

THIS DWG IS CONFIDENTIAL & PROPERTY OF MIDWAY MFG CO.

DIM. TOLERANCES
 UNLESS OTHERWISE SPEC.
 CONCENTRICITY T.I.R. .002
 FRACTIONAL ± 1/64
 DECIMAL ± .005
 HOLE DIA. +.002-.000
 ANGLE ± 1/2°
DO NOT SCALE DWG.

FIRST USED ON	
DRN CL	DATE 04/08/86
MECH CHK	MAT'L
ELEC CHK Cmm	FINISH

MIDWAY MFG. CO.
 FRANKLIN PK., IL. 60131 A BALLY CO.

ASSY DRAWING
 6803 CONTROL BD.
 A084-91786-G000

REVISIONS
 PART NO.
 M0-5-1-0-0-C-5-3-G-0-0-3

6803 CONTROL BOARD
A084-91786-G000
M051-00C53-G003

CROSS REFERENCE LIST

<u>DESCRIPTION</u>	<u>QTY.</u>	<u>DESIGNATION NO.</u>	<u>PART NOS.</u>
27pf 50V CER.	2	C2, C3	0360-00800-0052
47pf 50V CER.	1	C7	0360-00800-0027
390pf 50V CER.	25	C24-C30, C57-C71 C88-C90	0360-00800-0001
470pf 1KV CER.	27	C17-C23, C31-C36, C38-C41, C48-C56, C91	0307-00800-0008
.002uf 1KV CER.	19	C44-C47, C73-C87	0360-00800-0012
.003uf 1KV CER.	1	C43	0360-00800-0025
.01uf 50V CER.	24	C6, C9, C10, C12, C13 C15, C16, C42, CP1-CP16	0365-00800-0014
.05uf 16V CER.	1	C37	0360-00800-0006
.1uf 50V CER.	1	C4	0360-00800-0058
4.7uf 25V TANT	2	C5, C14	0360-00800-0008
6.8uf 25V TANT	1	C1	0360-00800-0048
470uf 16V ELEC	1	C8	0360-00800-0022
470uf 25V ELEC	1	C11	0360-00800-0024
82 OHM 1/4W 5%