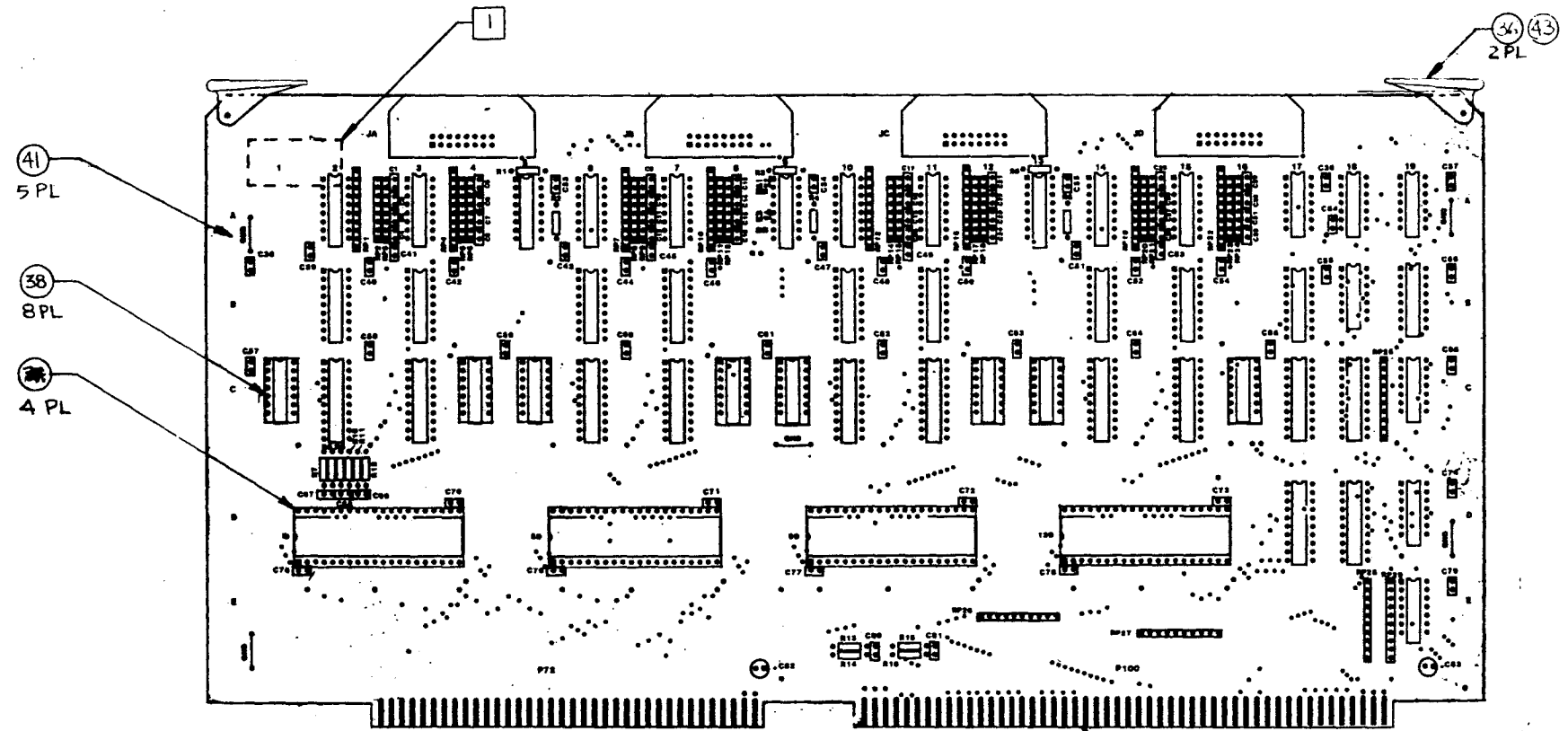
0117-0041

DWG. NO.	REV.	DATE
0117-0377	1	
REVISIONS		
ZONE	REV	DESCRIPTION



NEXT ASSY	USED ON	LAST USED	NOT USED	TYPE	REF DES	QTY
FIRST APPLICATION		REF DESIGNATIONS		SPARE GATES		
APPROVALS		DATE		SCHEMATIC		
DRAWN		10-7-83		K105-D		
CHECKED				POWER SUPPLY		
ENGR	SIZE	DWG NO.	REV			
	D	0117-0377				

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
			SEE HISTORY		MW	
A			PRODUCTION REL		MW	11/14/83

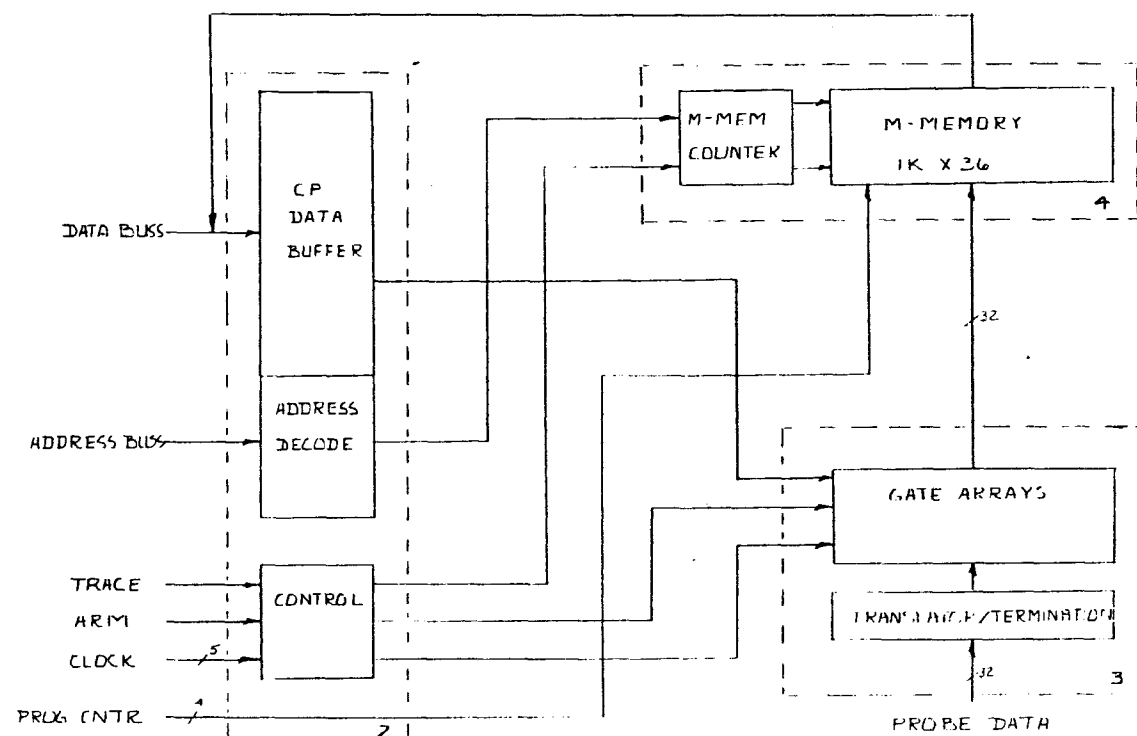


COMPONENT SIDE

- NOTES: UNLESS OTHERWISE SPECIFIED.
1. MARK ASSEMBLY DASH NO., REVISION LEVEL AND SERIAL NO. APPROXIMATELY WHERE SHOWN USING CONTRASTING INDELIBLE INK.
 2. ASSEMBLY REFLECTS SCHEMATIC DRAWING 0117-0146, AND FABRICATION DRAWING 0117-0147.

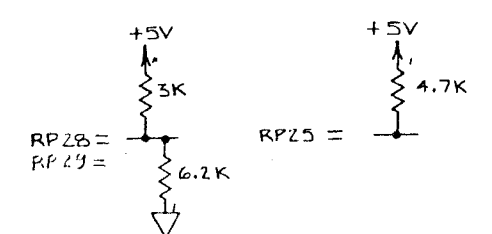
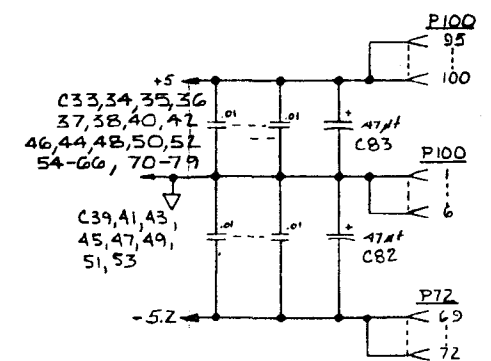
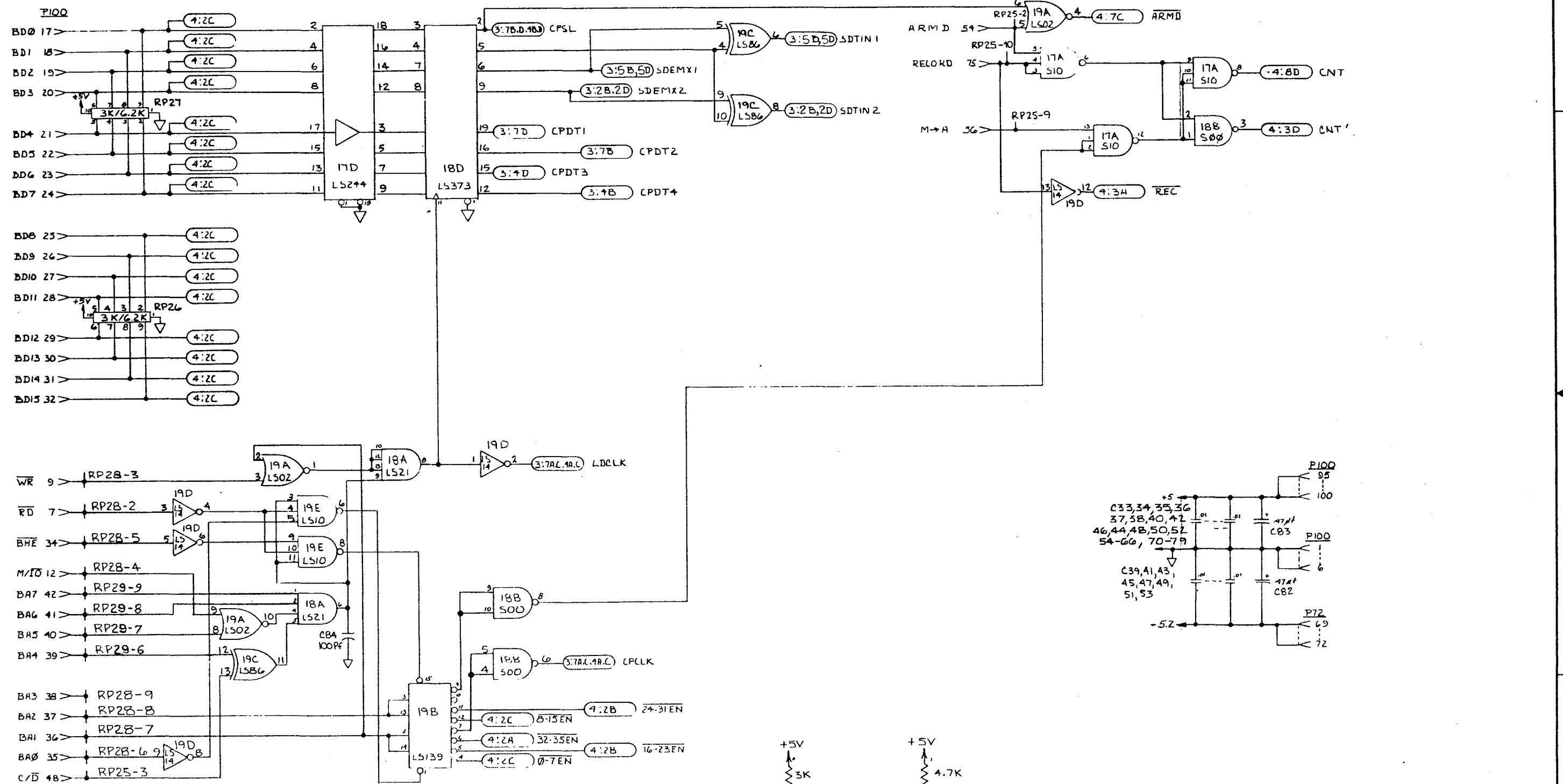
-06-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING		DRAWN	DATE	GOULD Instruments Division Santa Clara Operations	
REMOVE ALL BURRS AND SHARP EDGES		3/24/83	5/13/83	TITLE ASSEMBLY, DATA /M- MEMORY (W. GATE ARRAY)	
DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT		CHECKED	5/13/83	SCALE 1/1	
SURFACE BURNISH		PROG. ENG.	5/13/83	SIZE D	
TOLERANCE		MANUFACTURING	5/13/83	PART NUMBER 0117-0145	
DIMENSIONAL: X = .020, ± .1"		DATE	5/13/83	REV A	
ANGLE: 800-999 = .004		ENG. SERV.		MODEL K105	
HOLE SIZE: 0.599 = .003		DATE	5/13/83	SHEET 1 OF	
1.000-1.498 = .005					
XXX = .010					
DASH NO.	NUMBER	QTY	DATE		
-10	0117-3200	1			
NEXT ASSEMBLY					

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHRD	DATE
-	-	-	SEE HISTORY			
A	A392		PRODUCTION REL.	MW		11/1/88



-08-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	1
DO NOT SCALE DRAWING		DRAWN	DATE	GOULD Instruments Division Santa Clara Operations TITLE DATA / M-MEMORY (W. GATE ARRAY)	REV A
REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE ROUGHNESS		CHECKED			
TOLERANCE		PROJ. ENG.		SCALE	SIZE
DIMENSIONAL		HOLE SIZE		D	0117-0146
X = 1		ANGLES		MODEL	K.G.S.
XX = 0.20 - 1"		MANUFACTURING		SHEET 1 OF 7	
XXX = 0.10		ENG. SERV.			
DASH NO.	NUMBER	QTY	DATE		
-10	0117-0003	1			
NEXT ASSEMBLY					

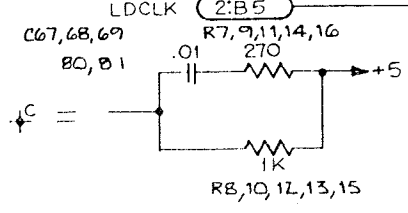
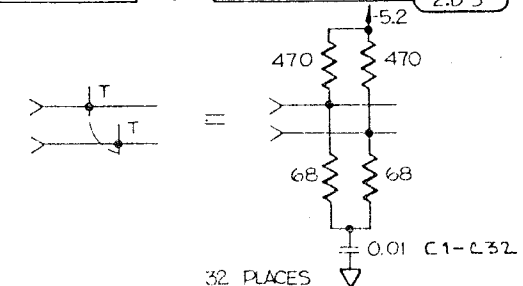
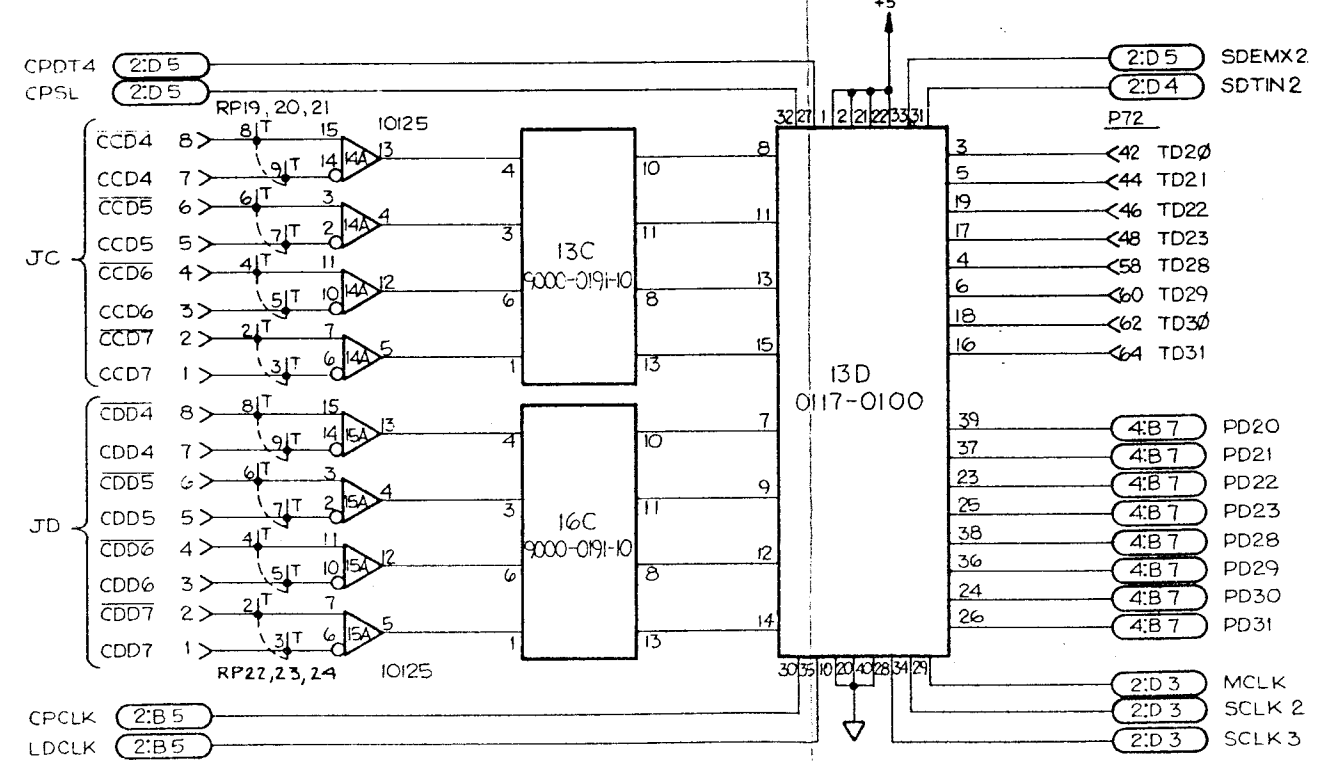
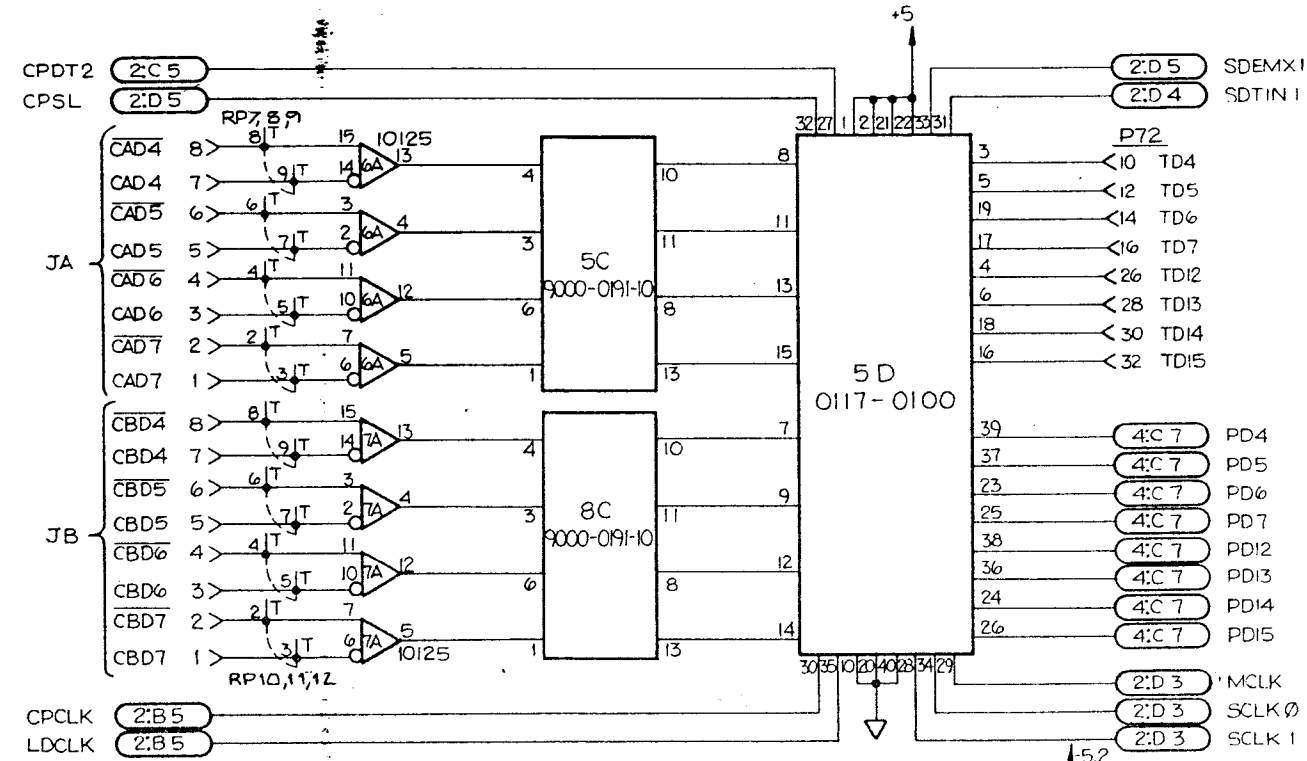
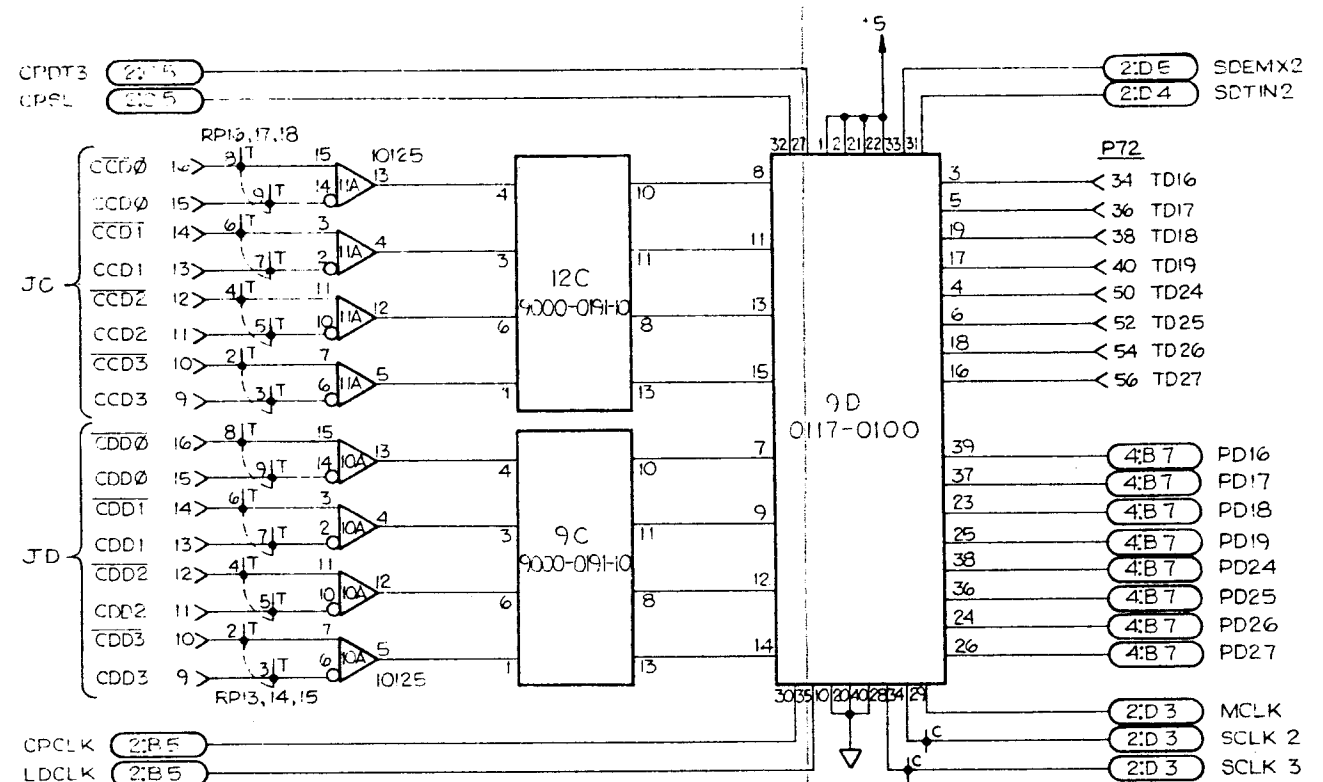
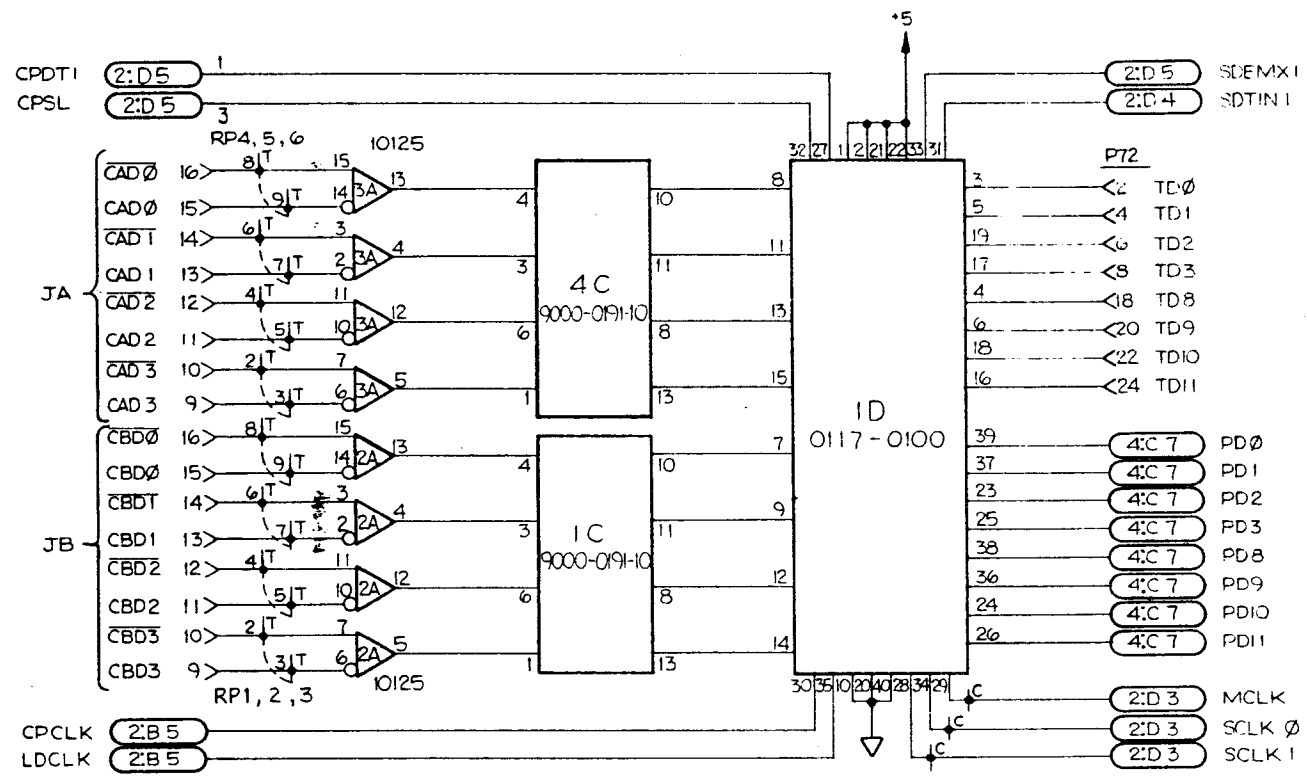
MCLK 86 > 3:5A.C MCLK
 CLOCK 3 94 > 3:2A.C SCLK 3
 CLOCK 2 92 > 3:2A.C SCLK 2
 CLOCK 1 90 > 3:5A.C SCLK 1
 CLOCK 0 88 > 3:5A.C SCLK 0



PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
-50 -40 -30 -20 -10		PART NUMBER		PART NAME		1
DO NOT SCALE DRAWING						
REMOVE ALL BURRS AND SHARP EDGES						
DIMENSIONS ARE IN INCHES AND APPLY						
OVER ALL DIMENSIONS EXCEPT HOLE						
SURFACE ROUGHNESS						
TOLERANCE						
DIMENSIONAL		HOLE SIZE		PROJ. ENG.		DATE
X = 1		0.598 - 0.01		CHECKED		DATE
ANGLES		80.899 - 0.01		MANUFACTURING		DATE
X = 0.10		1.000 - 0.05		QUALITY ASSUR		DATE
X = 0.10		1.000 - 0.05		SCALE		SCALE
DASH NO		NUMBER		SIZE		REVISION
NEXT ASSEMBLY		QTY		PART NUMBER		A
		ENG. SERV.		0117-0146		
		DATE		CODE		SHEET 2 OF 4
				KIDS		

GOULD **biomation**
 TITLE: DATA/M-MEMORY (W. GATE ARRAY)

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
SEE SH. 1						



DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR

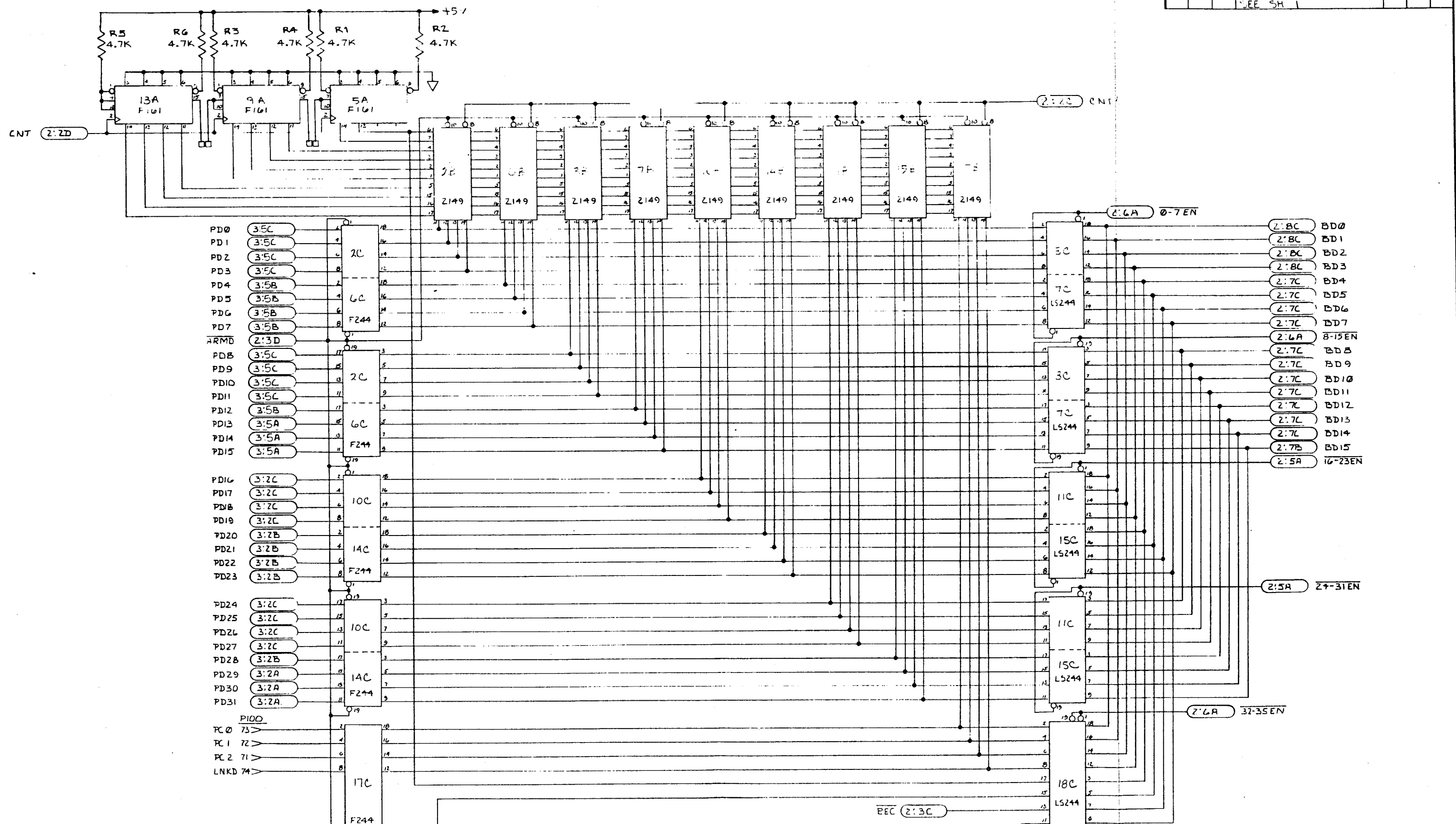
REV	DATE	BY	CHKD
3			

PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
06-04-03-02-01			1

TOLERANCE		HOLE SIZE	
DIMENSIONAL	± 0.1	0.591 - 0.001	
ANGLES	± 1°	0.001 - 0.004	
XXX ± 0.10		1.000 ± 0.005	

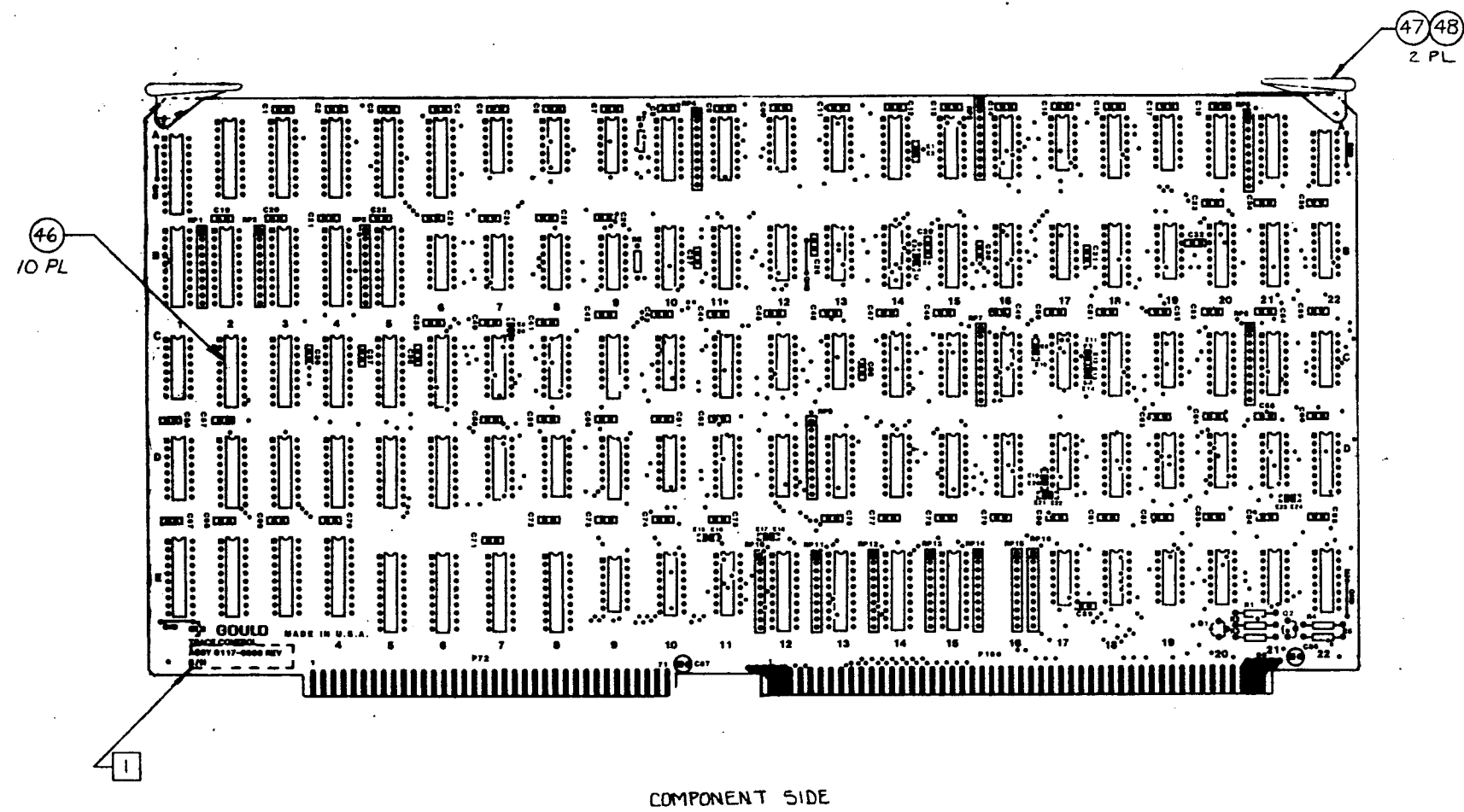
GOULD		Instruments Division	
Santa Clara Operations		TITLE	
		DATA/M-MEMORY (W. GATE ARRAY)	
SCALE	SIZE	PART NUMBER	REV
	D	0117-0146	A
MODEL	SHEET 3		OF 4

Dwg. No. 0117-0146		Rev. A				
REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
			SEE SH 1			



-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING													
REMOVE ALL DIMS AND SHARP POINTS													
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED													
TOLERANCE													
DIMENSIONAL: 3 ± .1 ANGLES: 2.5 ± .05													
HOLE SIZE: .025 ± .004													
XXX ± .010 1.000-1.499 ± .005													
SURFACE FINISH: AS REQUIRED													
Gould biomation													
TITLE: DATA/M-MEMORY (W. GATE ARRAY)													
SCALE: D 0117-0146													
REV: A													
DASH NUMBER: QTY: ENG. SERV. DATE: QUALITY ASSUR.													
CODE: SHEET 4 OF 4													

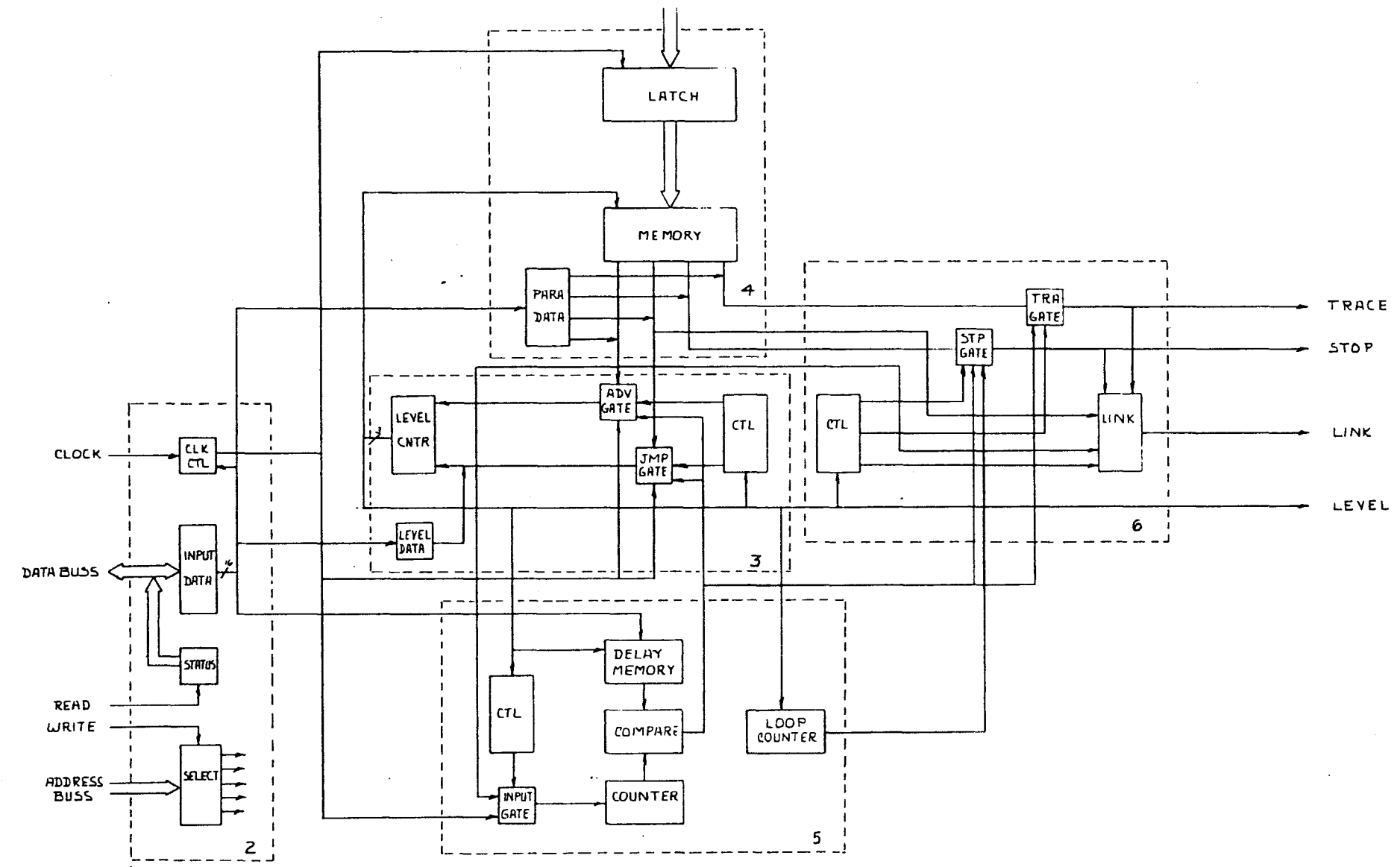
REVISIONS					
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD DATE
	02		PROTOTYPE		
	03		PROTOTYPE		
	50	549	PILOT RELEASE		
	56	429	REVISED PER ECO	MW	11/7/83
	57	442	REVISED PER ECO	MW	11/7/83
	57R	446	REWORK ONLY	MW	
	59R	447	REWORK ONLY	MW	
	60	4487	REVISED PER ECO	MW	11/7/84
	61	4543	PER ECO	MW	11/7/84
	62	4563A	REV'D PER ECO 4563A	BMM	11/7/84



NOTES: UNLESS OTHERWISE SPECIFIED.
 1 MARK ASSEMBLY DASH NO., REVISION LEVEL AND SERIAL NO. APPROXIMATELY WHERE SHOWN USING CONTRASTING INDELIBLE INK.

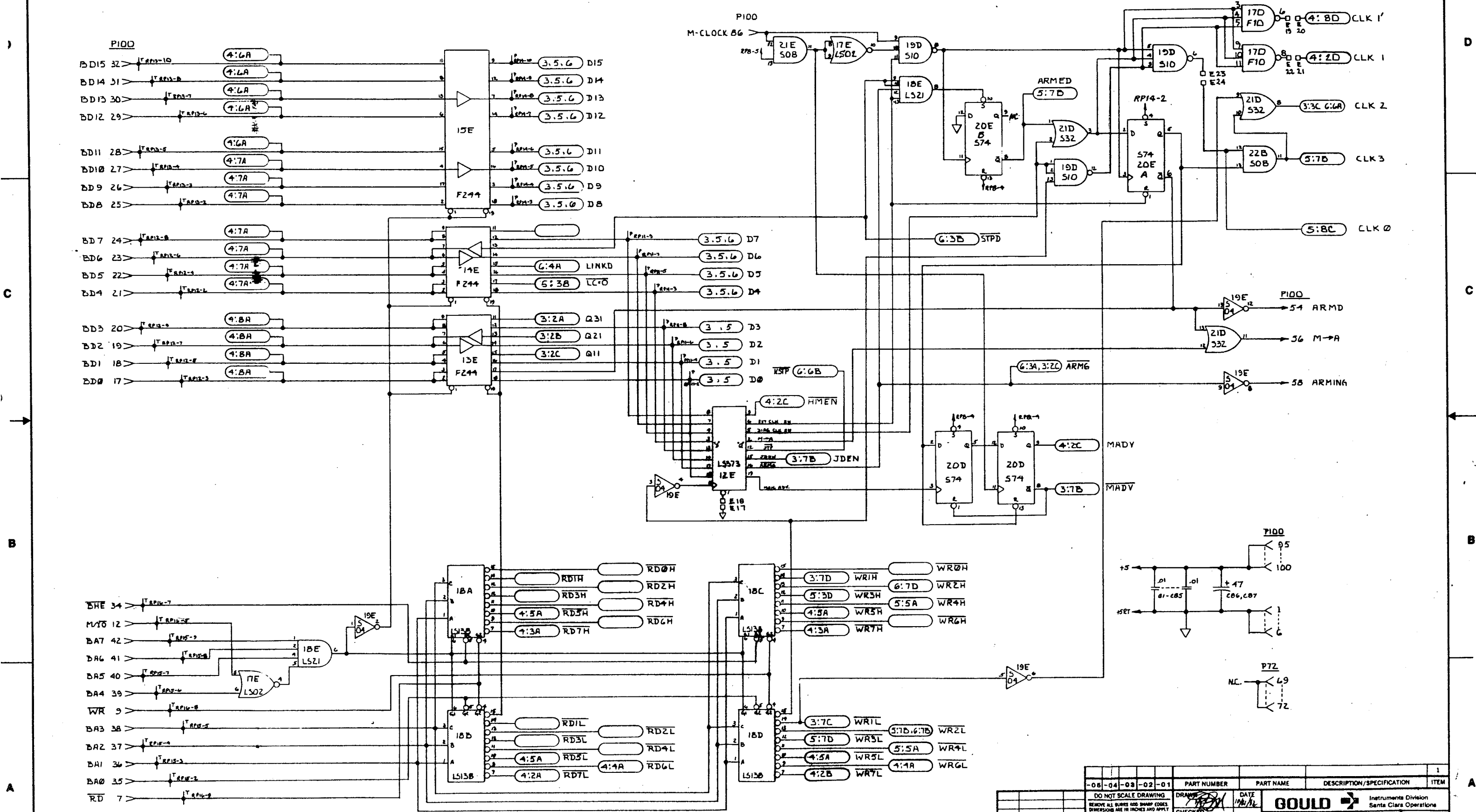
-06-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING		DRAWN	DATE	GOULD Instruments Division Santa Clara Operations	
REMOVE ALL BURRS AND SHARP EDGES		CHECKED	5/13/83	TITLE ASSEMBLY	
DIMENSIONS ARE IN INCHES AND APPLY OVER HOOD FINISHES EXCEPT PAINT SURFACE ROUGHNESS		DATE	5/13/83	TRACE CONTROL	
TOLERANCE		MANUFACTURING	DATE	SCALE	SIZE
DIMENSIONAL: X = .1, Y = .1, Z = .015		DATE	5/13/83	1/1	D
HOLE SIZE: .001, .002, .003, .004, .005, .006, .007, .008, .009, .010		DATE	5/13/83	MODEL	K105
XXX = .010		DATE	5/13/83	PART NUMBER	0117-0060
ID	0117-0060	QTY	1	REV	62
DASH NO.	0117-0060	ENG. SERV.		QUALITY ASSUR	
NO.	1	DATE	5/13/83	SHEET	1 OF 1

ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
	50		PILOT REL PER FRN 747	RM	JW	7/4/62
	56	4291	REV'D PER ECO 410	SAR		11/14/62
	57	4420	REV'D PER ECO	RR		12/13/62
	58R	4462	REWORK ONLY	MW		
	59R	4477	REWORK ONLY	MW		
	60	4497	REWORK ONLY	MW		12/14/62
	61	4543	PER ECO			
	62	4563	REVISED PER ECO 4563A	RM		



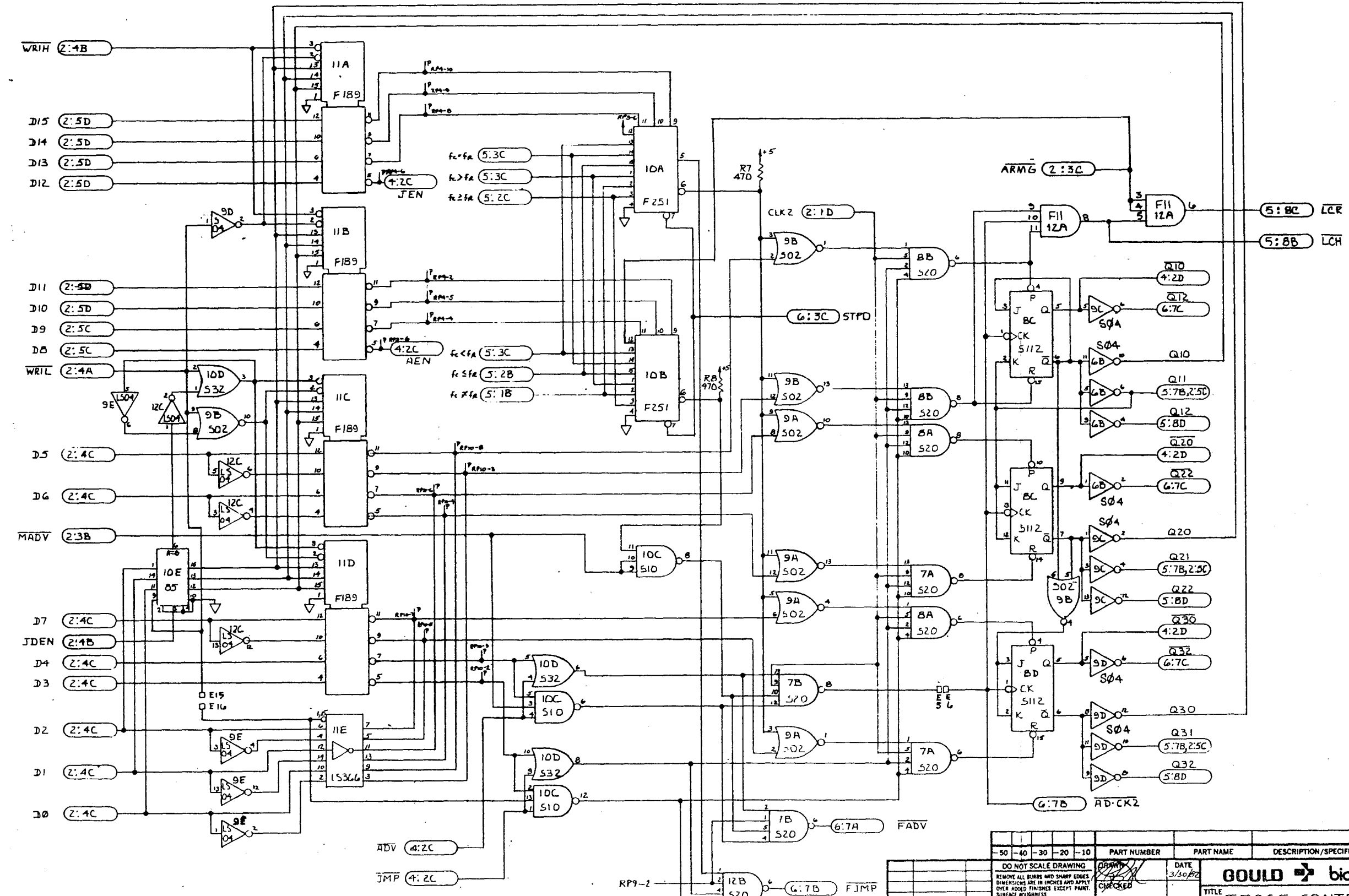
- NOTES: UNLESS OTHERWISE SPECIFIED,
1. ALL RESISTORS ARE IN OHMS, 1/4W, ±5%.
 2. ALL CAPACITORS ARE IN MICROFARADS, 50V, ±20%.
 3. COMPONENTS INDICATED ARE USED ON -10 ASSY ONLY.
 4. \overline{P} OR \overline{P} EQUALS SINGLE PULLUP TO +5 (4.7K SIP OR DIP)
 5. \overline{P} EQUALS TERMINATION $\begin{matrix} 15 \\ | \\ 3K \\ | \\ 5 \\ | \\ 6.2K \\ \downarrow \end{matrix}$ (SIP OR DIP)
 6. $\square-\square$ BREAK POINT - .120 SQ. PADS SPACED .150 (2:1)

-80		-40		-30		-20		-10		1	
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM			
10	0117-0003	1							GOULD blomation TITLE TRACE CONTROL K105 SCALE SIZE PART NUMBER 1/16" D 0117-0061 62 CODE K105 SHEET 1 OF 6		



-06-04-03-02-01				PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING				DATE	1/20/82	GOULD Instruments Division Santa Clara Operations	1
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ACROSS FINISHED SURFACE UNLESS OTHERWISE SPECIFIED.				CHECKED	R. Wood		
TOLERANCE				PROJ. ENG.	5/1/83	TITLE	TRACE CONTROL
DIMENSIONAL: HOLE SIZE 1 = 1 UNLES 1/2 = 1/2 ± .01 3/16 = 3/16 ± .01 1/8 = 1/8 ± .01 1/4 = 1/4 ± .01 3/8 = 3/8 ± .01 1/2 = 1/2 ± .01 3/4 = 3/4 ± .01 1 = 1 ± .01				MANUFACTURING		SCALE	MOQUE
DASH NO.				NUMBER	QTY	DATE	REV
				ENG. SERV.		PART NUMBER	0117-0061
				DATE		MODEL	K105
				QUALITY ASSUR		SHEET	Z OF 6

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	OWN	CHKD	DATE

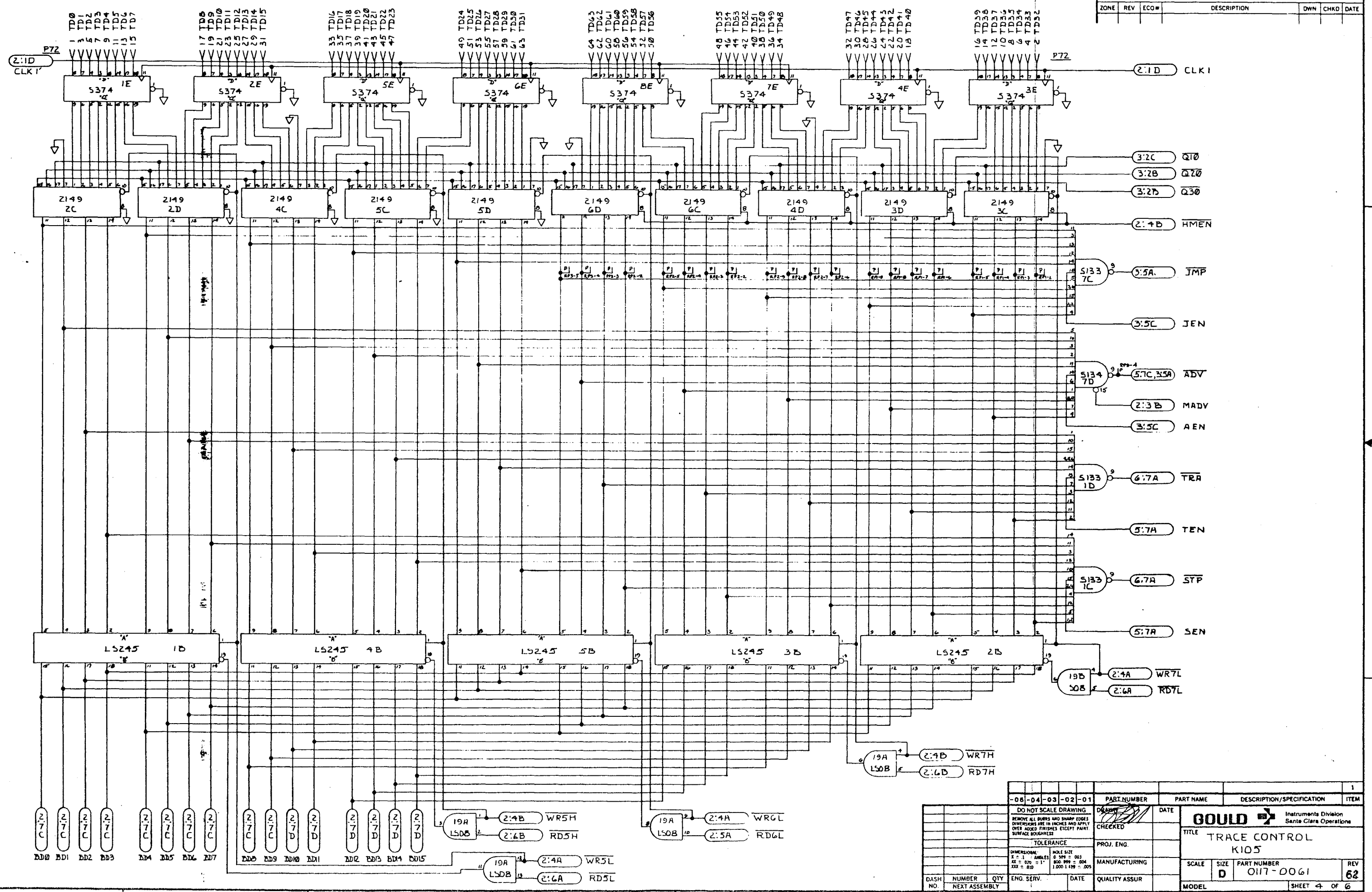


GOULD **biomation**

TITLE: **TRACE CONTROL K105**

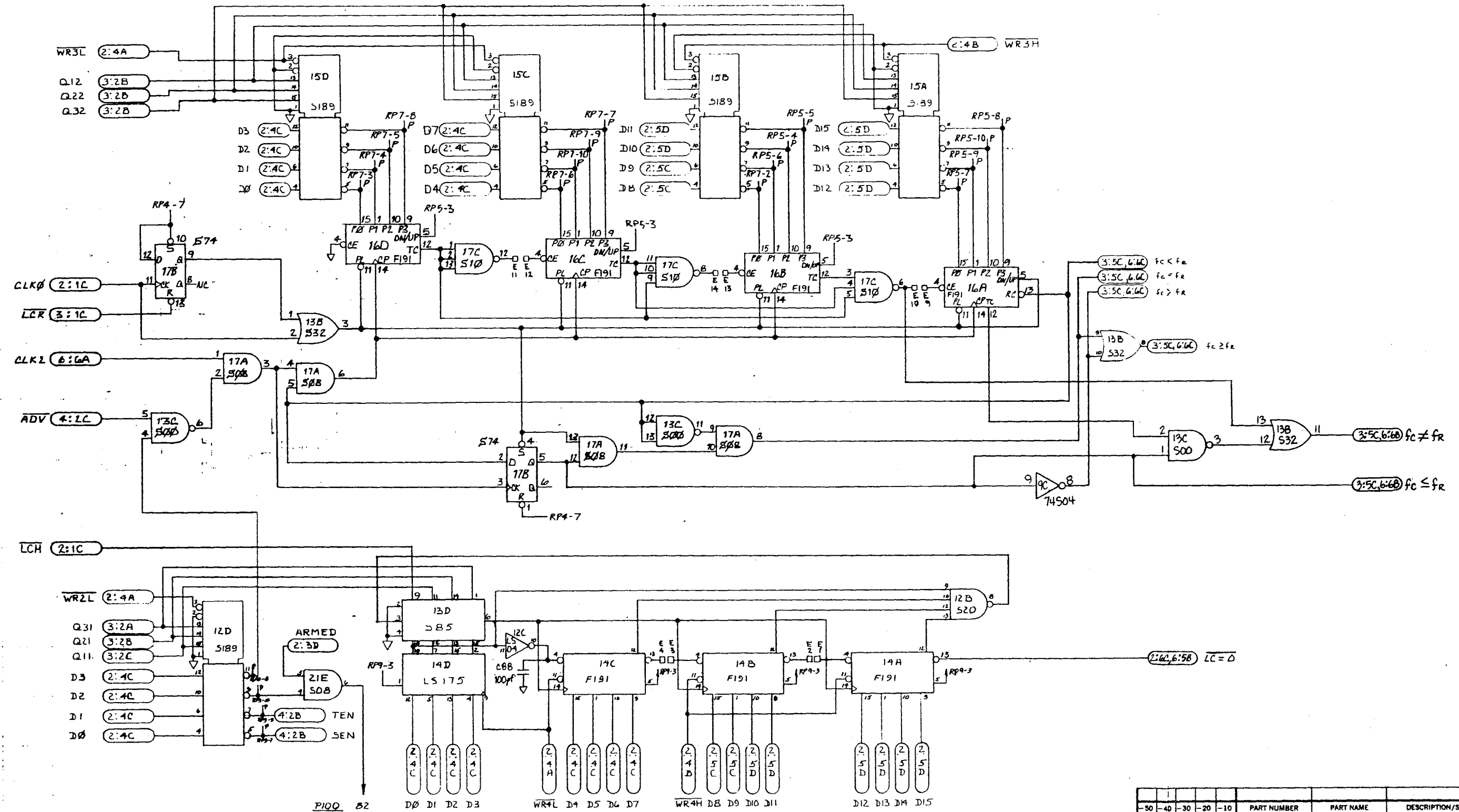
SCALE: **D** PART NUMBER: **0117-0061** REV: **62**

SHEET 3 of 6



-05-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE BOURNESS		DATE	GOULD Instruments Division Santa Clara Operations		
TOLERANCE		PROJ. ENG.	TITLE TRACE CONTROL KIOS		
DIMENSIONAL: X = .1 / ANGLES XX = .010 ± .01 XXX = .010		MANUFACTURING	SCALE	SIZE	PART NUMBER
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR
NEXT ASSEMBLY		DATE		REV 62	
MODEL					SHEET 4 OF 6

REVISIONS				
ZONE	REV	ECO#	DESCRIPTION	DATE

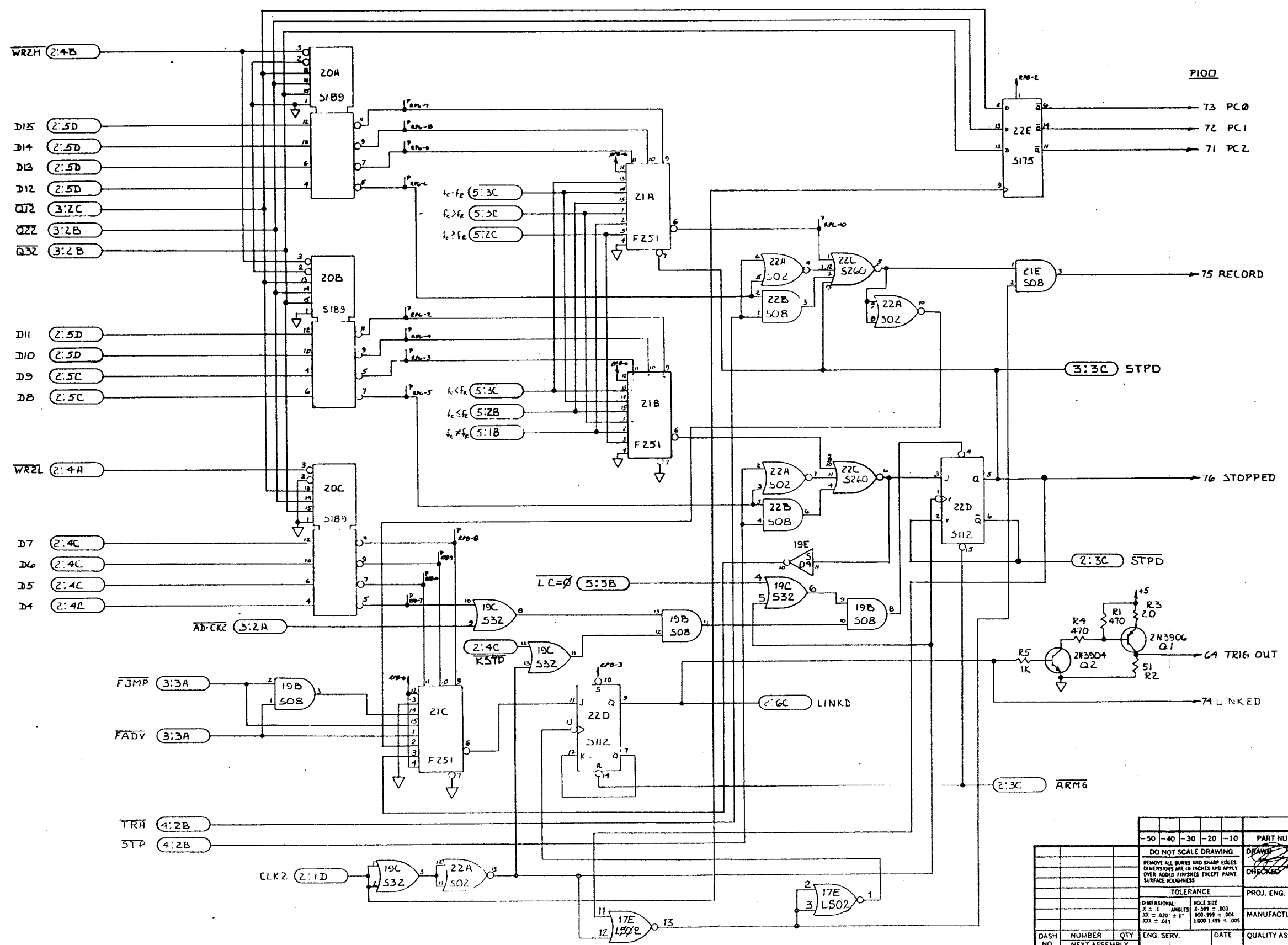


DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR.

DO NOT SCALE DRAWING	DRAWN	DATE
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER HOLES FINISHES EXCEPT PAINT. SURFACE FINISHES	CHECKED	
TOLERANCE	PROJ. ENG.	
DIMENSIONAL: X = 1/16" UNLESS OTHERWISE SPECIFIED	MANUFACTURING	
SCALE	SIZE	PART NUMBER
D	D	0117-0061
REV	REV	REV
62	62	62

GOULD	biomotion
TITLE	
TRACE CONTROL	
K105	
SCALE	SIZE
D	D
REV	REV
62	62

REVISIONS						
ZONE	REV	ECD#	DESCRIPTION	DWN	CHKD	DATE

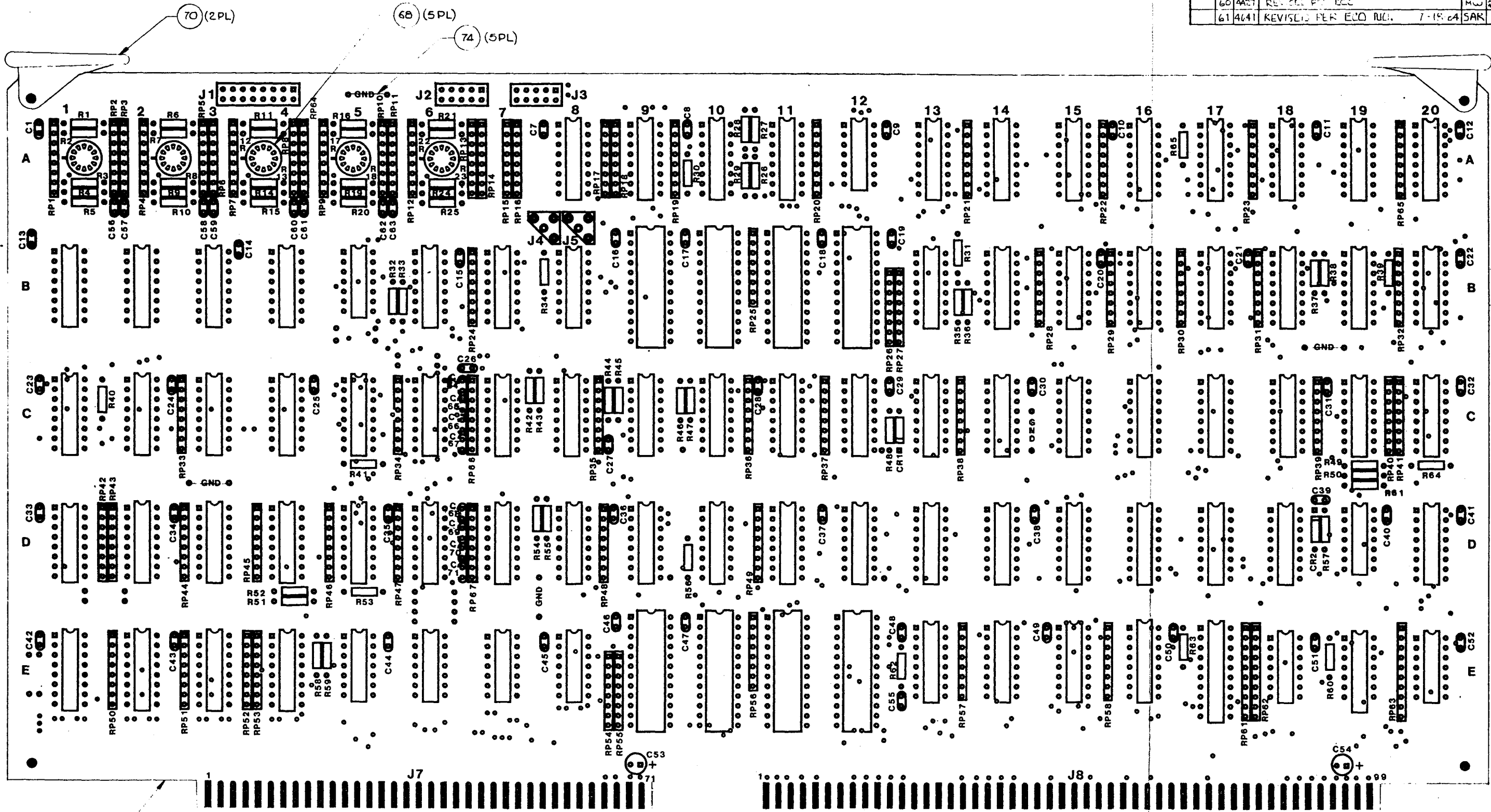


DASH NO.		NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR

PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
						1

DO NOT SCALE DRAWING		DATE	
REMOVE ALL BURRS AND SHARP EDGES		DRAWN	
DIMENSIONS ARE IN INCHES AND APPLY		CHECKED	
OVER ADDED FINISHES EXCEPT PAINT.			
SURFACE ROUGHNESS			
TOLERANCE		PROJ. ENG.	
DIMENSIONAL		MANUFACTURING	
X ± .1		HOLE SIZE	
XX ± .020 ± .001		0.399 ± .003	
XXX ± .015		1.000 ± .005	
		SCALE	
		SIZE	
		PART NUMBER	
		REV	
		NONE	
		D	
		0117-0061	
		62	
		SHEET 6 OF 6	

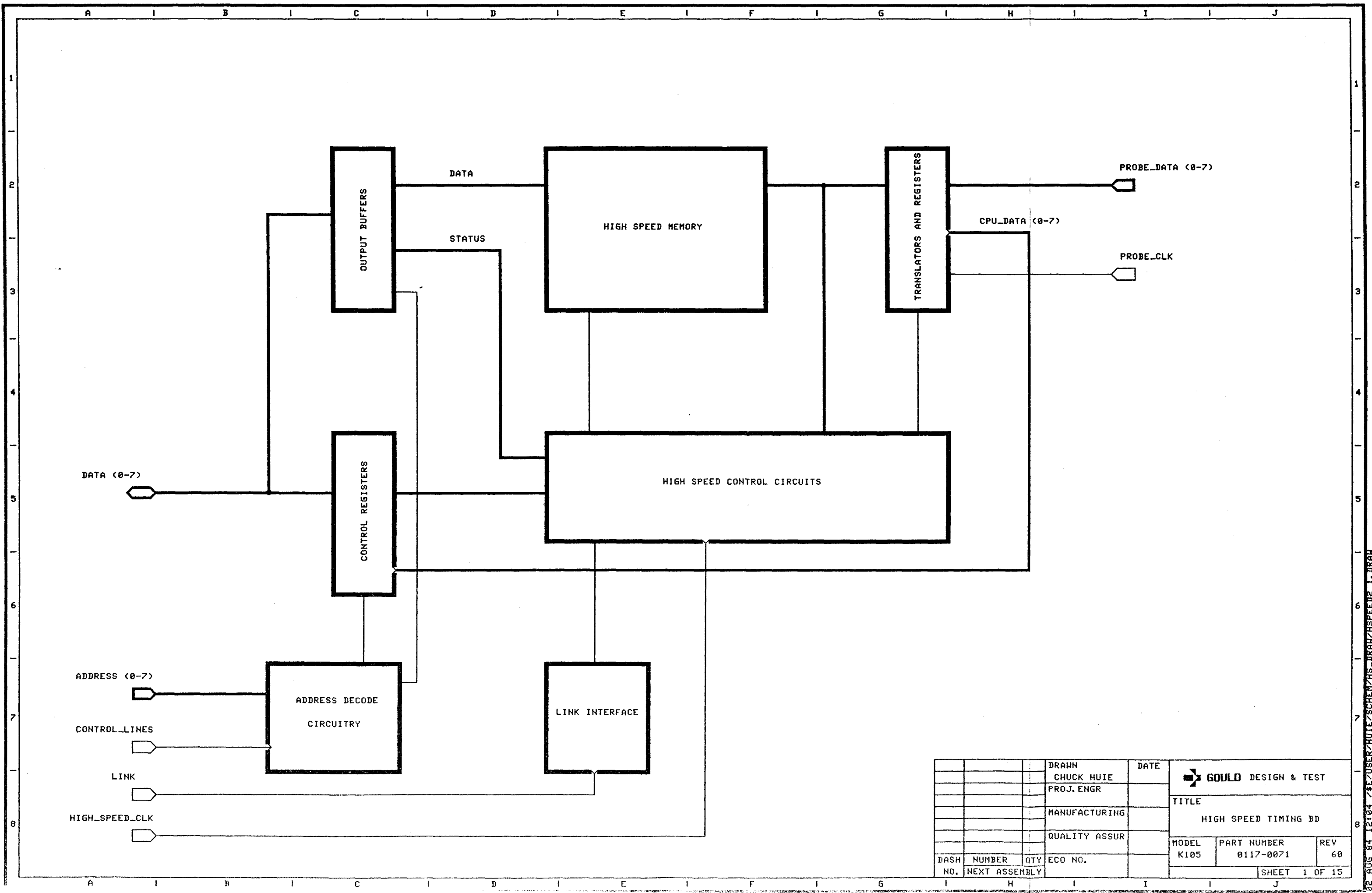
DWG. NO. 0117-0070		SH 1	REV 1	1		
REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	APPD
	59	4322A	REVISED PER ECO	D.C.	D.C.	D.C.
	60	4427	REVISED PER ECO	M.W.	M.W.	M.W.
	61	4641	REVISED PER ECO NCL	7-15-64	SAR	SAR



COMPONENT SIDE

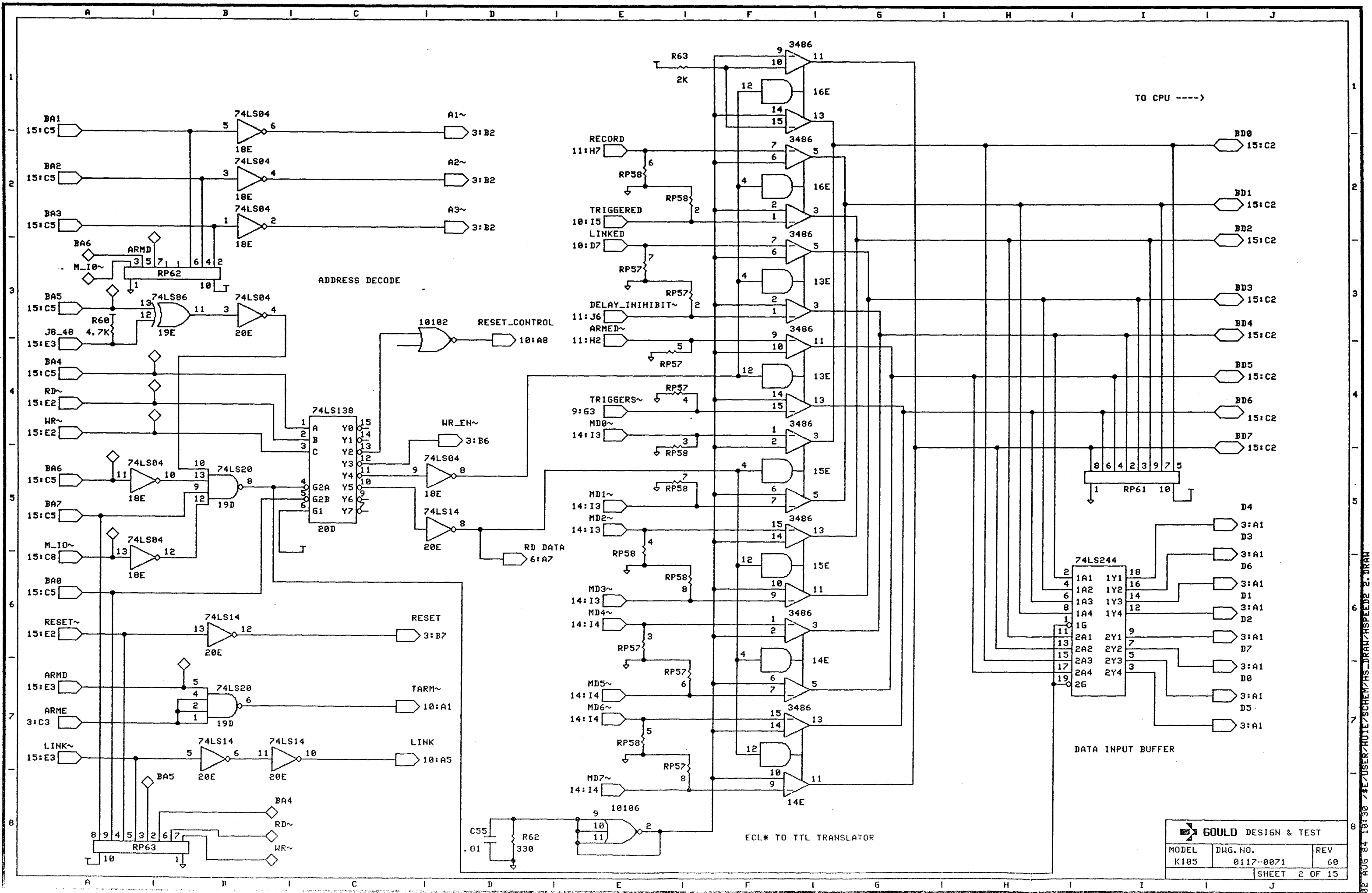
QTY PER ASSY	PART NUMBER	DESCRIPTION	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ANGLES XX.XXX			
MATERIAL		PARTS LIST	
FINISH		GOULD Electronics	
DASH NO.		TITLE: ASSEMBLY HIGH SPEED TIMING BD	
NEXT ASSY		DWG NO. 0117-0070	
USED ON		REV 1	
FIRST APPLICATION		SCALE MODEL K105 SHEET 1 OF 1	

INCH PLOT REPRODUCED NO. 1448



			DRAWN	DATE	GOULD DESIGN & TEST		
			CHUCK HUIE				
			PROJ. ENGR		TITLE HIGH SPEED TIMING BD		
			MANUFACTURING				
			QUALITY ASSUR		MODEL	PART NUMBER	REV
			ECO NO.		K105	0117-0071	60
DASH NO.	NUMBER NEXT ASSEMBLY	QTY			SHEET 1 OF 15		

02 AUG 84 12:04 73E70SER7HUIE/SCHM7HS_DRAH/HSPEE2 I. DRAH



TO CPU ---->

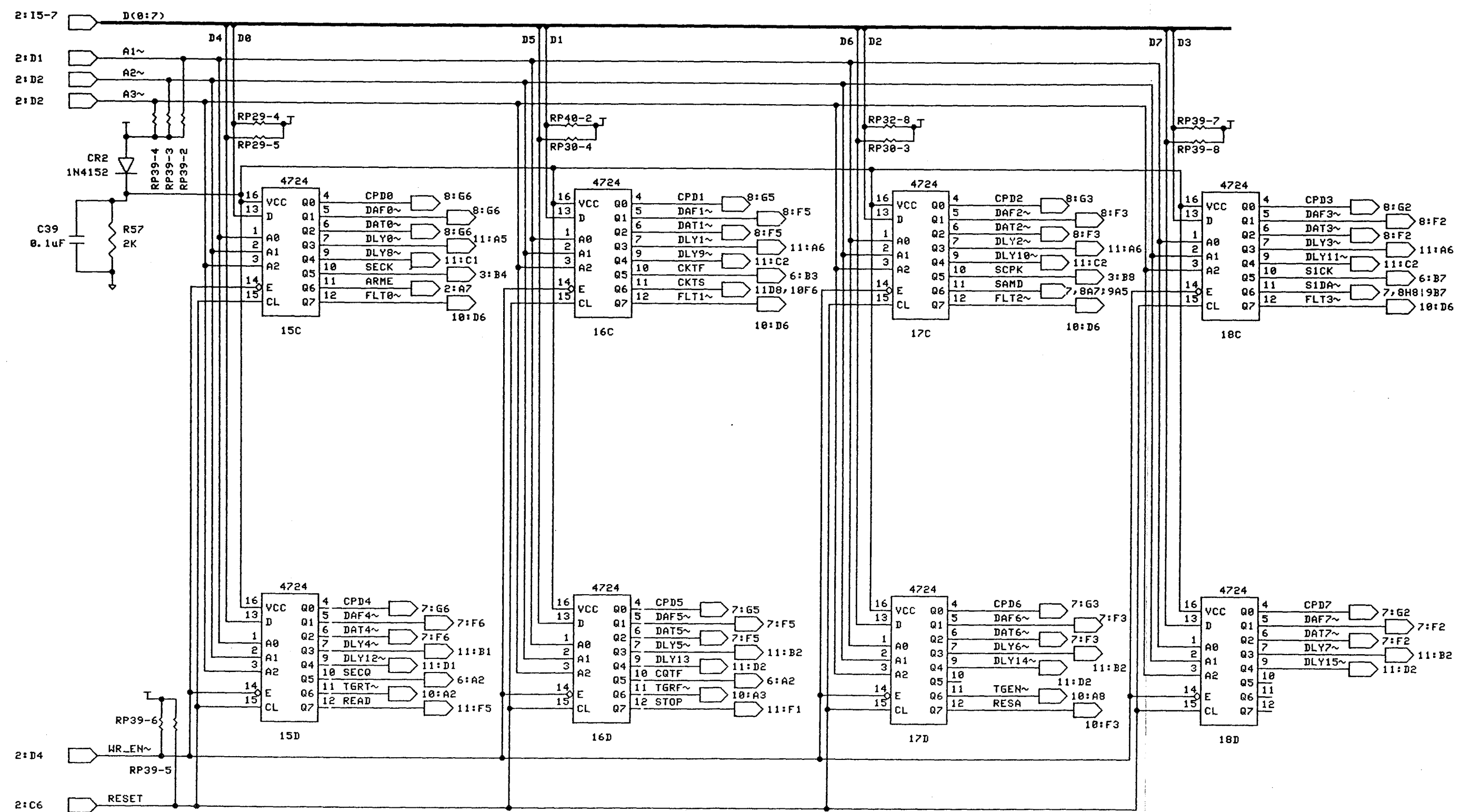
ADDRESS DECODE

DATA INPUT BUFFER

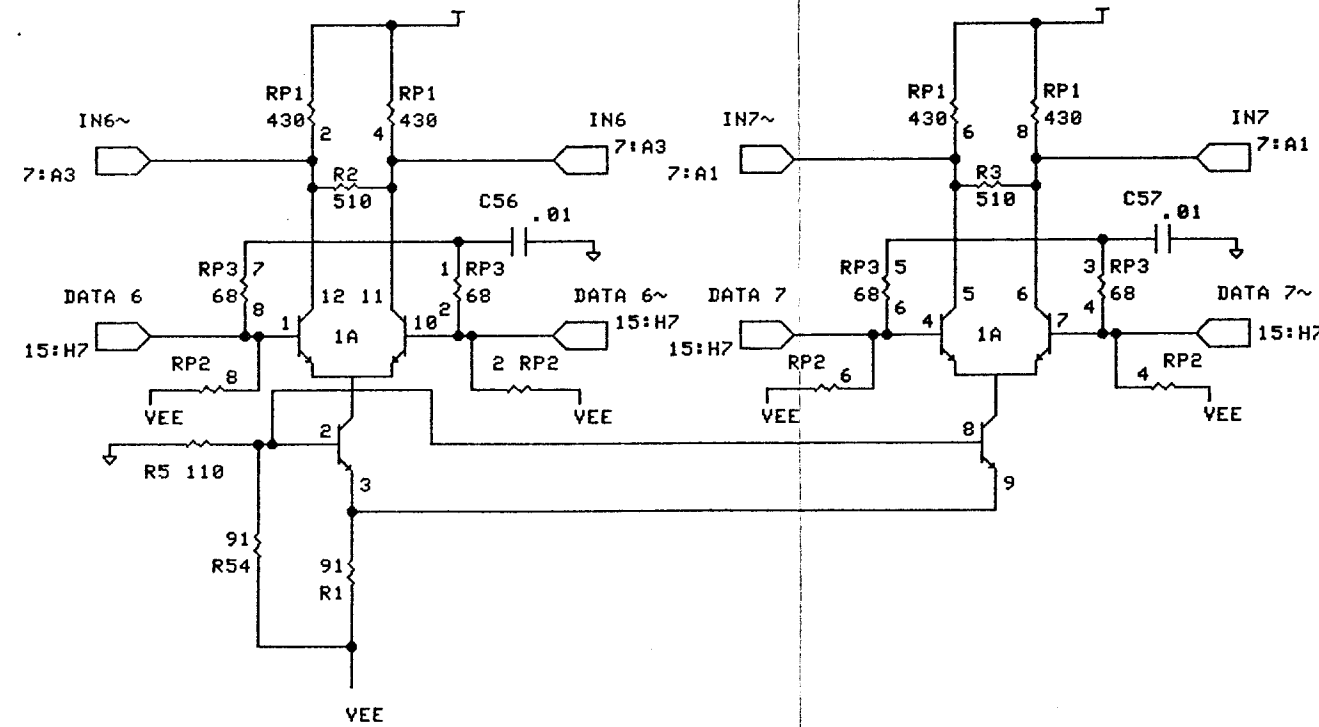
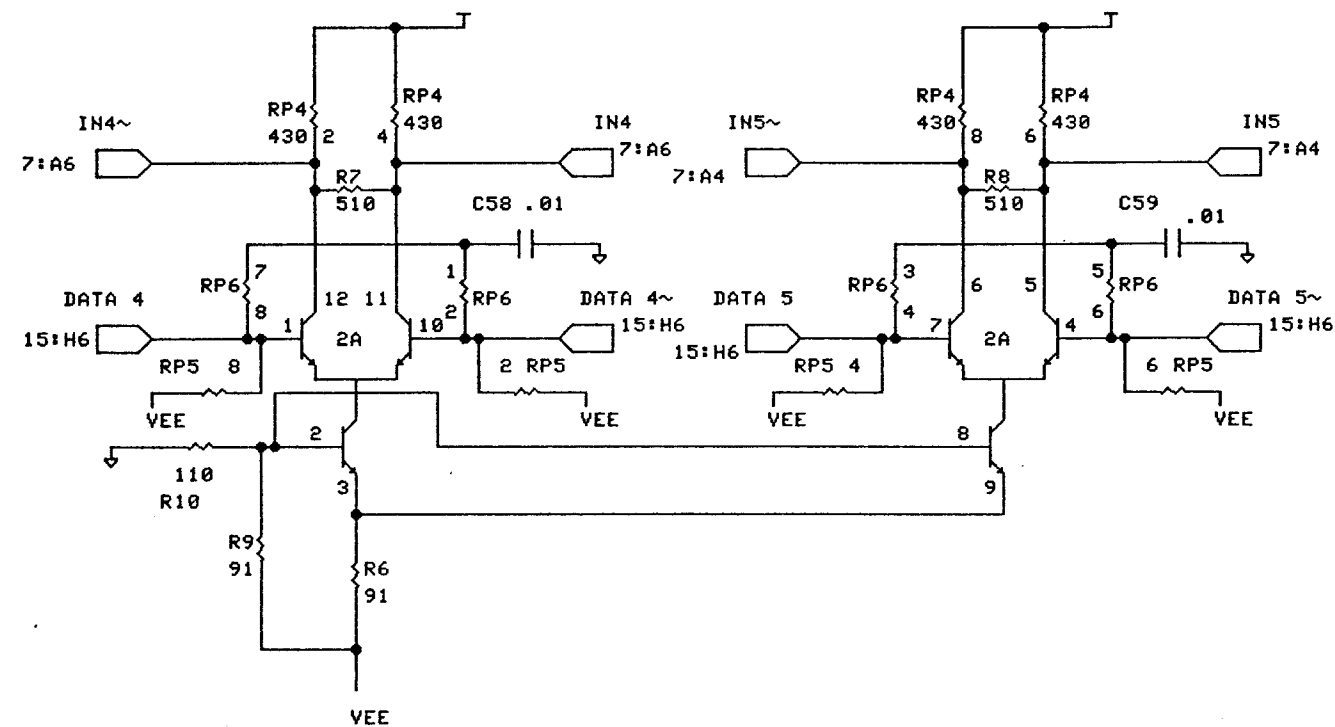
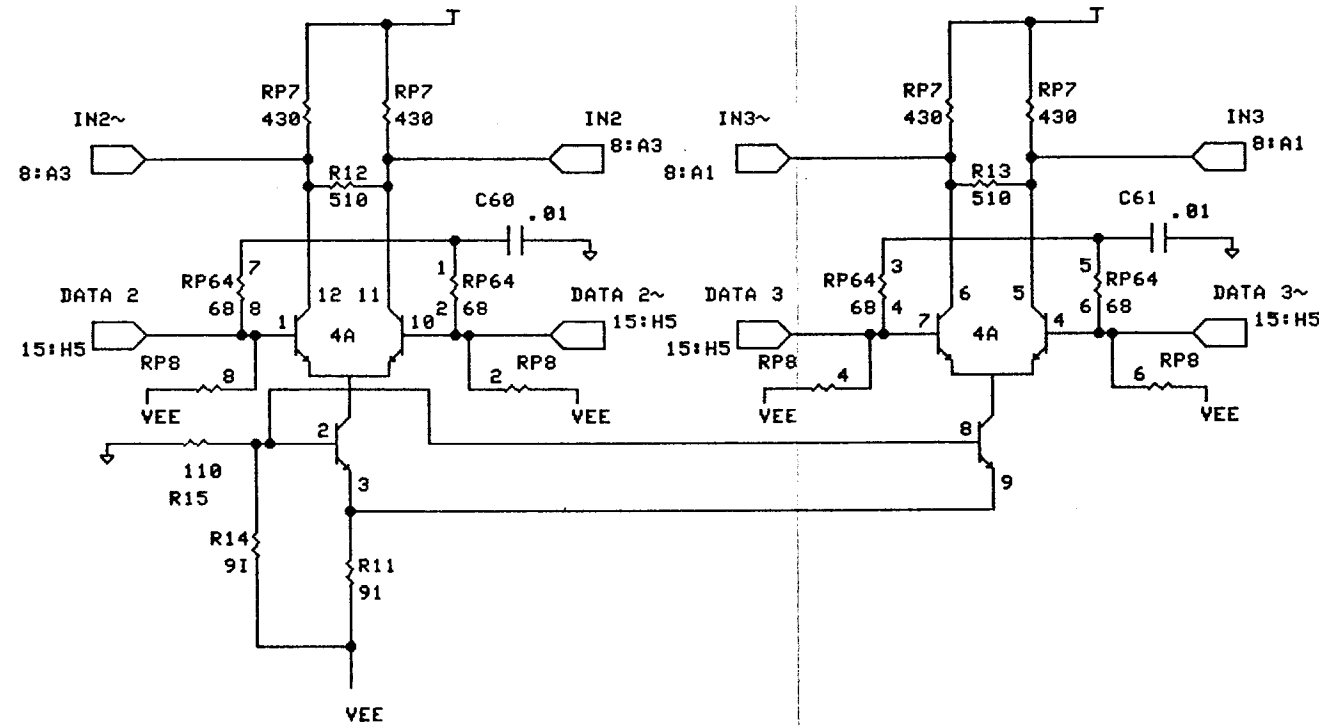
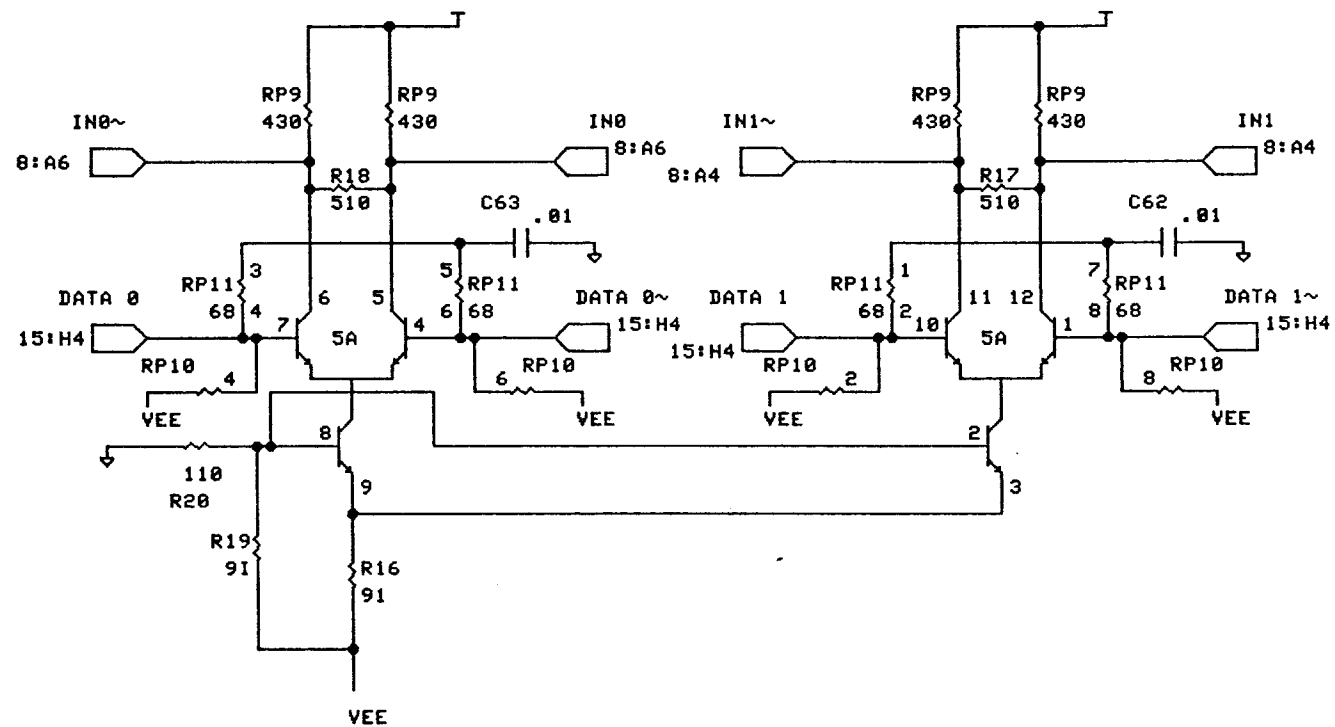
ECL* TO TTL TRANSLATOR

GOULD DESIGN & TEST		
MODEL K105	DWG. NO. 0117-0071	REV 60
SHEET 2 OF 15		

82 AUG 84 10:30 / *EUSER7HUIE7SCHEM7HS_DKRN7HSPEDE2 2. DRAN



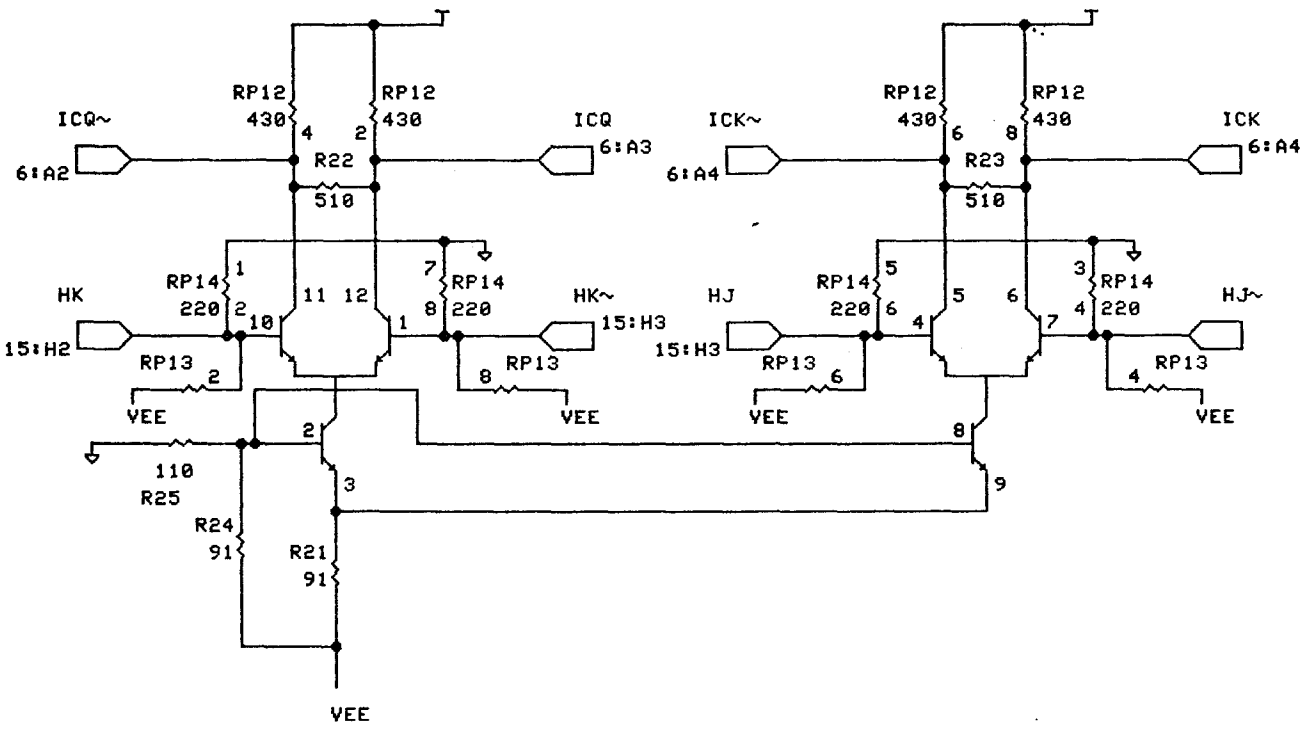
CONTROL LATCHES



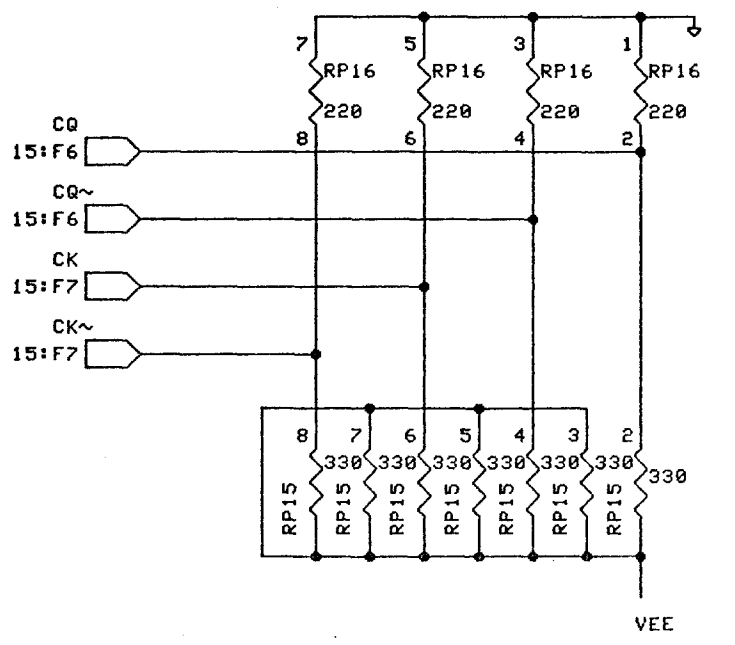
ECL TO ECL* TRANSLATORS

MODEL	DWG. NO.	REV
K105	0117-0071	60
SHEET 4 OF 15		

02 AUG 84 10T35 7#E7USER7H0IE7SCHEM7HS_DRAW7HSPEED2 4. DRAW

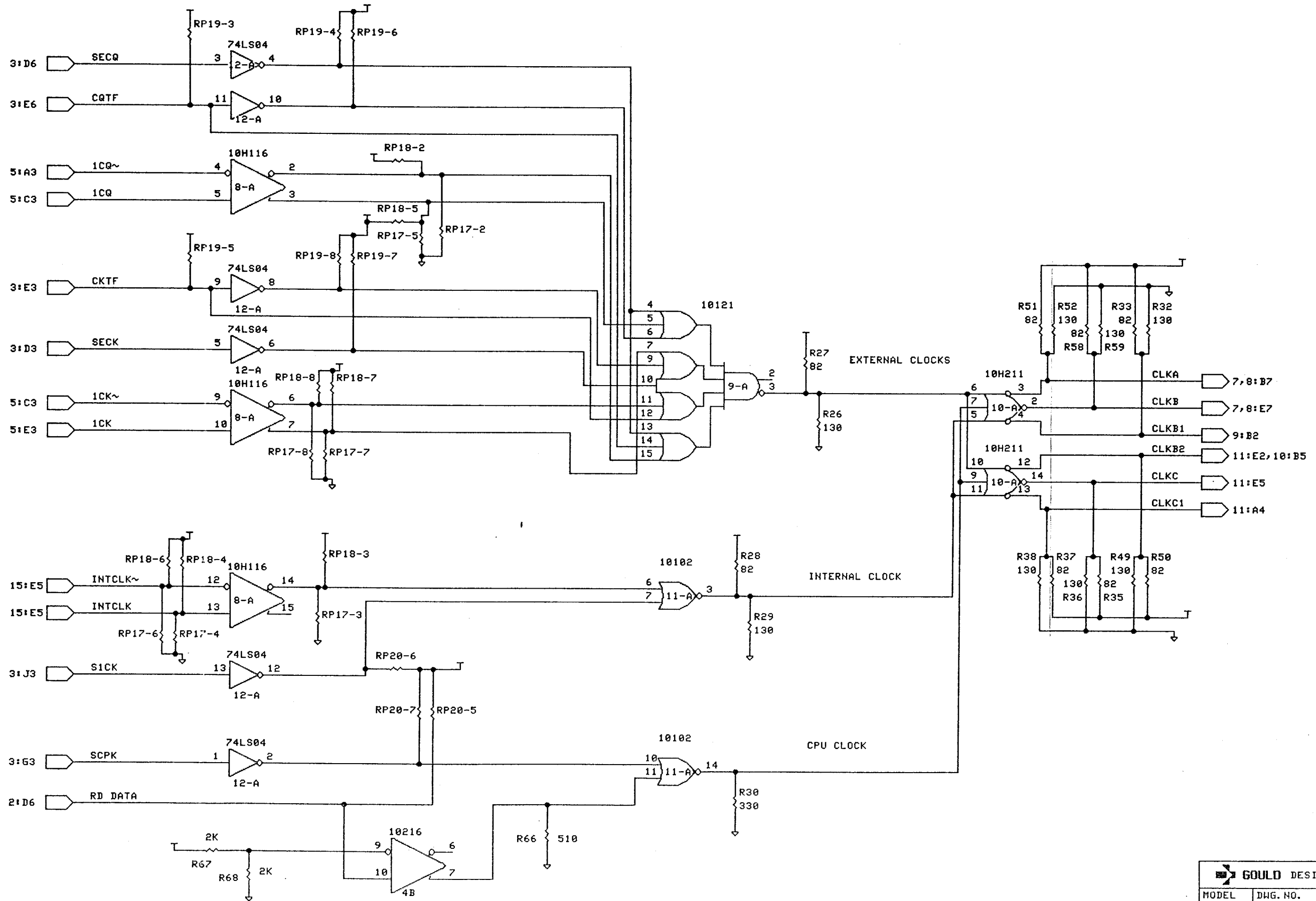


ECL TO ECL* TRANSLATORS FOR CLKS



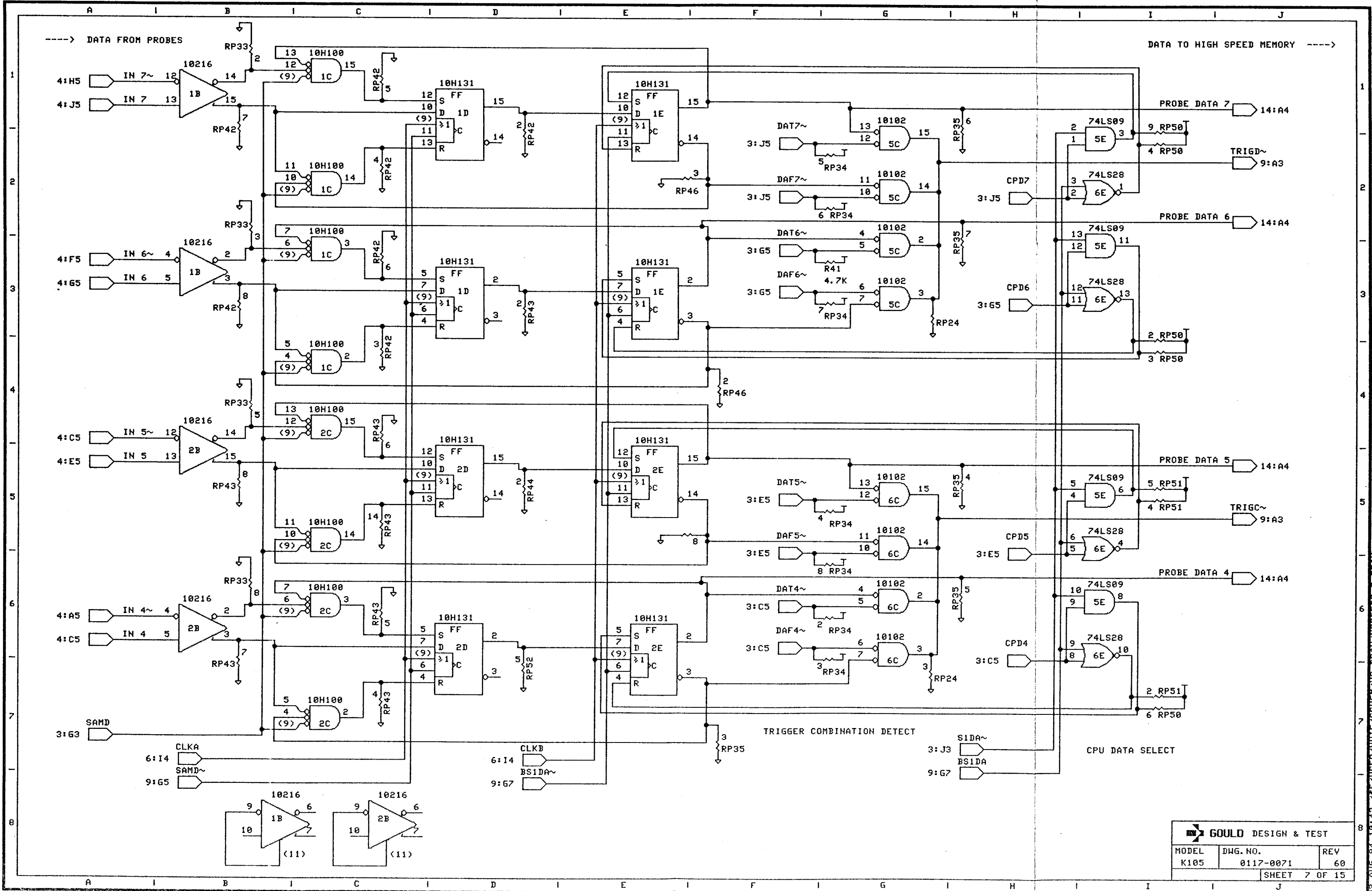
DUMMY LOADS

GOULD DESIGN & TEST		
MODEL	DWG. NO.	REV
K105	0117-0071	60
SHEET 5 OF 15		

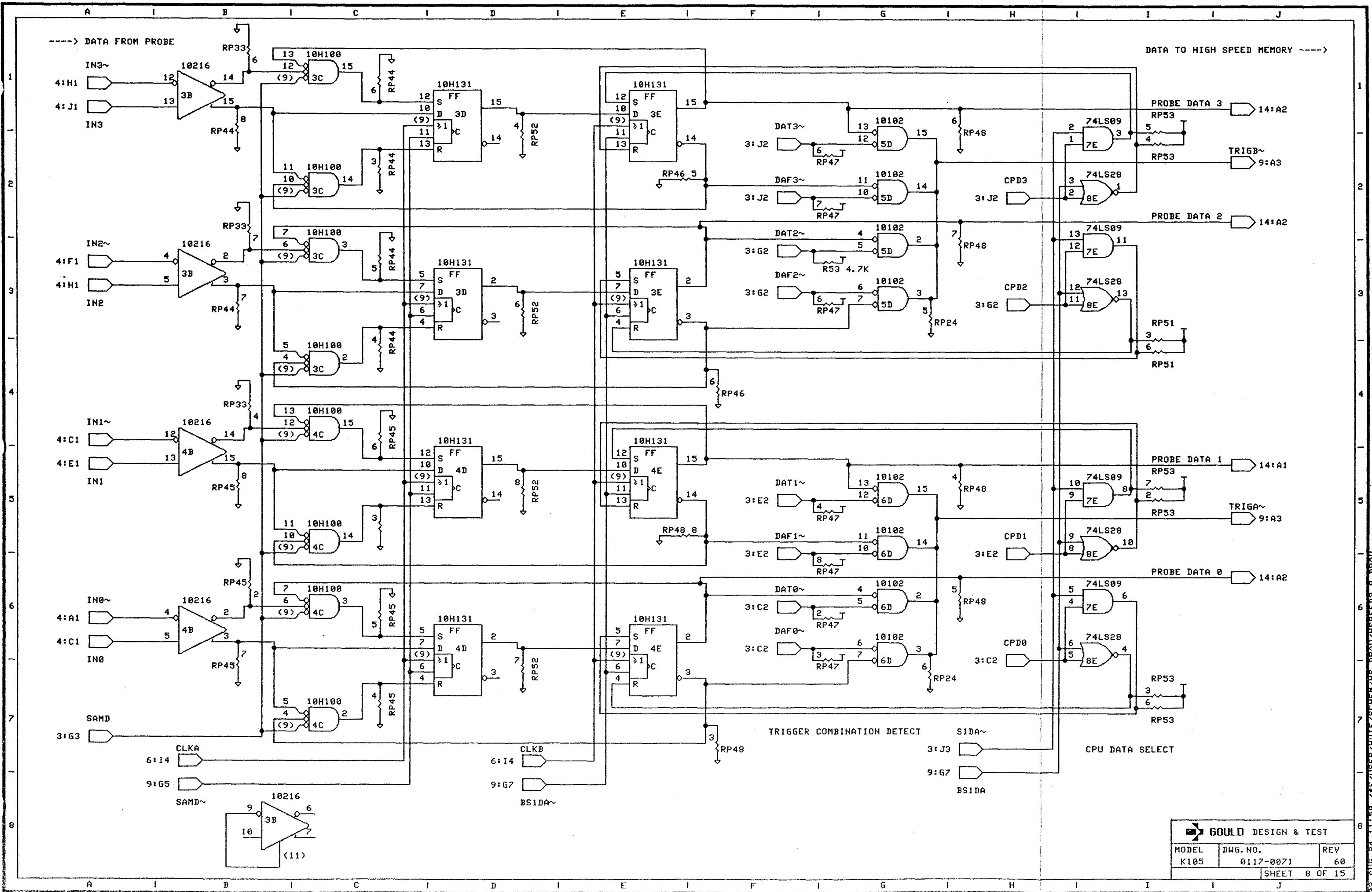


GOULD DESIGN & TEST		
MODEL	DWG. NO.	REV
K105	0117-0071	60
SHEET 6 OF 15		

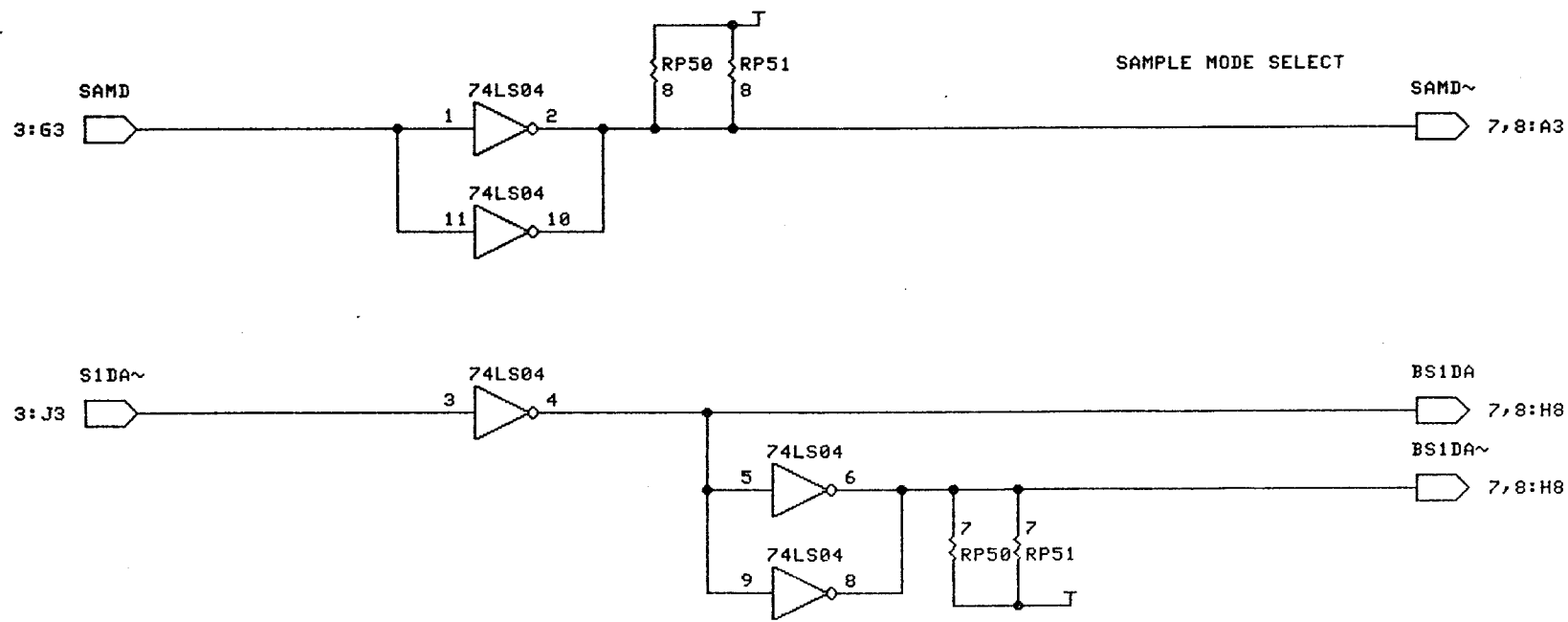
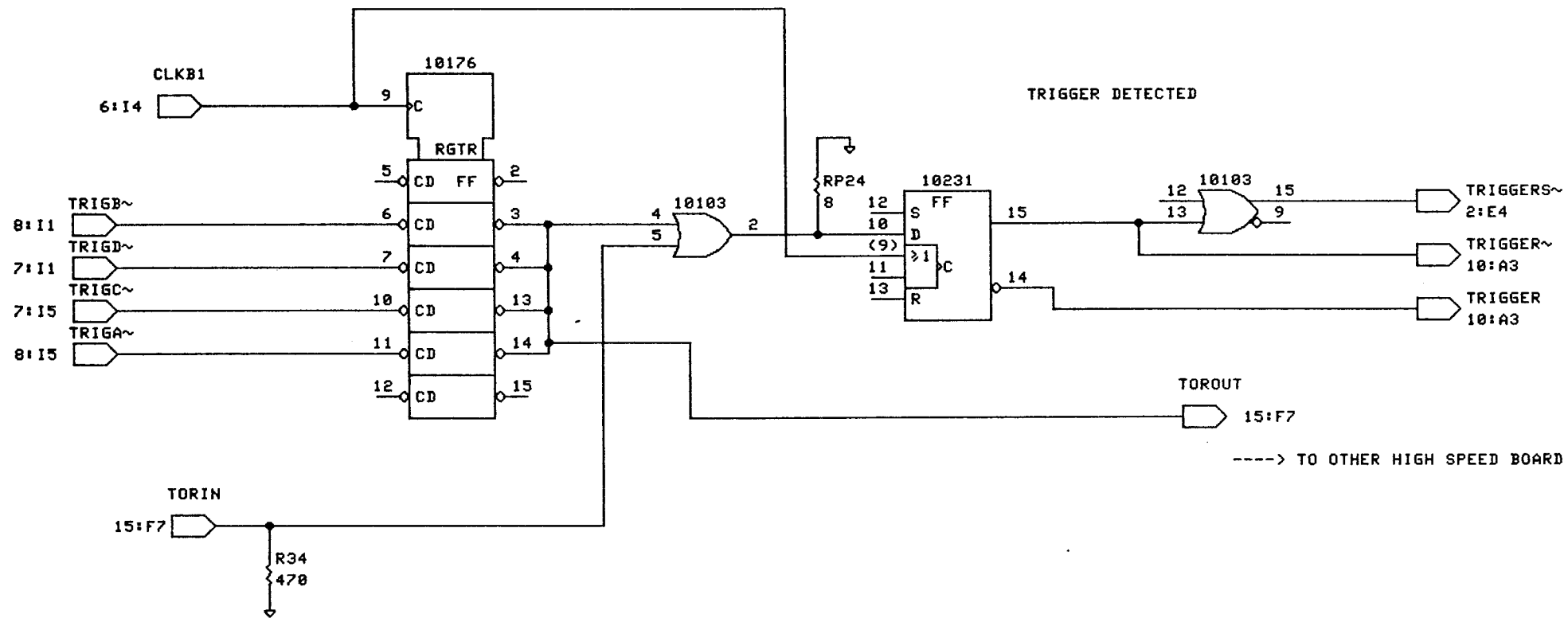
02 AUG 84 10:39 7#E7USER7H01E7SCHEM7HS_DBRAM7HSPEDE 6. DRAM



82 AUG 84 10:42 / USER/HUIE/SCHEM/HS-DRAW/SPED2 7.DRAW

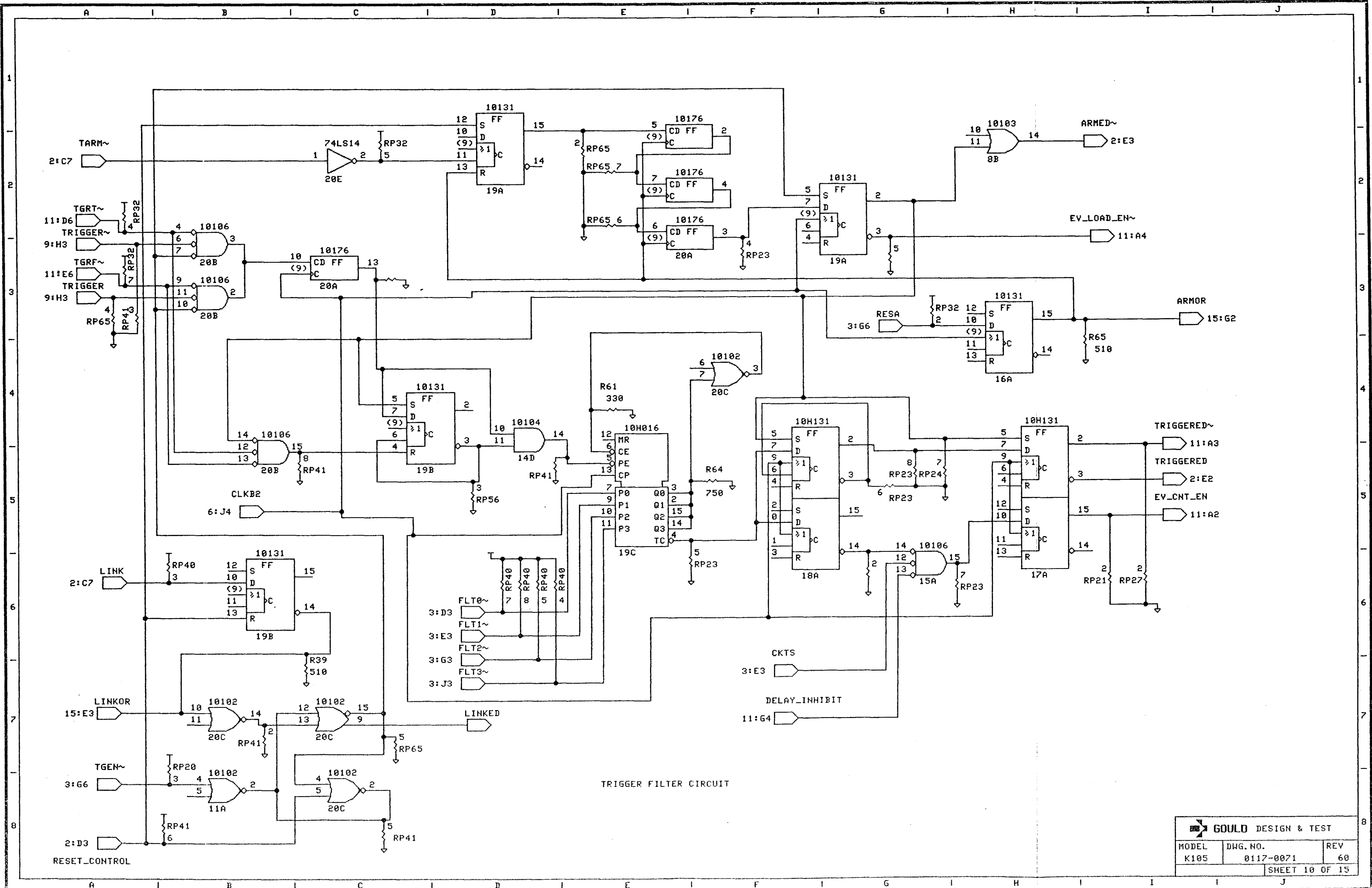


82 AUG 84 11:50 7#E7USER7HOLE/SCHEN7HS_DRAW7HSPEED2 8. DRAN



GOULD DESIGN & TEST		
MODEL K105	DWG. NO. 0117-0071	REV 60
SHEET 9 OF 15		

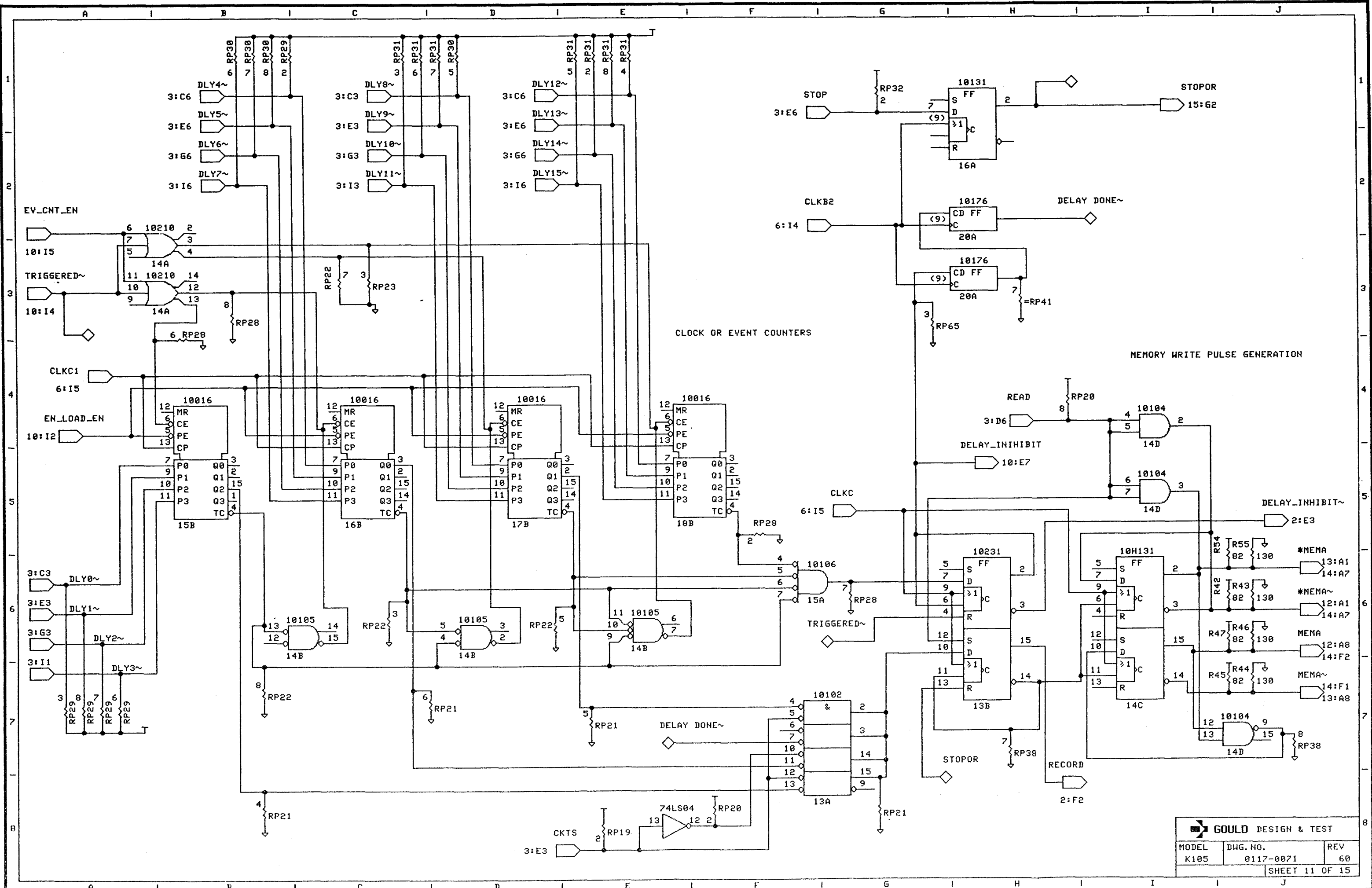
02 AUG 84 10:47 74EUSER/7HUIE/SCHEN/RS_DRA/PHSPEEDE 9.DRAW



TRIGGER FILTER CIRCUIT

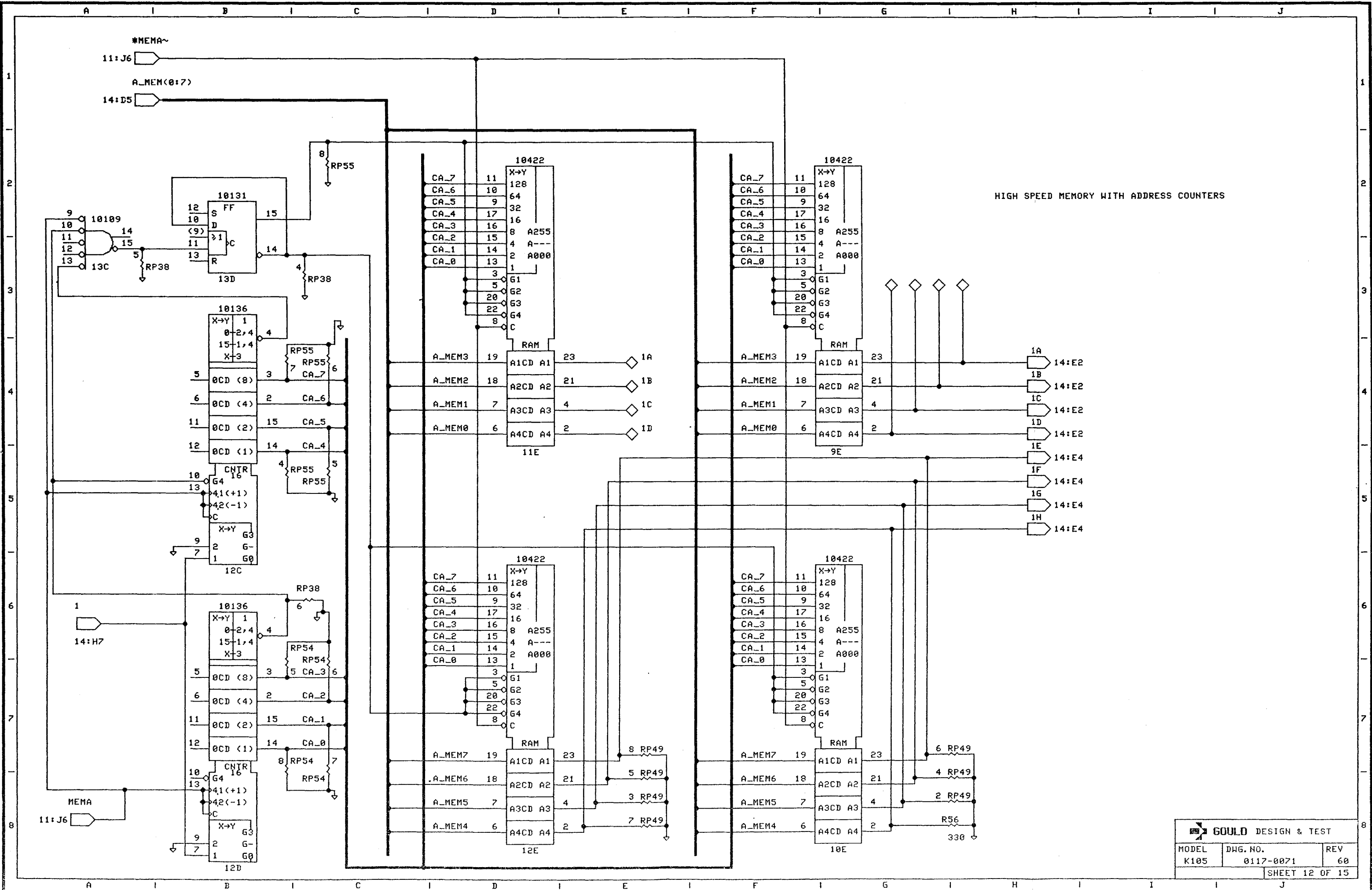
GOULD DESIGN & TEST		
MODEL	DWG. NO.	REV
K105	0117-0071	60
SHEET 10 OF 15		

92 AUG 84 10:49:74 *E7USER7RUIE7SCHEWZHS_DURAN7HSFEDE 10. DRAN



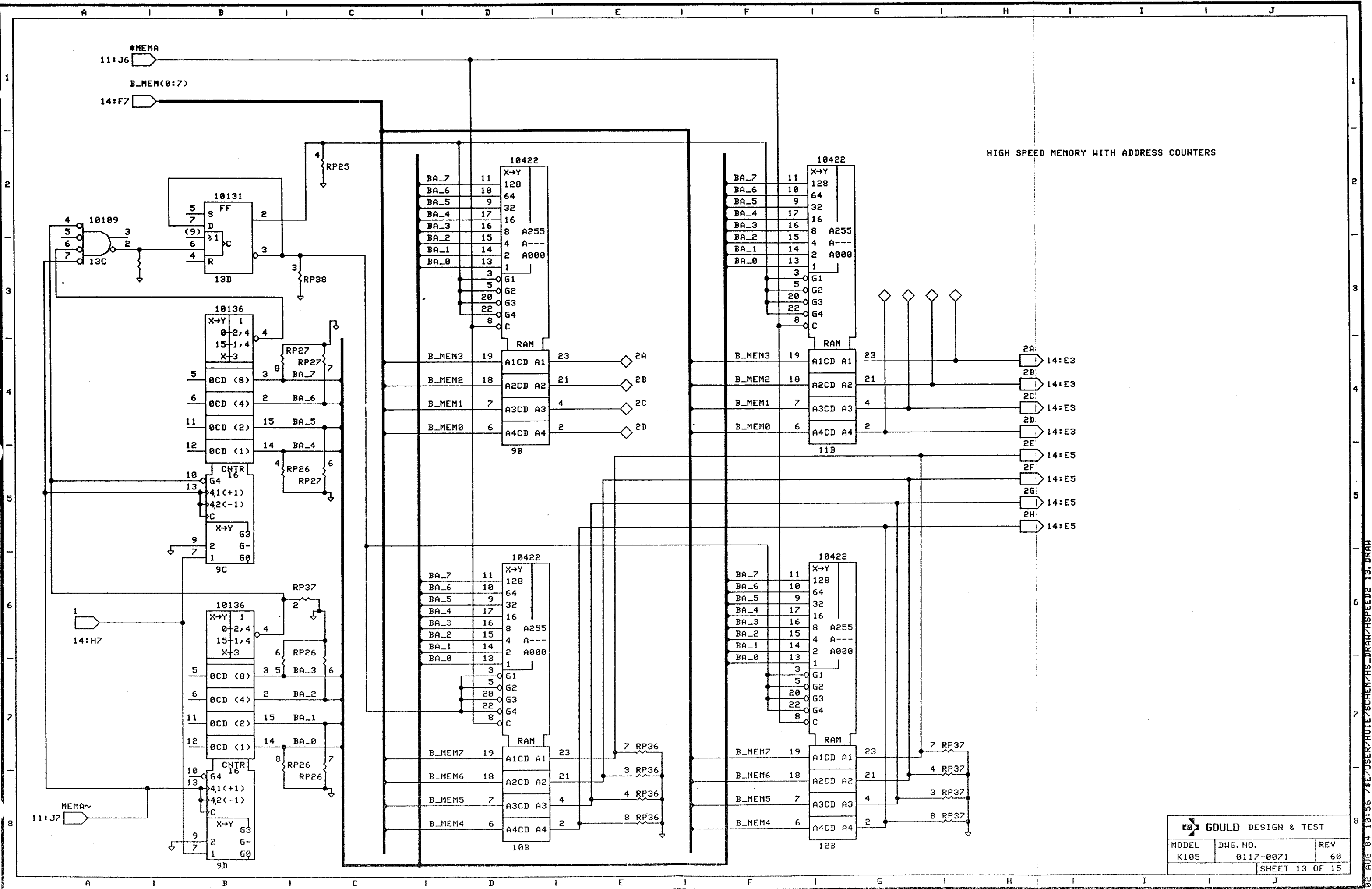
GOULD DESIGN & TEST		
MODEL	DWG. NO.	REV
K105	0117-0071	60
SHEET 11 OF 15		

82-AUG 84 10:51:45 USER/HOLE/SCHWZHS-DRAWZHSPEDE 11.DRAW



GOULD DESIGN & TEST		
MODEL K105	DWG. NO. 0117-0071	REV 60
SHEET 12 OF 15		

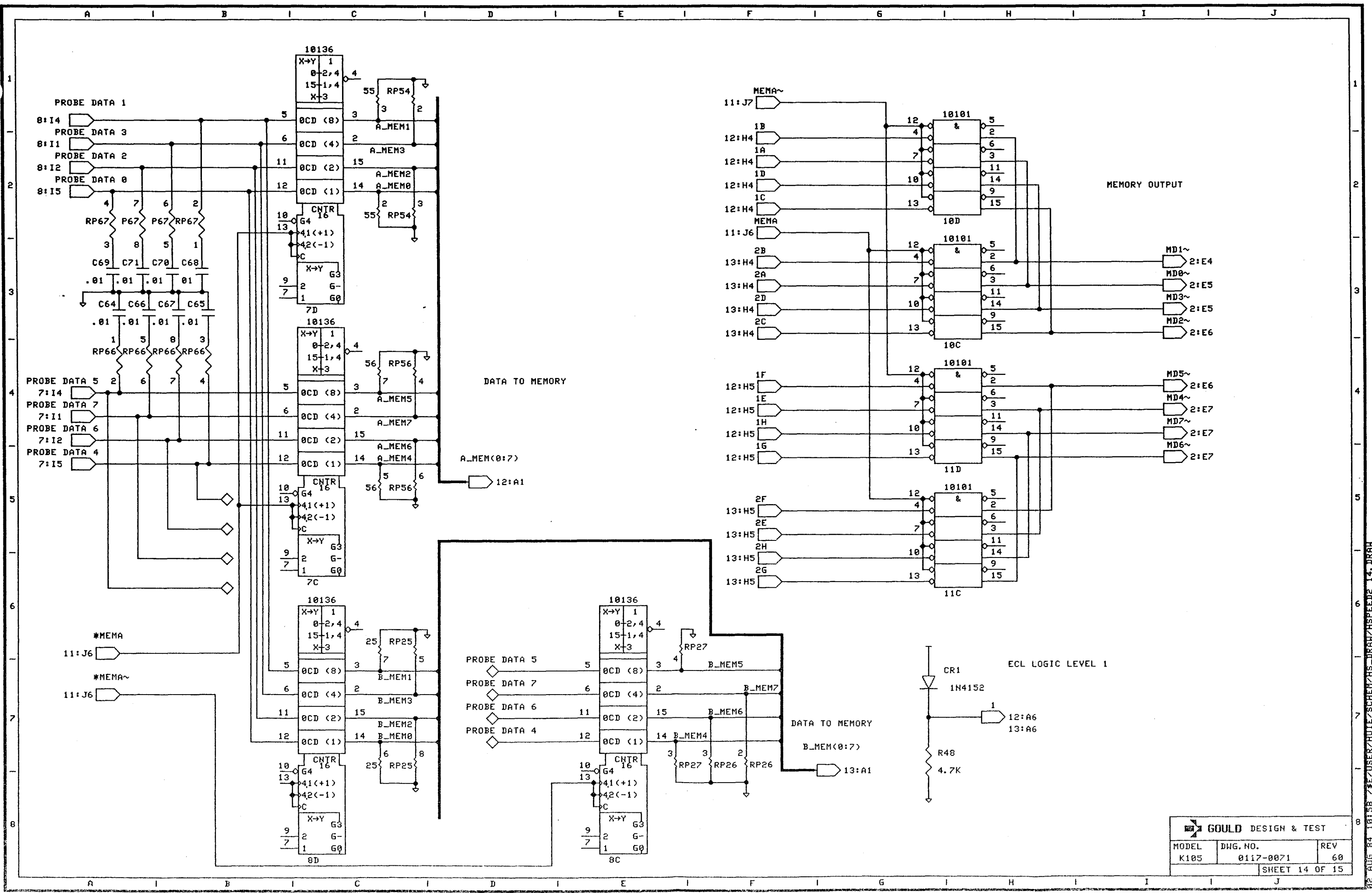
02 AUG 84 18:54 73E7USER7H01E7SCHEM7HS_DRAH7SPEED2 12. DRAM



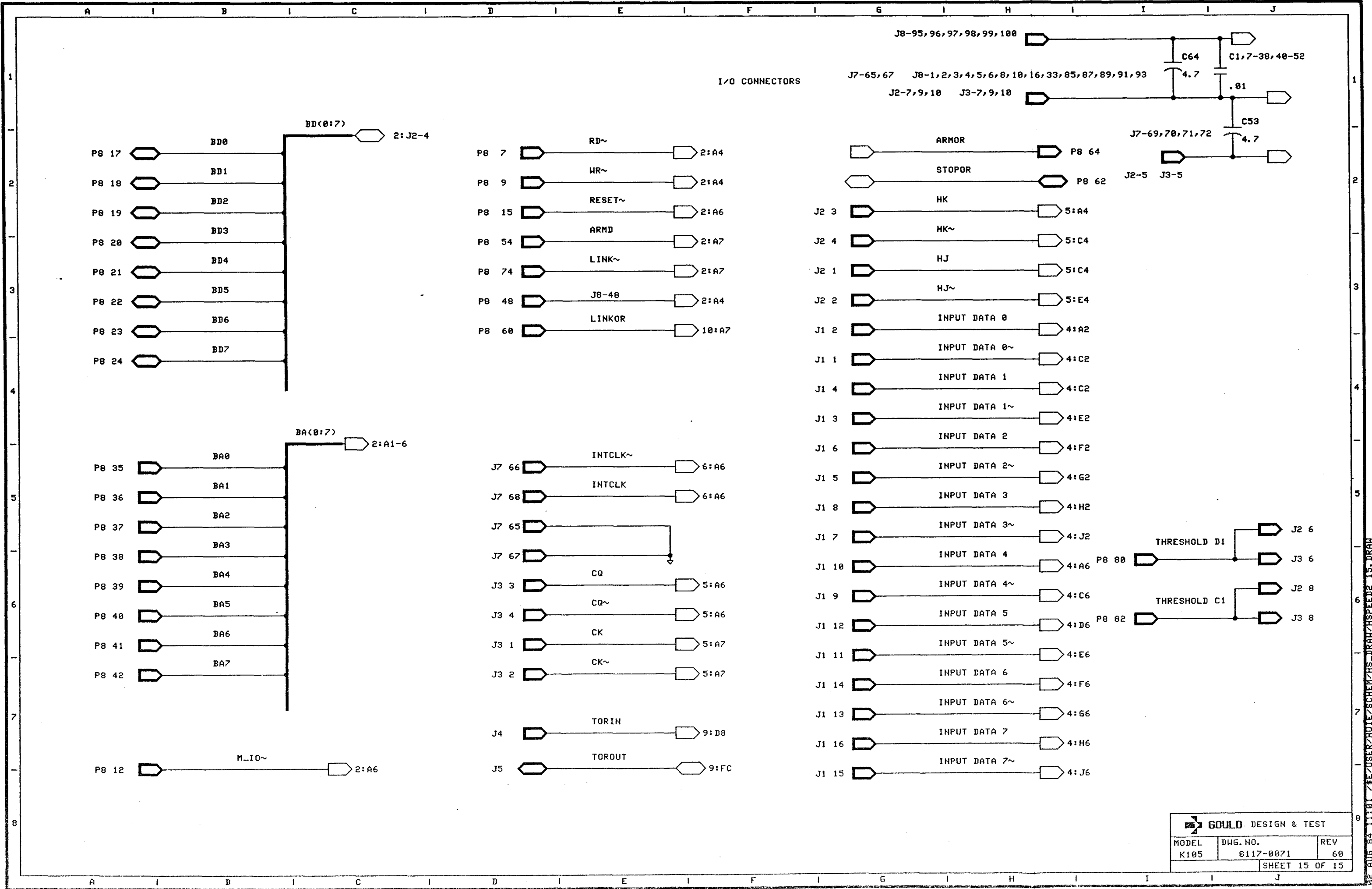
HIGH SPEED MEMORY WITH ADDRESS COUNTERS

GOULD DESIGN & TEST		
MODEL	DWG. NO.	REV
K105	0117-0071	60
SHEET 13 OF 15		

92 AUG 84 10:56 #E7USER7H01E7SCHEM7HS_DBRAM/HSPED2 13. DRAM



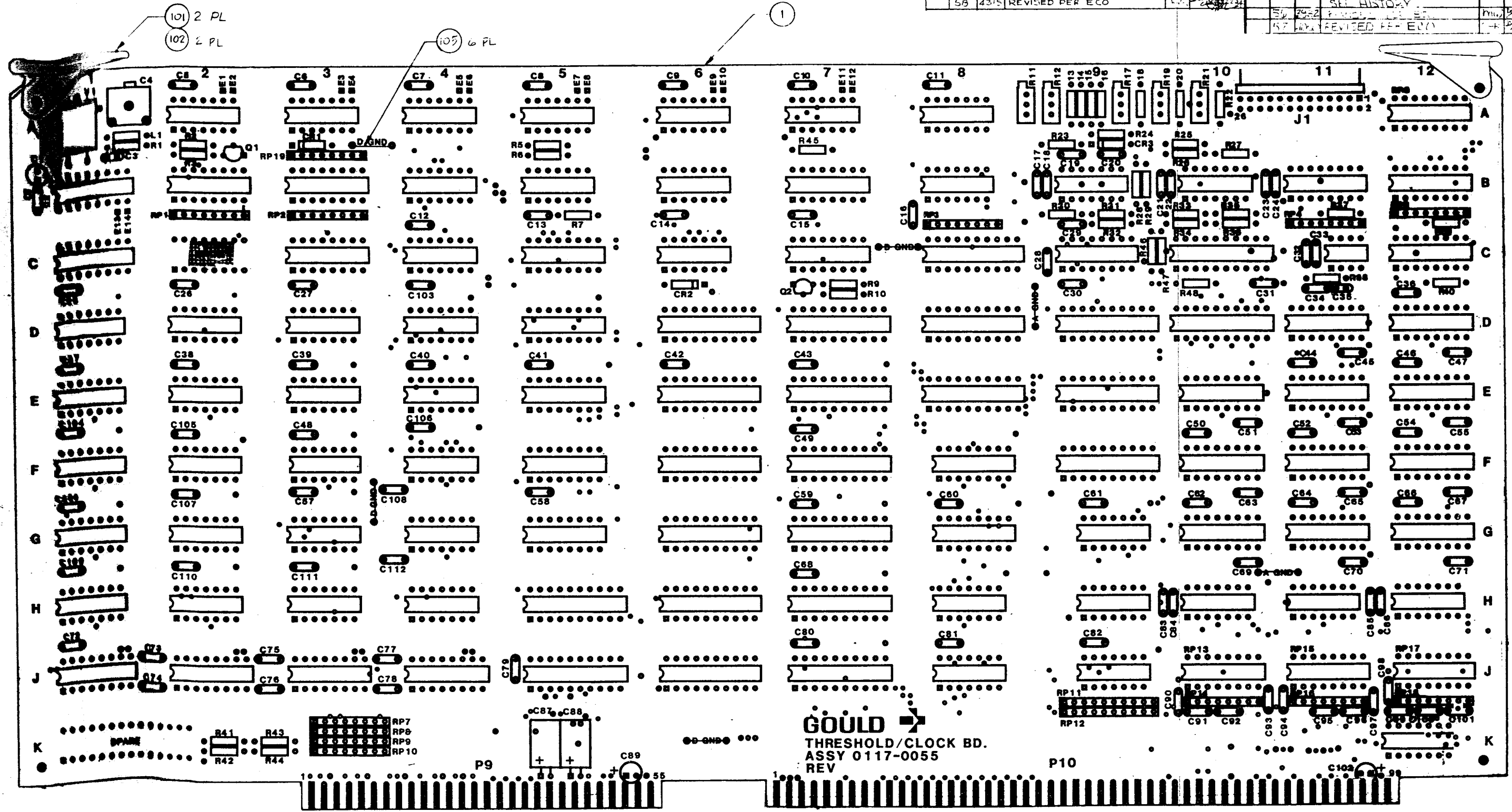
02 AUG 84 10:58 78E/USER/HOTE/SCHEM/HS-DRAWN/SPEED2 14, DRAM



GOULD DESIGN & TEST		
MODEL	DWG. NO.	REV
K105	6117-0071	60
SHEET 15 OF 15		

02 AUG 84 11:01 78E/USER/HOTE/SCHEM/HS-DRAW/HSPEDE2 15. DRAM

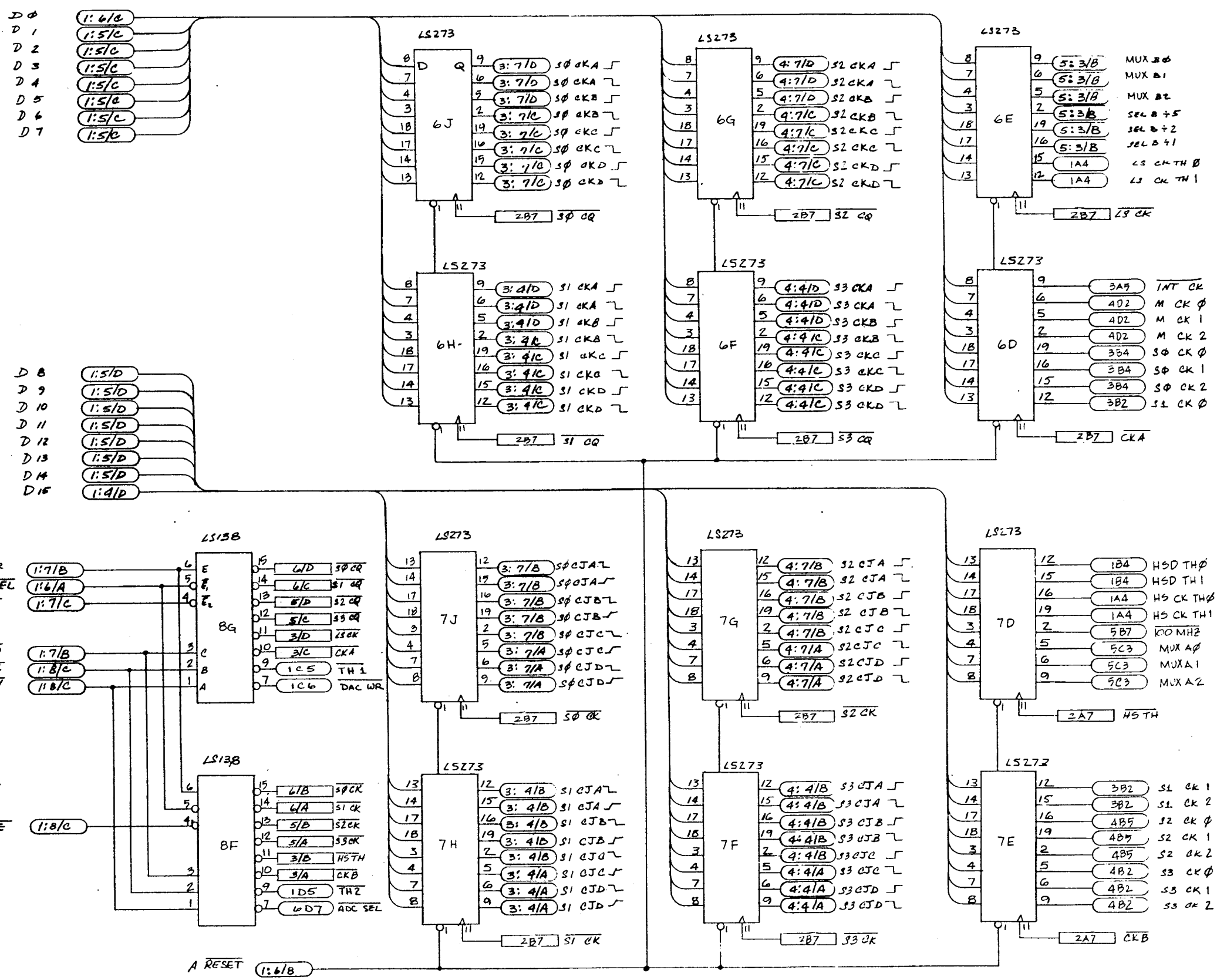
REV	DATE	DESCRIPTION	DWN	CHKD	DATE	ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
58	4/3/5	REVISED PER ECO							SEE HISTORY			



COMPONENT SIDE

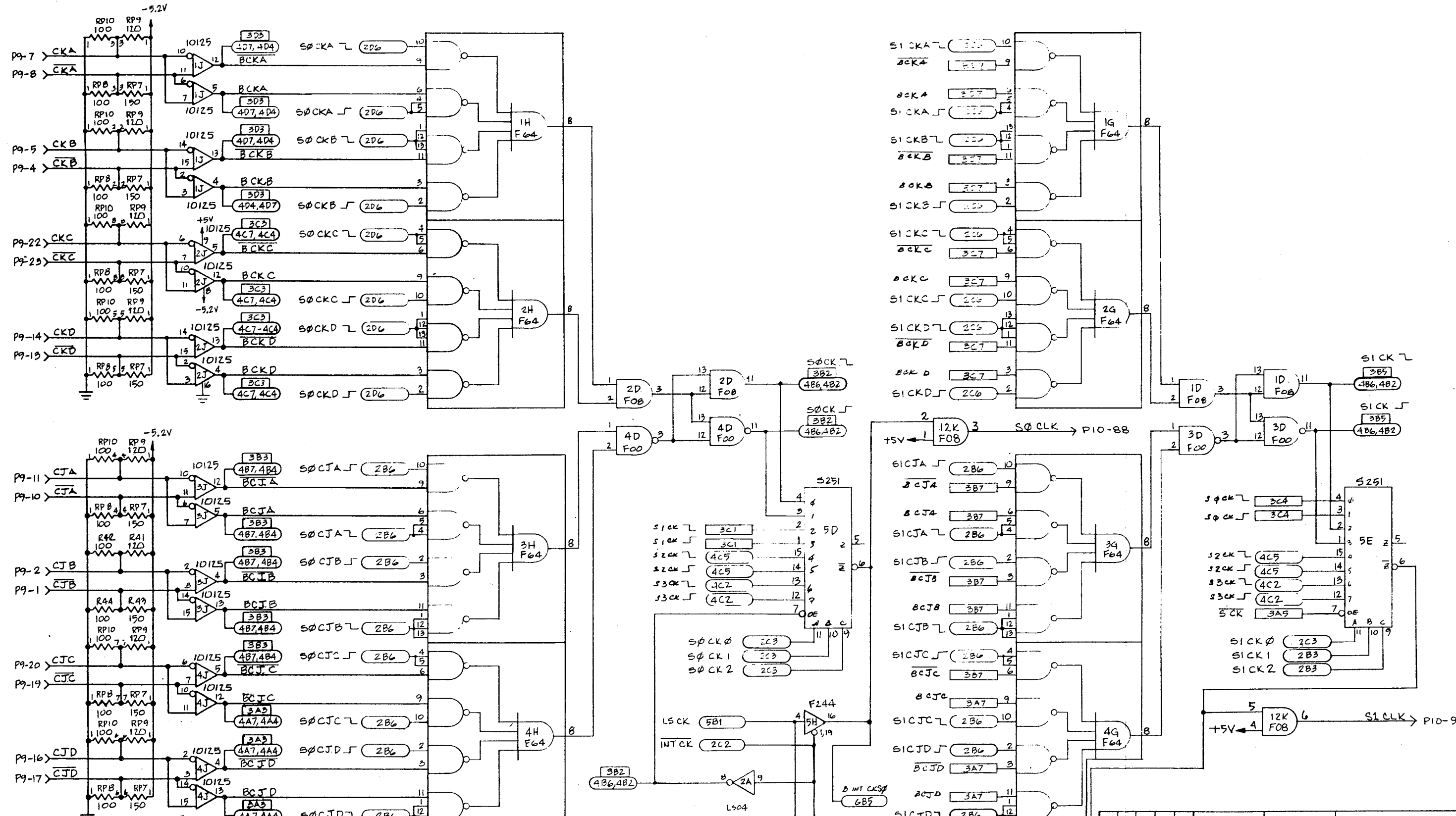
-50		-40		-30		-20		-10		PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM			
DO NOT SCALE DRAWING REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE ROUGHNESS										DRAWN <i>L. Galindo</i> 7/21/88		DATE		GOULD biomation				1	
TOLERANCE DIMENSIONAL: XX = .020 XXX = .010										CHECKED <i>R. Wood</i> 5/1/88		DATE		TITLE ASSEMBLY THRESHOLD/CLOCK PWB					
HOLE SIZE XX = .020 XXX = .010										PROOF ENG. <i>M. Smith</i> 1/13/83		DATE		SCALE 2/1		PART NUMBER 0117-0055		REV 58	
DASH NO.		NUMBER		QTY		ENG. SERV.		DATE		DATE		CODE K105		SHEET 1 OF 1					

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
	01		PROTO			
	02		REVISED			11-30-82
	03		REVISED			1-11-83
	04		REVISED PER EN 1230, 1241			
	50		PROTO REL PER ERN 349			
	51		CCB ERROR			
	52	3990	REVISED PER ECO		mw	
	53	3908	REVISED PER ECO LP		mw	
	54	3925A	REVISED PER ECO N ²		JWC	1/10/83
	55	3943	REVISED PER ECO #		mw	
	56	3982	REVISED PER ECO #		mw	
	57	4050	REVISE PER ECO #		SAR	
	58	4315	REVISE PER ECO		D.C.	



-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM		
DO NOT SCALE DRAWING										DRAWN	DATE	1			
REMOVE ALL BURRS AND SHARP EDGES										CHECKED		GOULD biomation			
DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT.										PROJ. ENG.		TITLE			
SURFACE ROUGHNESS										MANUFACTURING		SCHEMATIC			
TOLERANCE										QUALITY ASSUR		THRESHOLD/CLOCK			
DIMENSIONAL X = 1 HOLE SIZE 0.599 ± .003										ENG. SERV.		SCALE	SIZE	PART NUMBER	REV
XX = 0.25 ± 0.1 0.00398 ± .004										DATE		D	0117-0056	58	
XXX = 0.13										DASH NO.	NUMBER	QTY	CODE K105	SHEET 2 OF 7	

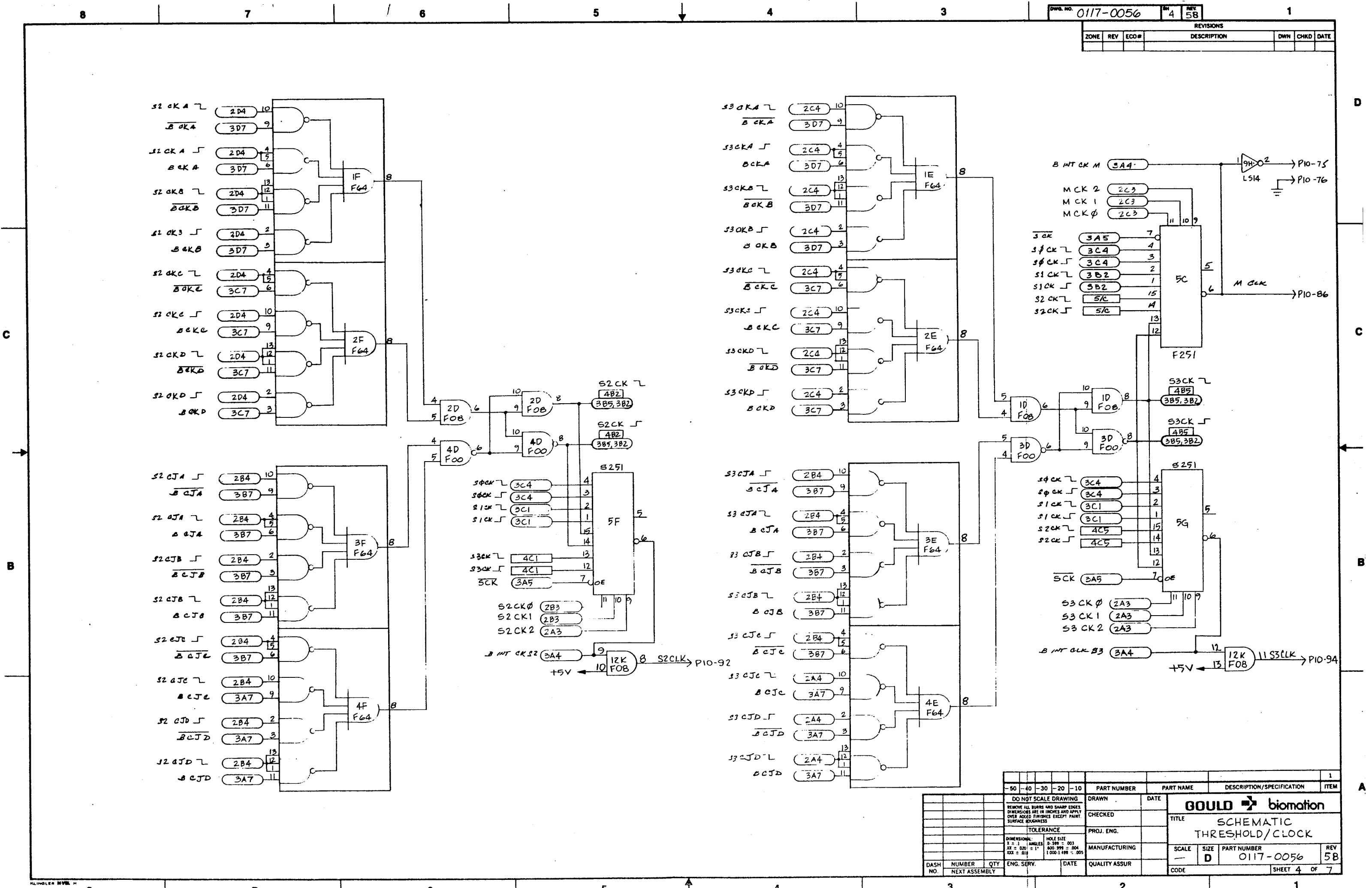
REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	OWN	CHKD	DATE



- SICK 1 3C1
- SICK 2 3C1
- S2CK 1 4C5
- S2CK 2 4C5
- S3CK 1 4C2
- S3CK 2 4C2
- SφCK φ 2C3
- SφCK 1 2C3
- SφCK 2 2C3
- LSCK 5B1
- INTCK 2C2
- S251 6B5
- S251 4B5, 6B5
- S251 4B2, 6B5
- S251 4B2, 6B5

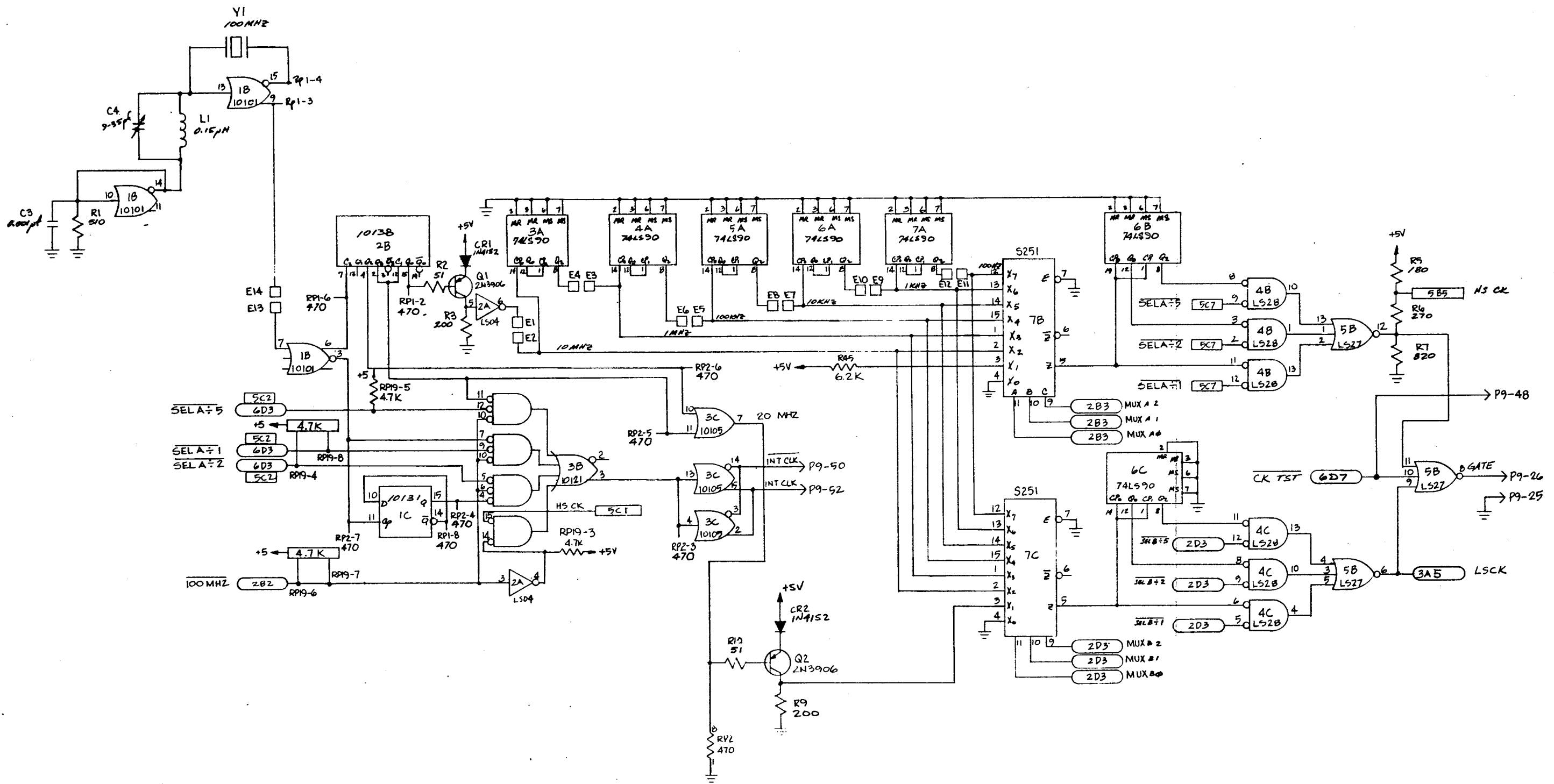
PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
DO NOT SCALE DRAWING		DRAWN		DATE		
REMOVE ALL BURRS AND SHARP EDGES.		CHECKED				
DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT.		PROJ. ENG.		TITLE		
SURFACE ROUGHNESS		MANUFACTURING		SCHEMATIC THRESHOLD/CLOCK		
TOLERANCE		ENG. SERV.		SCALE		
HOLE SIZE		DATE		SIZE		
2 ± .001				PART NUMBER		
3 ± .001				0117-0056		
4 ± .001				REV		
5 ± .001				58		
6 ± .001				SHEET 3 OF 7		

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHRD	DATE



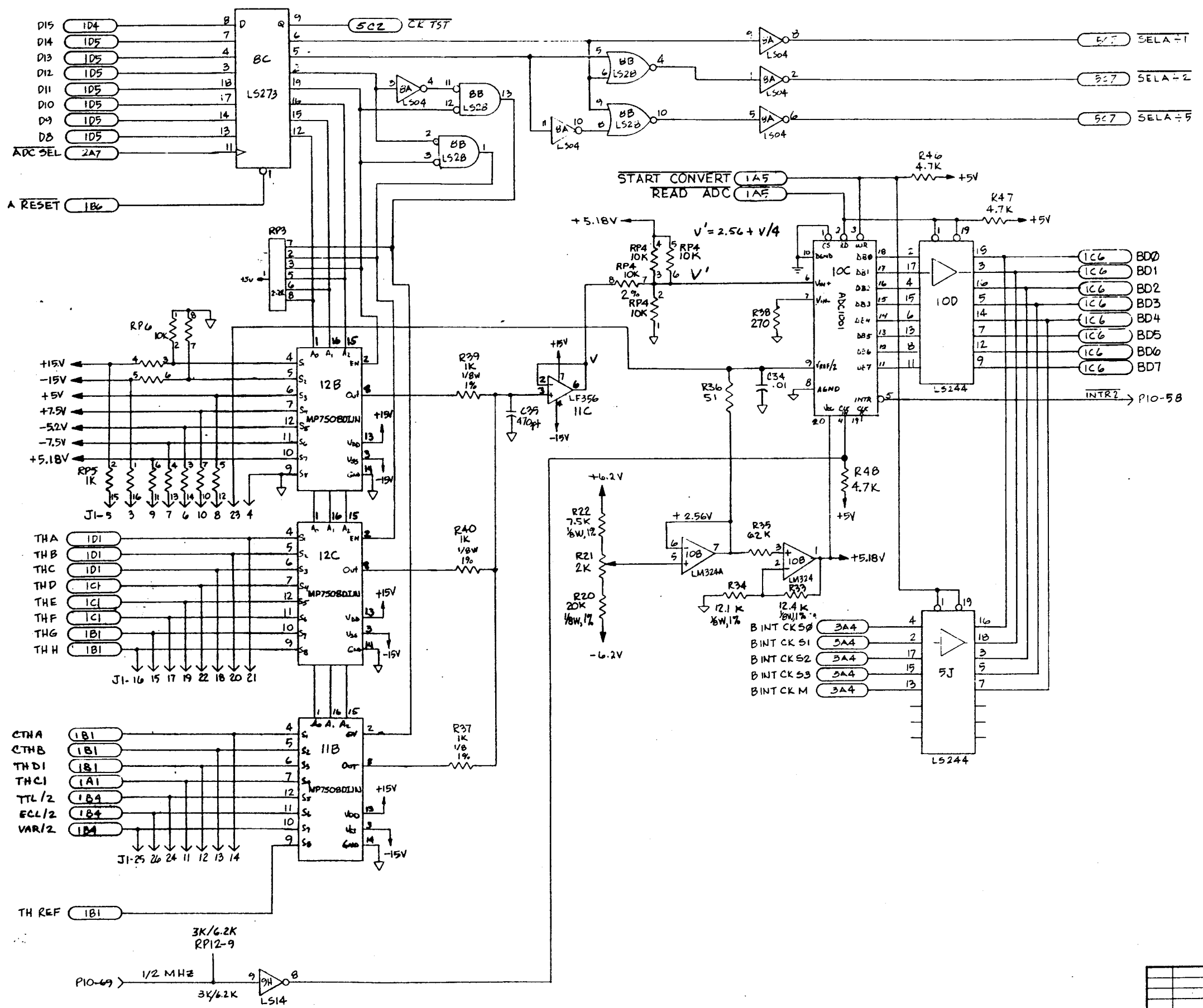
-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM																											
DO NOT SCALE DRAWING																																								
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT. SURFACE ROUGHNESS																																								
TOLERANCE																																								
DIMENSIONAL: X = .1 ANGLES: 0.398 = .003 1.000 = .004 1.000 = .005																																								
HOLE SIZE: 0.398 = .003 1.000 = .004 1.000 = .005																																								
DASH NO. NUMBER QTY ENG. SERV. DATE QUALITY ASSUR																																								
<table border="1"> <tr> <td>DRAWN</td> <td>DATE</td> <td colspan="2">GOULD biomation</td> </tr> <tr> <td>CHECKED</td> <td></td> <td colspan="2">TITLE</td> </tr> <tr> <td>PROJ. ENG.</td> <td></td> <td colspan="2">SCHEMATIC</td> </tr> <tr> <td>MANUFACTURING</td> <td></td> <td colspan="2">THRESHOLD/CLOCK</td> </tr> <tr> <td>SCALE</td> <td>SIZE</td> <td>PART NUMBER</td> <td>REV</td> </tr> <tr> <td></td> <td>D</td> <td>0117-0056</td> <td>58</td> </tr> <tr> <td>CODE</td> <td></td> <td>SHEET 4</td> <td>OF 7</td> </tr> </table>													DRAWN	DATE	GOULD biomation		CHECKED		TITLE		PROJ. ENG.		SCHEMATIC		MANUFACTURING		THRESHOLD/CLOCK		SCALE	SIZE	PART NUMBER	REV		D	0117-0056	58	CODE		SHEET 4	OF 7
DRAWN	DATE	GOULD biomation																																						
CHECKED		TITLE																																						
PROJ. ENG.		SCHEMATIC																																						
MANUFACTURING		THRESHOLD/CLOCK																																						
SCALE	SIZE	PART NUMBER	REV																																					
	D	0117-0056	58																																					
CODE		SHEET 4	OF 7																																					

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE



50		40		30		20		10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING													1
REMOVE ALL BURRS AND SHARP EDGES													
DIMENSIONS ARE IN INCHES AND APPLY													
OVER ALL DIMENSIONS EXCEPT PAINT													
SURFACE ROUGHNESS													
TOLERANCE													
DIMENSIONS: HOLE SIZE													
3 = 1 ANGLES: 0.399 = 0.03													
11 = 0.03 = 1"													
100 = 1.000 = 0.004													
1000 = 1.000 = 0.004													
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR	SCALE		SIZE	PART NUMBER	REV	TITLE		
						- D			0117-0056	58	SCHEMATIC THRESHOLD / CLOCK		
											SHEET 5 OF 7		

REVISIONS					
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD DATE



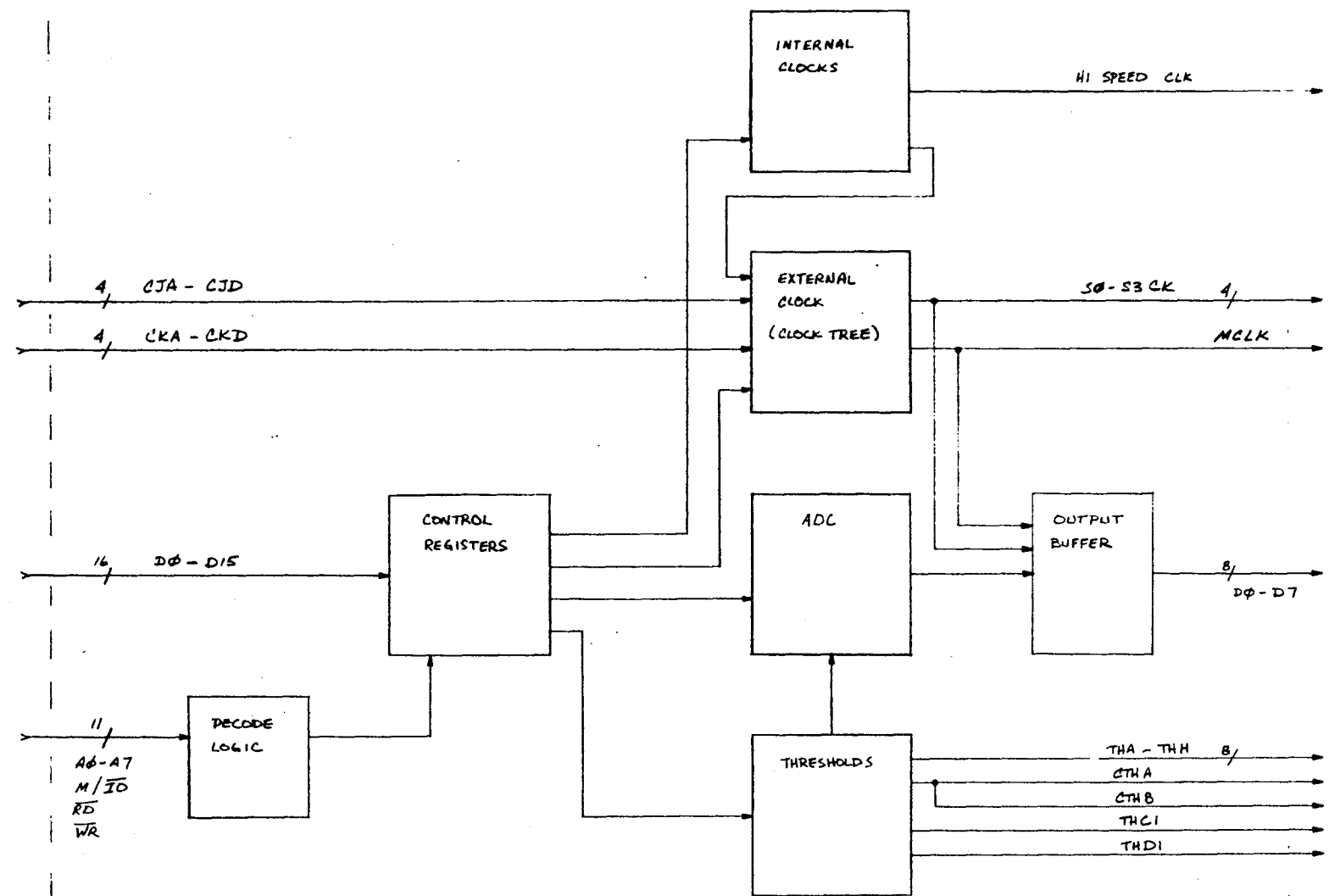
VOLTAGE SELF-TEST

-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING										DRAWN BY: <i>Bob Hagan</i>		DATE: 10-29-81	
REMOVE ALL BURRS AND SHARP EDGES										CHECKED:		PROJECT ENGINEER:	
DIMENSIONS: X=1, Y=1, Z=1										MANUFACTURING:		QUALITY ASSURANCE:	
HOLE SIZE: 0.399 ± 0.003										TITLE: GOULD biomation		REV: 5B	
SCALE: D										PART NUMBER: 0117-0056		SHEET 6 OF 7	

K105 MOTHER BD

K105 THRESHOLD / CLOCK BL.

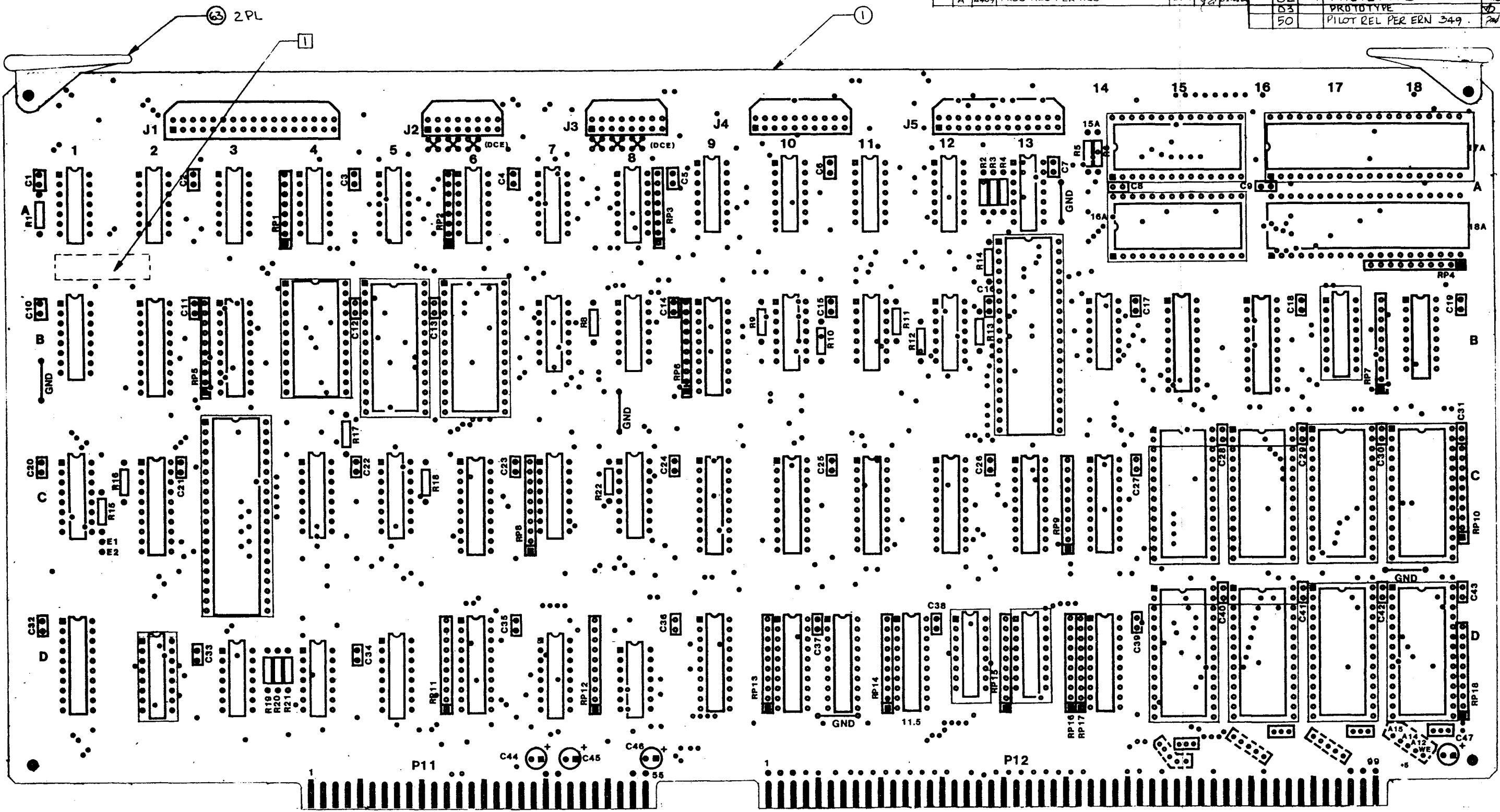
K105 MOTHER BD.



NOTE:
 SQUARE PADS
 DENOTE GEN RAD BREAKPOINTS

-06-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING		DRAWN	DATE	GOULD Instruments Division Santa Clara Operations	1
REMOVE ALL BURS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ACLED FINISHES EXCEPT PART. SURFACE ROUGHNESS		CHECKED			
DIMENSIONAL TOLERANCE		PROJ. ENG.		TITLE	
DASH NO. 0117-0056		MANUFACTURING		SCALE	
NUMBER		QUALITY ASSUR		SIZE	
QTY				PART NUMBER	REV
ENG. SERV.				D	0117-0056 58
DATE				MODEL	SHEET 7 OF 7
NEXT ASSEMBLY				K105	

ZONE	REV	ECO	DESCRIPTION	DWN	CHKD	DATE	REVISIONS			DWN	CHKD	DATE
5	1	426	REVISED PER E.C.O N°	JWC	1-23-82		02	PROTOTYPE			M.W.	
A	4409		PROD REL PER ECO	D.C.	7-28-82		03	PROTOTYPE				
							50	PILOT REL PER ERN 349				



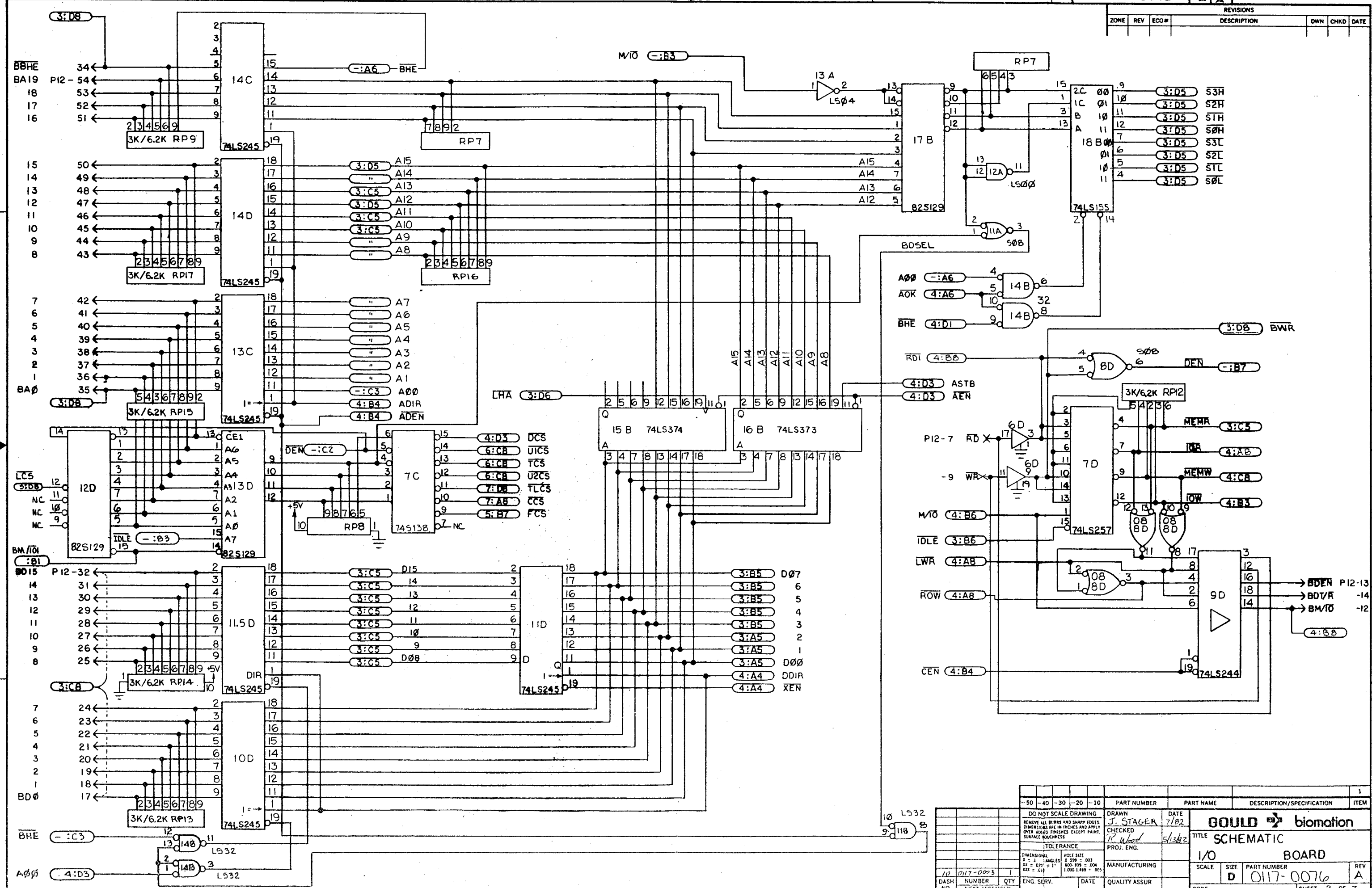
COMPONENT SIDE

NOTES: UNLESS OTHERWISE SPECIFIED

- 1 STAMP ASSEMBLY DASH NO., REVISION LEVEL AND SERIAL NO. APPROXIMATELY WHERE SHOWN USING CONTRASTING INDELIBLE INK.
- 2. ASSEMBLY REFLECTS SCHEMATIC DRAWING 0117-0076 AND FABRICATION DRAWING 0117-0077.

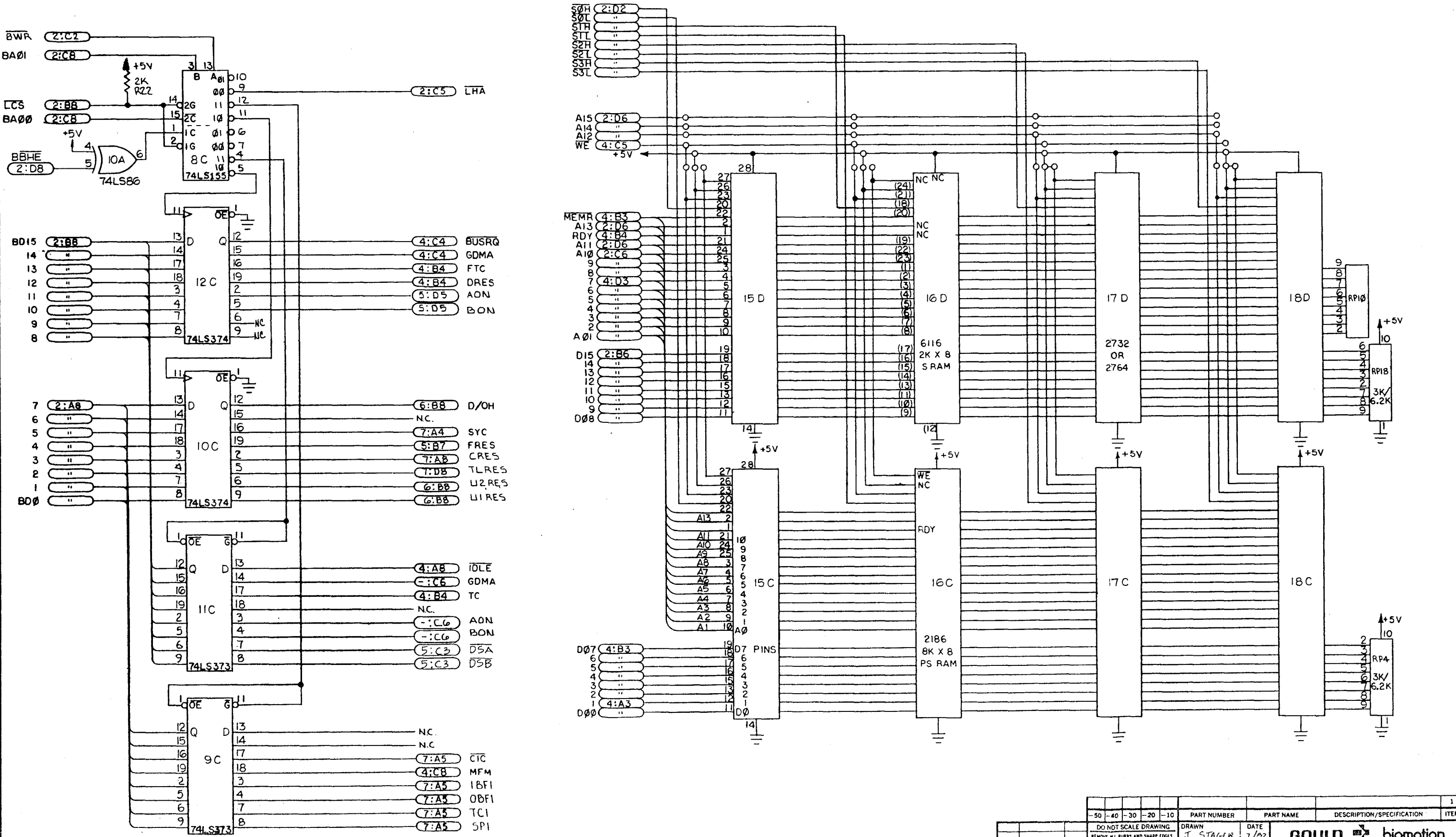
-05-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING		DATE	GOULD Instruments Division Santa Clara Operations		
REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE FINISHNESS		12/17/82	TITLE ASSEMBLY I/O		
TOLERANCE		1/3/83	SCALE SIZE PART NUMBER 2/1 D 0117-0075		
DIMENSIONAL HOLE SIZE		PROJ. ENGR.	REV A		
X = .010 ± .001		MANUFACTURING	MODEX K105 SHEET 1 OF 1		
Y = .010 ± .001		QUALITY ASSURANCE			
Z = .010 ± .001		DATE			
XXX = .010		9/3/82			
DASH NO.	NUMBER NEXT ASSEMBLY	ENG. SERV.	DATE		
10 0117-0075	1				

REVISIONS			
ZONE	REV	ECO#	DESCRIPTION



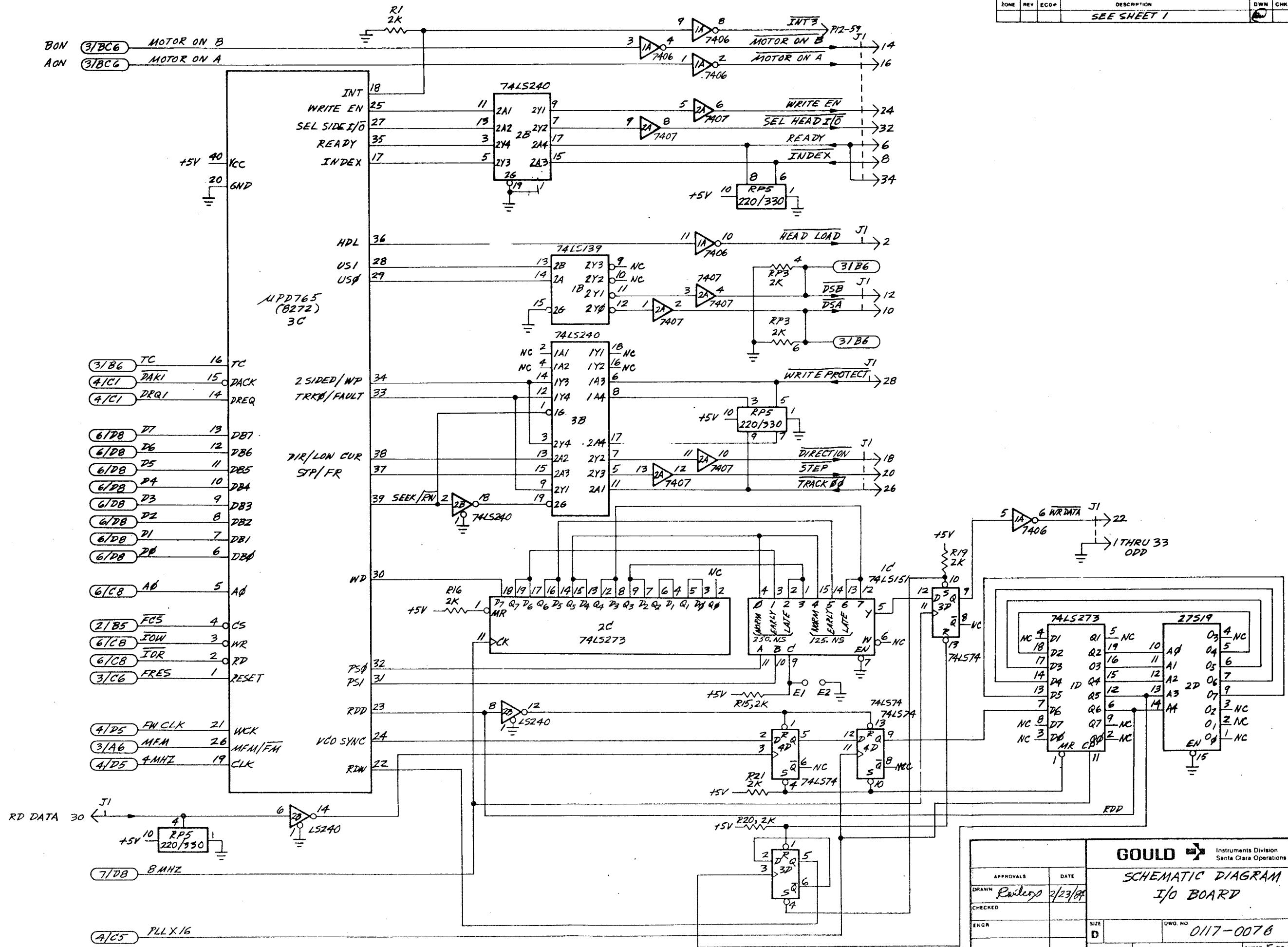
PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
<p>DO NOT SCALE DRAWING REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ALL SURFACES EXCEPT PAINTED SURFACE ROUGHNESS</p>						
DRAWN J. STAGER		DATE 7/82		CHECKED K. Wood		1
DASH NO. 0117-0003		MANUFACTURING		TITLE SCHEMATIC		1
NUMBER QTY		DATE		SCALE SIZE PART NUMBER		REV
NEXT ASSEMBLY		ENG. SERV.		D 0117-0076		A
		QUALITY ASSUR		SHEET 2 OF 7		

REVISIONS				
ZONE	REV	ECO#	DESCRIPTION	DATE



-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	1
DO NOT SCALE DRAWING										DRAWN	J. STAGER	DATE	7/82
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT SURFACE ROUGHNESS.										CHECKED	R. Wood	DATE	5/13/82
TOLERANCE										PROJ. ENG.			
DIMENSIONAL: HOLE SIZE 0.598 - 0.01										MANUFACTURING			
X = 0.05 = 1"										QUALITY ASSUR			
XXX = 0.10													
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR	TITLE		SCALE		SIZE	PART NUMBER	REV	
						SCHEMATIC		D			0117-0076	A	
										CODE		SHEET 3 OF 7	

REVISIONS				DWN	CHKD	DATE
ZONE	REV	ECO#	DESCRIPTION			
			SEE SHEET 1			



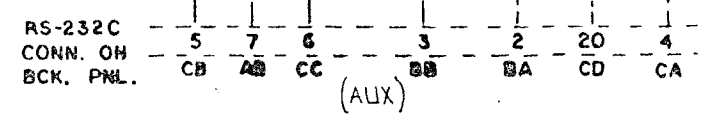
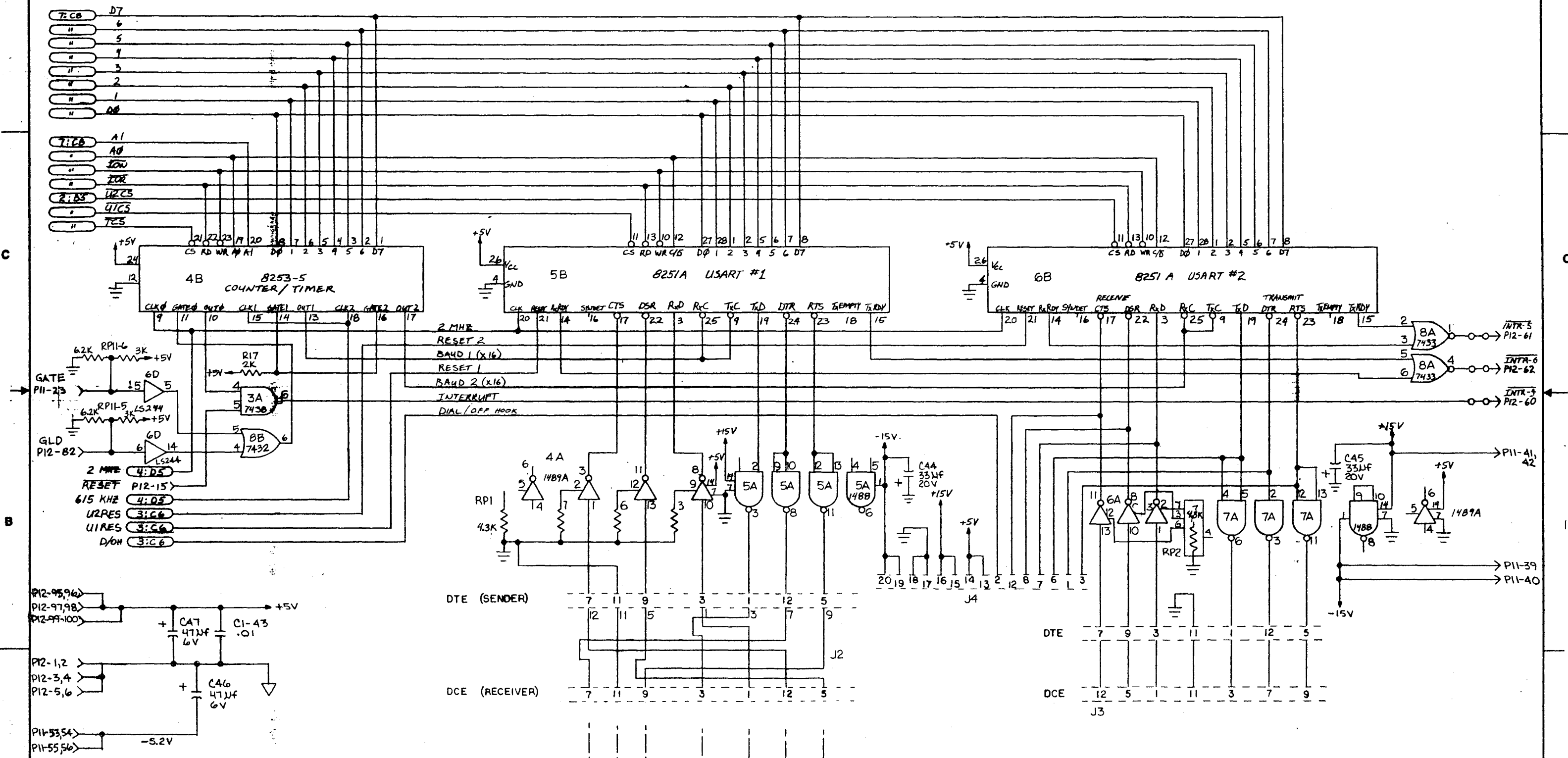
C

B

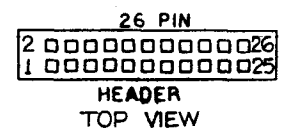
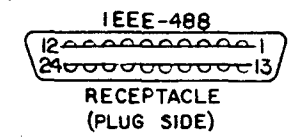
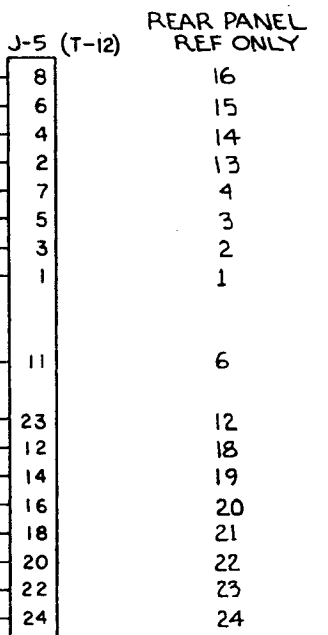
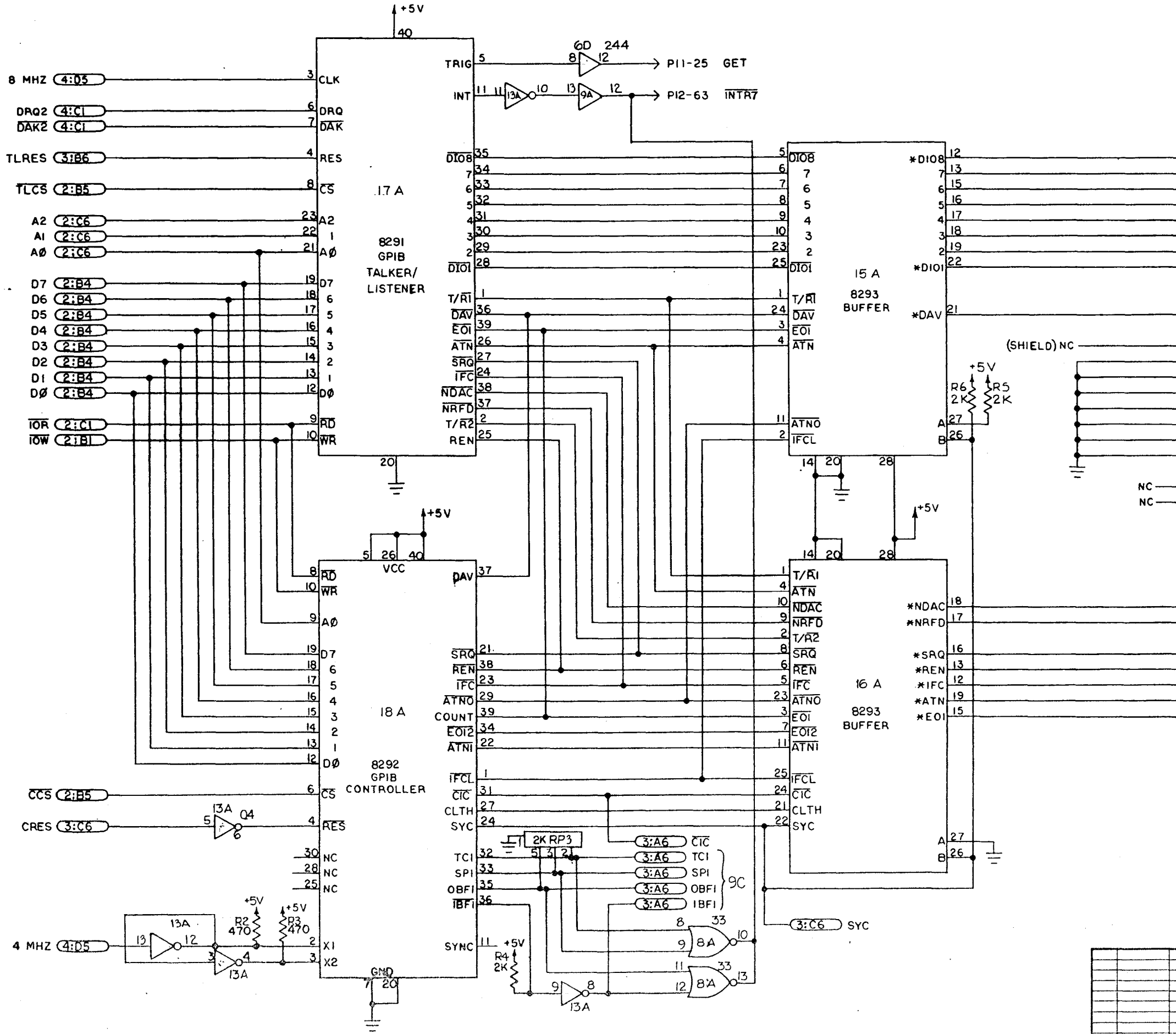
A

APPROVALS		DATE	GOULD Instruments Division Santa Clara Operations SCHEMATIC DIAGRAM I/O BOARD
DRAWN		2/23/88	
CHECKED			
ENGR			
SIZE		D	DWG NO 0117-0076
REV		A	SHEET 5 OF 7

REVISIONS					
ZONE	REV	ECO#	DESCRIPTION	OWN	CHKD DATE



-05-04-03-02-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER ALL DIMENSIONS EXCEPT PAINT SURFACE FINISHES		DRAWN J. STAGER	DATE 7/82	GOULD Instruments Division Santa Clara Operations TITLE SCHEMATIC I/O BOARD	
TOLERANCE DIMENSIONAL: 1/16" = .001" ANGLES: 0.500 = .001 XX = .005 = .004 1.000-1.400 = .005		CHECKED	PROJ. ENG.		SCALE D
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR
				MANUFACTURING	
				MODEL	
				0117-0076	
				SHEET 6	OF 7



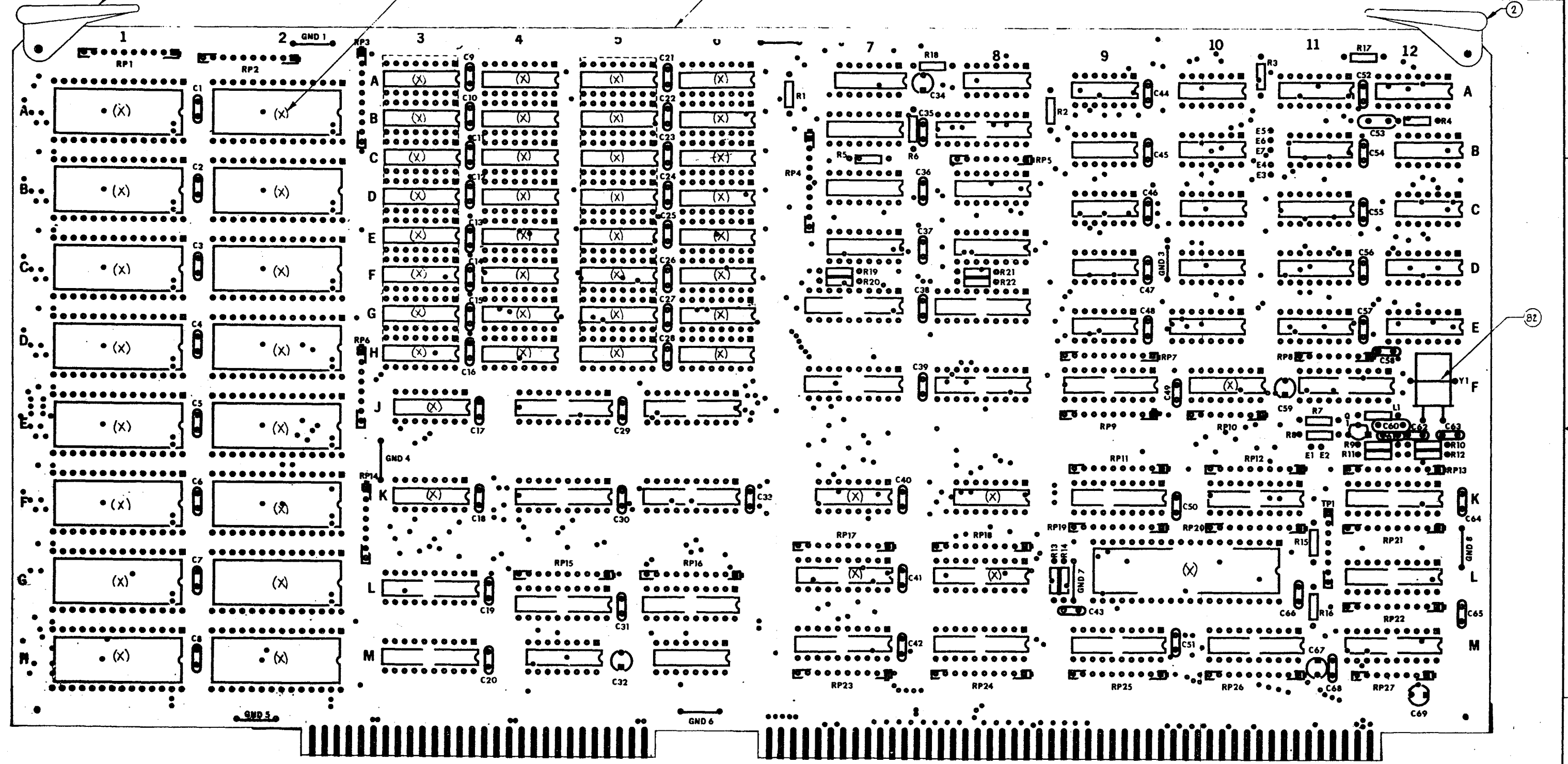
DASH NO.		NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR.

PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
						1

DO NOT SCALE DRAWING	DRAWN	DATE	
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ALL FINISHES EXCEPT PAINT. SURFACE FINISHES:	J. STAGG	7/82	
TOLERANCE	PROJ. ENG.	TITLE SCHEMATIC	
MANUFACTURING	SCALE		BOARD
QUALITY ASSUR.	SIZE	PART NUMBER	REV
	D	0117-0076	A
	CODE	SHEET 7 OF 7	

REVISED PER ECO #1101		REVISED PER ECO #11062		REVISED PER ECO #1706		REVISED PER ECO #2009	
REVISED PER ECO #2367		REVISED PER ECO #2704		REVISED PER ECO #3514		REVISED PER ECO #4495	

REVISIONS		ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

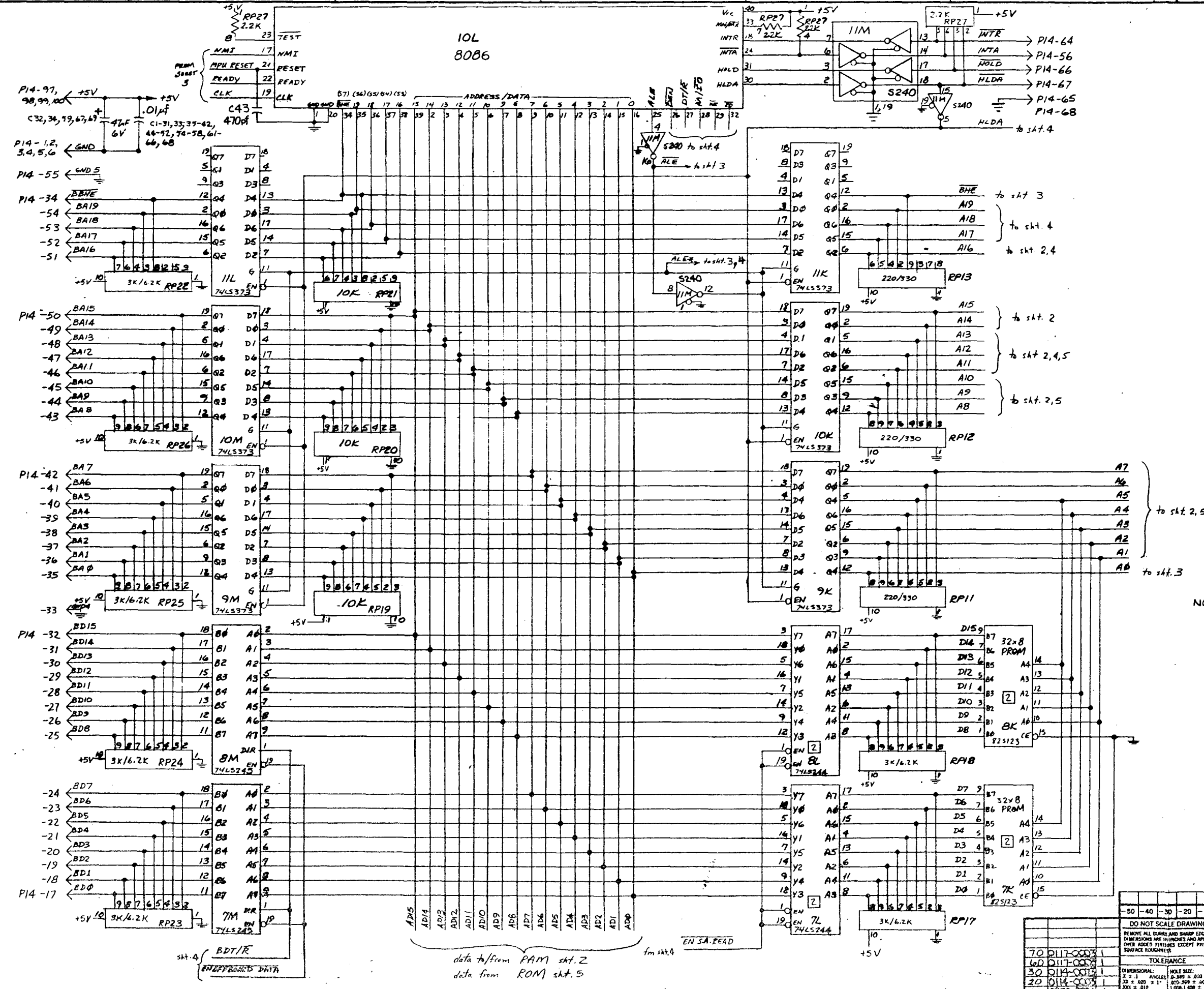


COMPONENT SIDE

NOTES:
 [1] THIS SYMBOL (X) INDICATES WHERE I.C. SOCKETS ARE REQUIRED (FOR REF ONLY)

-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES AND APPLY OVER GOOD FINISHES EXCEPT PAINT. SURFACE ROUGHNESS										DRAWN R2	DATE 4-16-84	GOULD biomation	
TOLERANCE										CHECKED RG	PROJ. ENG.	TITLE ASSEMBLY, K101, K500 MPU BD.	
DIMENSIONAL X = 1 ANGLE XX = 0.10 XXX = 0.10										HOLE SIZE Ø.599 ± .003 Ø.000 ± .004 1.000 ± .004		SCALE 2:1	
DASH NUMBER		NUMBER		QTY		ENG. SERV.		DATE		QUALITY ASSUR		REV V	
NEXT ASSEMBLY										PART NUMBER 0114-0185		SHEET 1 OF 1	

10L 8086



REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	OWN	CHKD	DATE
A	-		Prototype (as ETIHEA)			7-3-80
B	-		Prototype as modified			2-3-81
C	-		Prototype - APPROX ERN #	WJW		11-7-81
D	-		REL TO PILOT RUN PER ERN#086	WJW		1-10-81
E	1484		REVISED PER ECO N°	JWC	BD	3-3-81
F	1662		REVISED PER ECO	SR	JL	4-16-81
G	1706		REVISED PER ECO	SR	JL	4-22-81
H	2009		REVISED PER ECO	MS	RG	9-14-81
N	2574		REVISED PER ECO N°	JWC	JW	8-17-81
P	3529		REVISED PER ECO	MW	DW	7-2-82
R	3765		REVISED PER ECO	MW	DW	7-7-82
S	3985		REVISED PER ECO	WJW	DW	7-29-82
T	4306		REVISED PER ECO	WJW	DW	7-29-82
U	4494		REVISED PER ECO	WJW	DW	7-29-82
V	4587		REVISED PER ECO N°	JWC		7-29-82

AI-A16 TO SHT. 2
 A8, BHE TO SHT 3
 A11-A19 TO SHT 4
 A1-A13 TO SHT 5

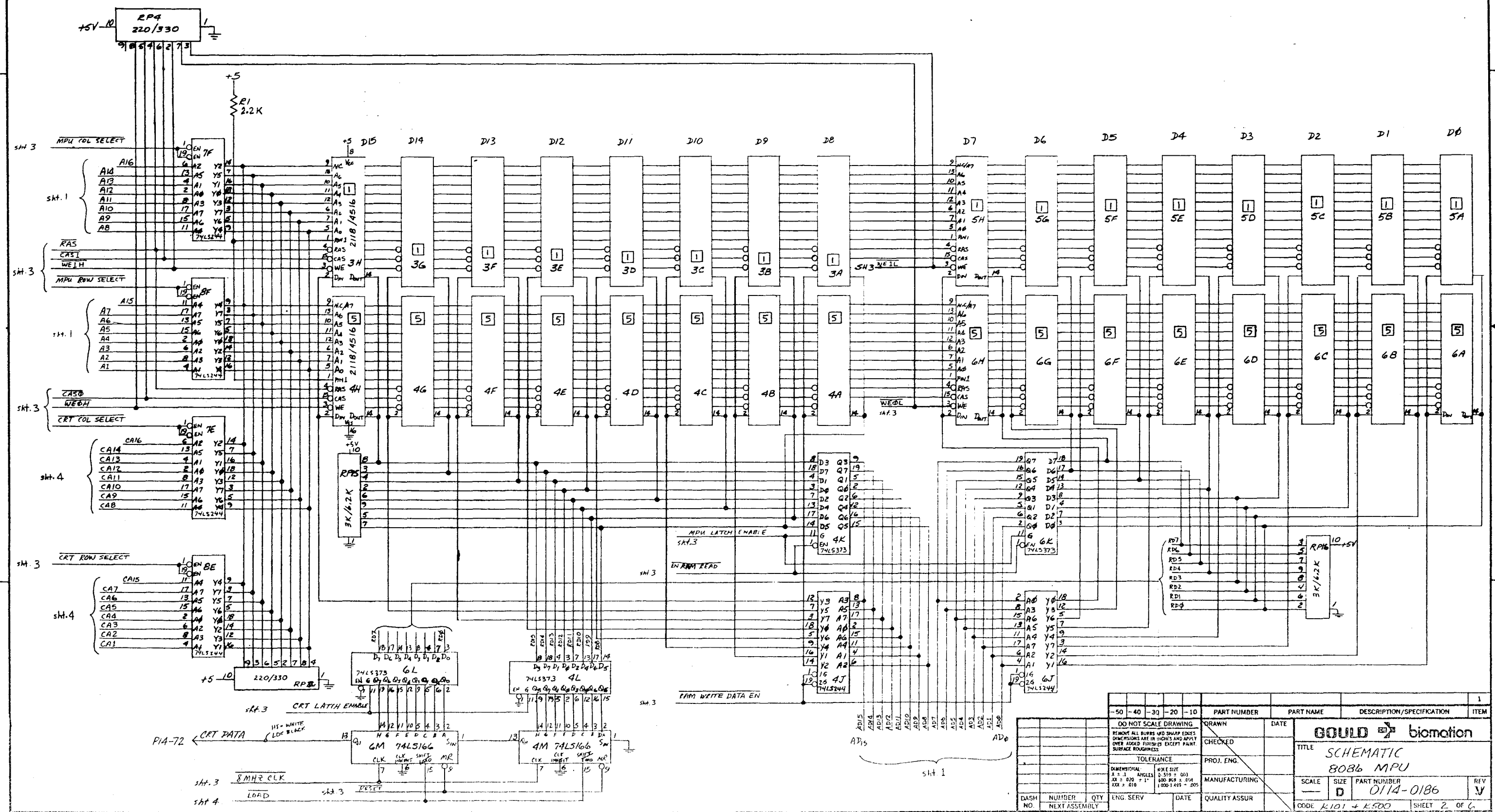
- NOTES: UNLESS OTHERWISE SPECIFIED
1. -A0 ONLY
 2. LOADED TEMPORARILY FOR TEST ONLY.
 3. ALL RESISTORS ARE IN OHMS, 1/4W, 5%.
 4. ALL CAPACITORS ARE IN MICRO FARADS.
 5. 16K RAM FOR K500 -(2118 TYPE)
 64K RAM FOR K101-(4164 TYPE)
 64K RAM FOR K105-(4164 TYPE)

PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
70	0117-0001	1				1
60	0117-0001	1				1
30	0114-0001	1				1
20	0114-0001	1				1
10	0150-0001	1				1

DO NOT SCALE DRAWING		DATE		TITLE	
REMOVE ALL DIMS AND SHARP EDGES		7-9-80		SCHEMATIC	
DIMENSIONS ARE IN INCHES AND APPLY		PROJ. ENG.		8086 MPU	
OVER ADDED FINISHES EXCEPT PRINT		4/10/81		SCALE	
SURFACE ROUGHNESS		MANUFACTURING		SIZE	
		4-10-81		PART NUMBER	
		DATE		0114-0186	
		4-10-81		REV	
		4-10-81		14	
		4-10-81		D	
		4-10-81		CODE K101 + K500	
		4-10-81		SHEET 1 OF 6	

data to/from RAM sht. 2
 data from ROM sht. 5

REVISIONS				DWN	CHKD	DATE
ZONE	REV	ECO#	DESCRIPTION			



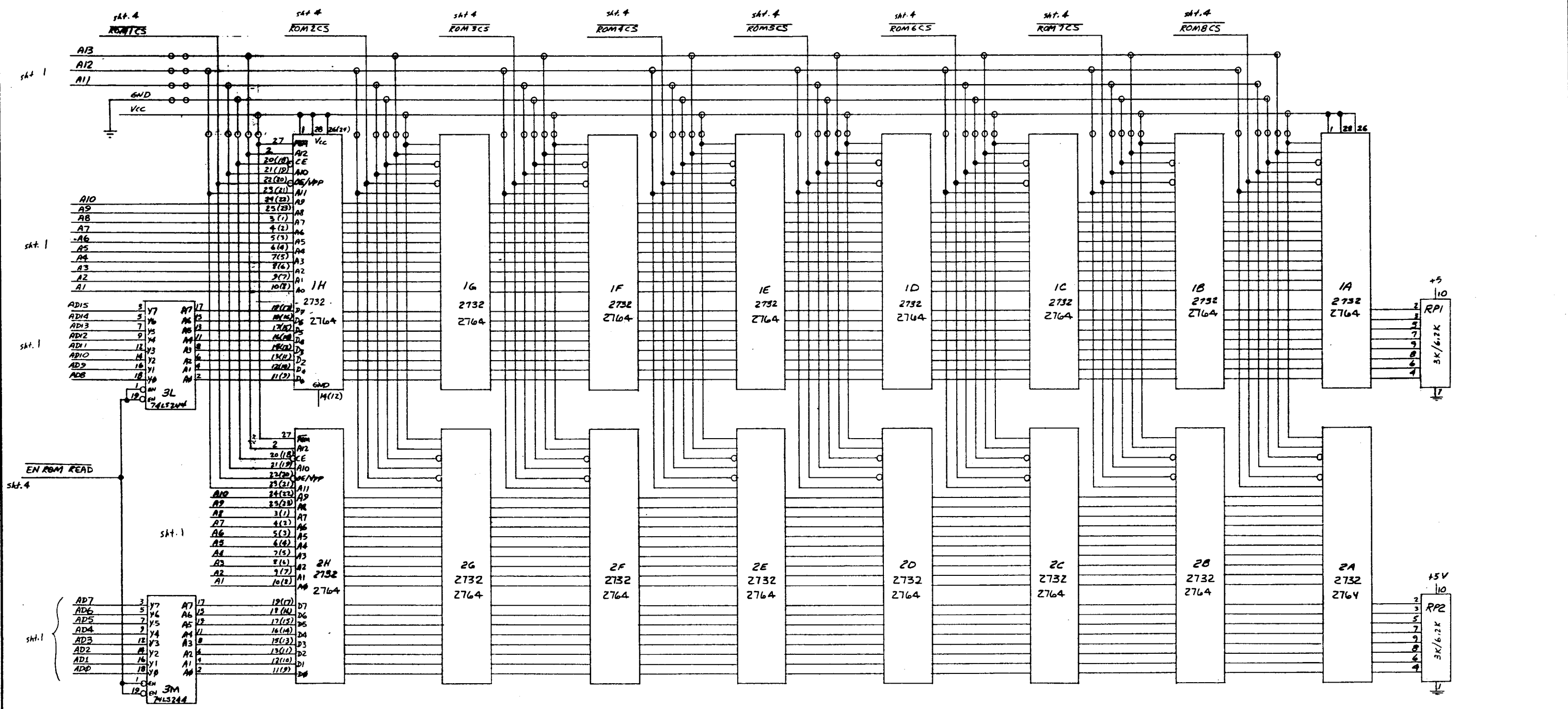
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR.

PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM

DO NOT SCALE DRAWING		DATE	
REMOVE ALL BURRS AND SHARP EDGES		DRAWN	
DIMENSIONS ARE IN INCHES AND APPLY OVER ANGLED FINISHES EXCEPT PAINT.		CHECKED	
SURFACE ROUGHNESS		PROJ. ENG.	
TOLERANCE		MANUFACTURING	
DIMENSIONAL		DATE	
X ± .1		QUALITY ASSUR.	
Y ± .1			
Z ± .1			
XX ± .010			
YY ± .010			
ZZ ± .010			

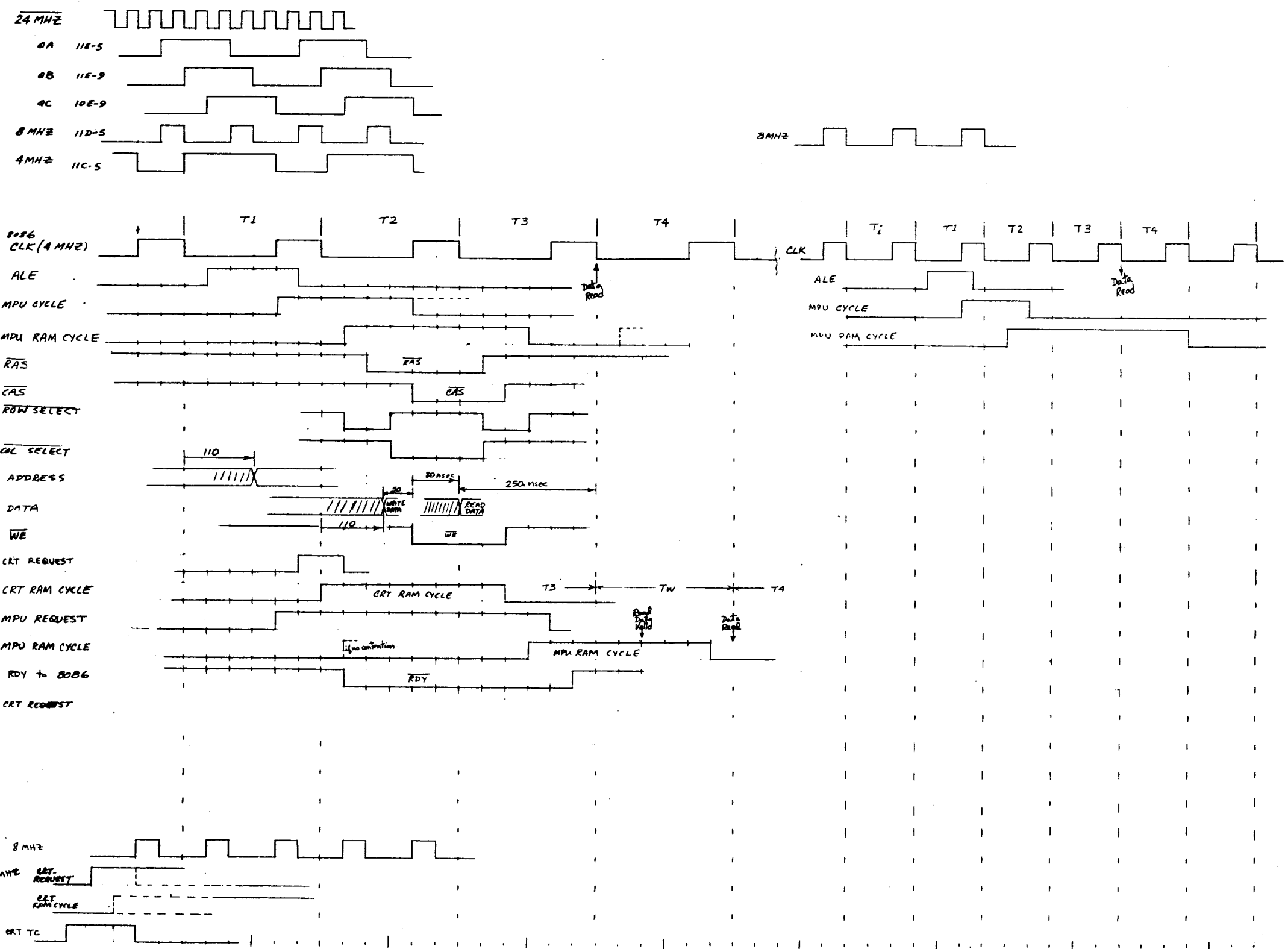
TITLE		REV	
SCHEMATIC		V	
8086 MPU			
SCALE	SIZE	PART NUMBER	REV
D	D	0114-0186	V
CODE K101 + K500		SHEET 2 OF 6	

REVISIONS				DWN	CHKD	DATE
ZONE	REV	ECD#	DESCRIPTION			



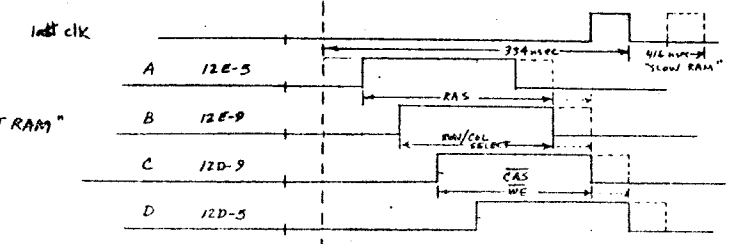
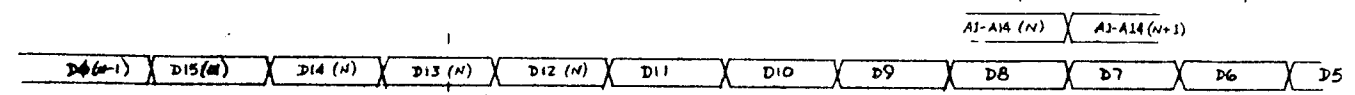
-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING										DRAWN	DATE	GOULD biomation	
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES EXCEPT PAINT. SURFACE ROUGHNESS										CHECKED		TITLE SCHEMATIC 8086 MPU	
DIMENSIONAL TOLERANCE										PROJ. ENG.		SCALE SIZE PART NUMBER REV	
DASH NO. NUMBER QTY ENG. SERV. DATE QUALITY ASSUR										MANUFACTURING		D 0114-0186	
												CODE K101 + K500 SHEET 5 OF 6	

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE



no contention
Fast RAM cycle

Worst case for MPU
CRT cycle starts
one CLK before



RAM cycle
shift register

TIMING DIAGRAMS

DIMENSIONS				TOLERANCE				MATERIALS				FINISHES			
50	40	30	20	10	5	3	2	1	0.5	0.2	0.1	0.05	0.02	0.01	0.005
DO NOT SCALE DRAWING								BRAWN				DATE			
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADGED FINISHES EXCEPT PAINT. SURFACE BROUGHNESS:								CHECKED				TITLE			
TOLERANCE								PROJ. ENG.				GOULD biomation			
DIMENSIONS: APPLICABLE								MANUFACTURING				SCALE			
X ± .010								QUALITY ASSUR				SIZE D			
Y ± .010								DATE				PART NUMBER			
Z ± .010								PART ASSEMBLY				0114-0186			
HOLE SIZE: 2.500 ± .003								REV				6			
1.000 ± .004								SHEET				6			
1.000 ± .004								CODE				K101-K500			

D

C

B

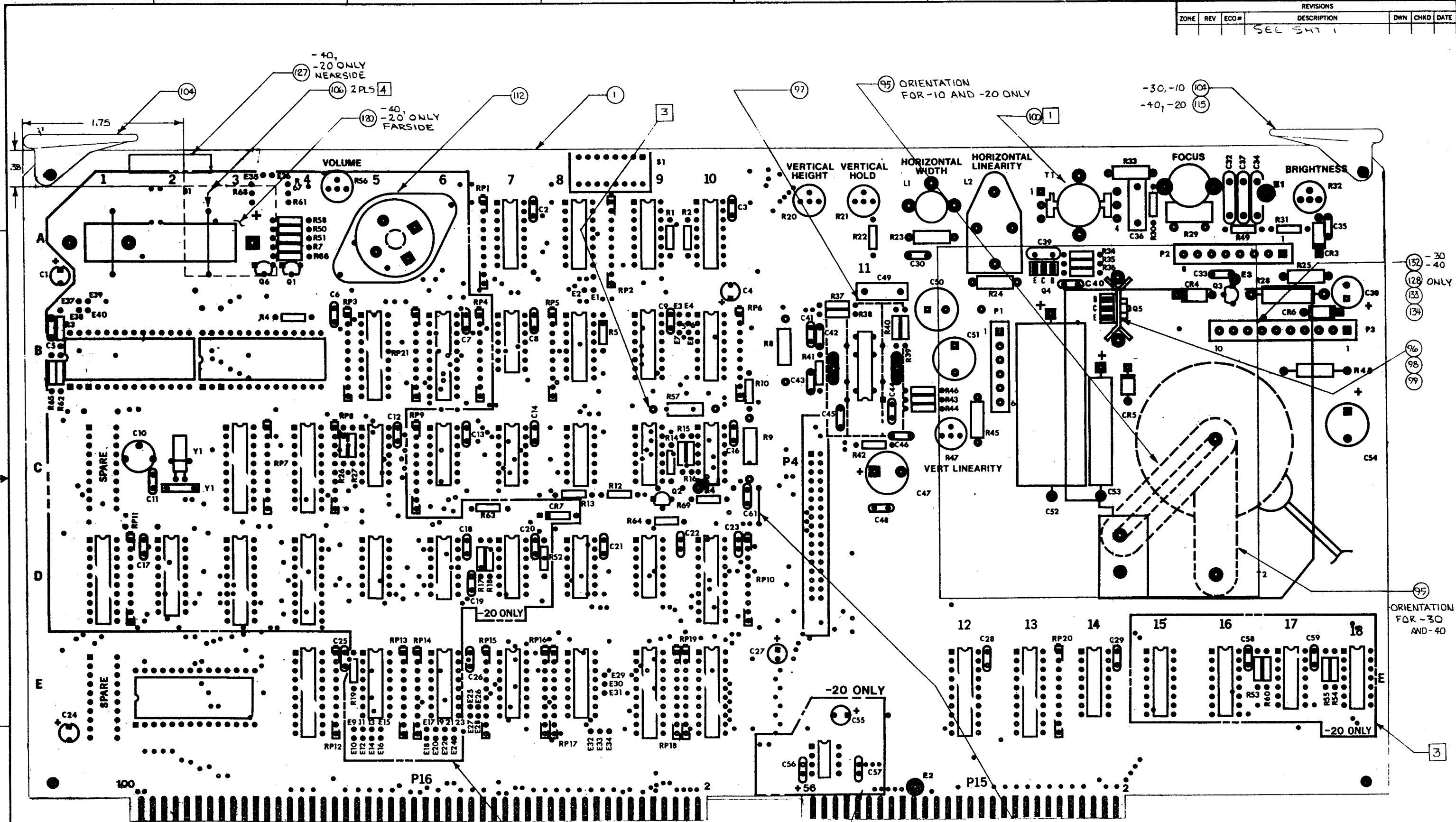
A

REVISIONS					
ZONE	REV	ECO#	DESCRIPTION	OWN	CHKD DATE
A			PRODUCT REL. PER ERN #295	JC	1/28/82
B			PRODUCTION RELEASE PER ERN #295	JC	1/28/82
C	3254A		REV'D PER ECO	MW	1/28/82
D	3905		REVISED PER ECO	MW	1/28/82
E	3906		REVISED PER ECO	MW	1/28/82
F	4147		REVISED PER ECO	MW	1/28/82
G	4425		REVISED PER ECO	JG	1/28/82
H	4542		REVISED PER E.C.O. N°	JWL	1/28/82
J	4639		PER ECO	JWL	1/28/82

JUMPER	AS ETCHED	-20 K101	-30 K105	-40 K205	-10 K500	DESCRIPTION
E1 TO E2	OUT				JUMPER FOR 50HZ ONLY	CRT SCAN RATE IN = 50 HZ. OUT = 60 HZ
E3 TO E4	OUT					NOT USED
E5 TO E6	OUT					NOT USED
E7 TO E8	OUT				JUMPER	IN = K500 HORIZ. SCAN OUT = K101
E9 TO E10	OUT					A18
E11 TO E12	IN					A17
E13 TO E14	IN					A16
E15 TO E16	IN					A15 } K101 CMOS RAM
E17 TO E18	IN					A14 } ADDRESS SELECTION
E19 TO E20	IN					A13
E21 TO E22	IN					A12
E23 TO E24	IN					A19
E25 TO E26	IN					A8 } K500 MEM MAPPED I/O
E27 TO E28	IN					A7 } ADDRESS DECODE
E29 TO E30	IN				CUT	IN SELECTS I/O MAPPED I/O (K101)
E30 TO E31	OUT				JUMPER	IN SELECTS MEM MAPPED I/O (K500)
E32 TO E33	IN				CUT	IN FOR K101
E33 TO E34	OUT				JUMPER	IN FOR K500

-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER GOOD FINISHES EXCEPT PAINT SURFACE ROUGHNESS.													
DRAWN		DATE		CHECKED		PROJ. ENG.		MANUFACTURING		QUALITY ASSUR.		TITLE ASSEMBLY DATA DISPLAY BD	
-40 0120-0004		3/25/82		JWB		Curt		1/28/82		SCALE		REV	
-30 0111-0003										2/1		J	
-20 0114-0002										SIZE		PART NUMBER	
-10 0150-0002										D		0114-2010	
DASH NO.		NUMBER		QTY		ENG. SERV.		DATE		CODE		SHEET 1 OF 2	
		NEXT ASSEMBLY								K101/K500			

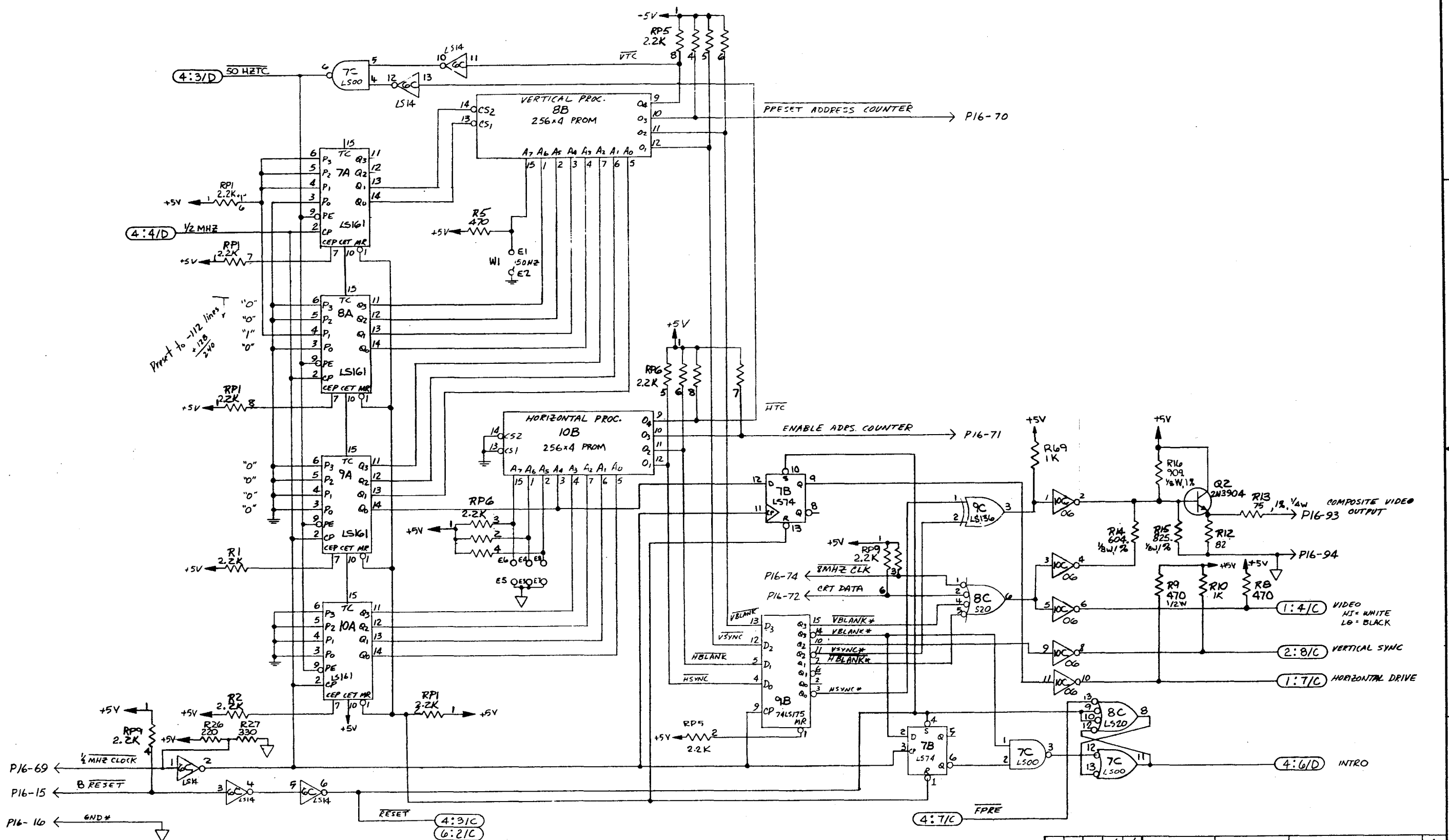
REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	DWN	CHKD	DATE
			SEE 547			



NOTES:

- REMOVE MOUNTING HARDWARE SUPPLIED WITH T1, USE ITEM (100) TO SECURE TO BOARD
- IC'S 7E, 9E, RP2 & S1 ARE -10; IC 9E & RP2 ARE -30.
- COMPONENTS IN THIS AREA PLUS R57 ARE -20, -40 ONLY EXCEPT FOR R26 & R27.
- SECURE BATTERY, B1, TO BOARD WITH ITEM 106 2 PLACES BEFORE SOLDERING LEADS TO PREVENT STRAIN ON BATTERY LEADS.
- JUMPER FROM E1 TO E2 AND E3 TO E4 ON SOLDER SIDE OF BOARD. USE LEADS OF STRAND WIRE. MAKE JUMPER AS SHORT AS POSSIBLE.

-05		-04		-03		-02		-01		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
DO NOT SCALE DRAWING										DRAWN	JWCARROLL	DATE	12-6-82
REMOVE ALL BURRS AND SHARP EDGES										CHECKED			
DIMENSIONS ARE IN INCHES AND APPLY OVER HIDDEN FEATURES EXCEPT PAINT SURFACE ROUGHNESS										PROJ. ENG.			
DIMENSIONAL TOLERANCES										MANUFACTURING			
HOLE SIZE										QUALITY ASSUR			
ANGLES													
SCALE										2/1			
SIZE										D			
PART NUMBER										0114-2010			
REV										J			
MODEL													
SHEET										2			
OF										2			



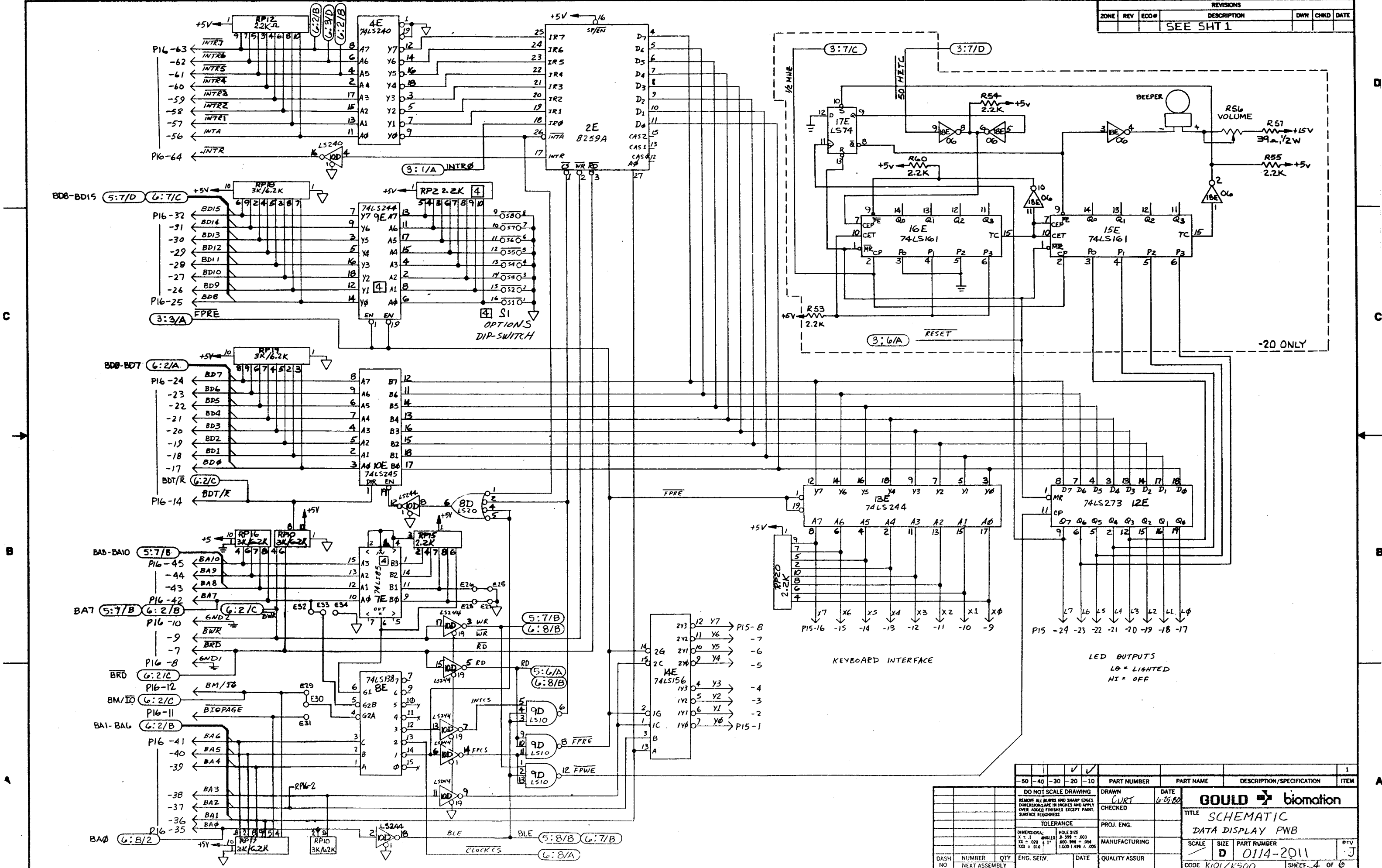
-50		-40		-30		-20		-10		PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
													1
DO NOT SCALE DRAWING										DATE	6/29/80		
REMOVE ALL BURRS AND SHARP EDGES. DIMENSIONS ARE IN INCHES AND APPLY OVER ADDED FINISHES UNLESS PART. SURFACE INDICATED.										CHECKED	CURT		
TOLERANCE										PROJ. ENG.			
DIMENSIONAL: X = 1.000 ± .004, Y = 1.000 ± .004, Z = 1.000 ± .004										MANUFACTURING			
HOLE SIZE: 2.500 ± .003, 3.000 ± .004, 3.500 ± .005, 4.000 ± .006, 4.500 ± .007, 5.000 ± .008, 5.500 ± .009, 6.000 ± .010										QUALITY ASSUR			
DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR		DATE		SCALE		SIZE	PART NUMBER	REV
									NONE		D	0114-2011	J
										CODE	K101 + K500	SHEET 3 OF 6	

GOULD **biomation**

TITLE: **SCHEMATIC - DATA DISPLAY PWB**

SCALE: NONE SIZE: D PART NUMBER: 0114-2011 REV: J

REVISIONS				DATE
ZONE	REV	ECO#	DESCRIPTION	DWN
			SEE SHT 1	



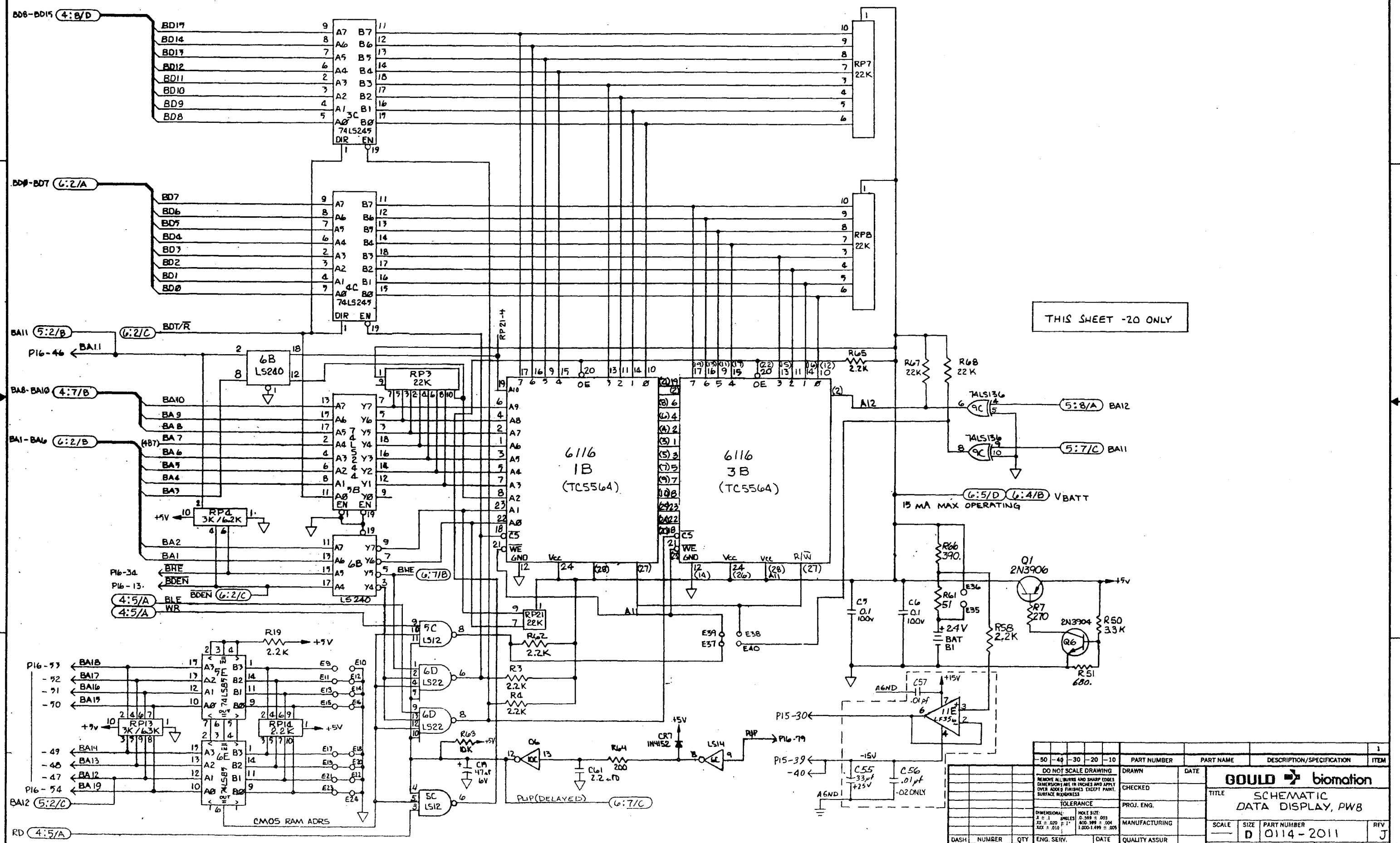
TOLERANCE		DIMENSIONAL		HOLE SIZE	
±0.10	±0.05	±0.01	±0.005	±0.005	±0.005
±0.05	±0.02	±0.005	±0.002	±0.002	±0.002
±0.02	±0.01	±0.002	±0.001	±0.001	±0.001

DASH NO.	NUMBER	QTY	ENG. SERV.	DATE	QUALITY ASSUR

PART NUMBER	PART NAME	DESCRIPTION/SPECIFICATION	ITEM
1	GOULD biomation	SCHEMATIC DATA DISPLAY PWB	1

DRAWN: CURT
 CHECKED: [Signature]
 DATE: 6-25-80
 TITLE: SCHEMATIC DATA DISPLAY PWB
 SCALE: D
 SIZE: 0114-2011
 PART NUMBER: 0114-2011
 REV: J
 CODE: K101/K500
 SHEET: 4 OF 6

REVISIONS						
ZONE	REV	ECO#	DESCRIPTION	OWN	CHKD	DATE
			SEE SHT 1			



THIS SHEET -20 ONLY

PART NUMBER		PART NAME		DESCRIPTION/SPECIFICATION		ITEM
-50	-40	-30	-20	-10		1
DO NOT SCALE DRAWING						
REMOVE ALL BURRS AND SHARP EDGES						
DIMENSIONS ARE IN INCHES AND APPLY						
OVER ADDED FINISHES EXCEPT PAINT.						
SURFACE ROUGHNESS						
TOLERANCE						
DIMENSIONAL: X = 1 ANGLES: 0.389 ± .003						
XX = 0.020 ± .001 800.389 ± .004						
XXX = 0.010 1.000-1.499 ± .005						
MOLE SIZE: 0.389 ± .003						
800.389 ± .004						
1.000-1.499 ± .005						
SCALE SIZE: D 0114-2011						
REVISIONS						
DRAWN DATE						
CHECKED						
PROJ. ENG.						
MANUFACTURING						
QUALITY ASSUR						
DATE						
SHEET 5 of 6						

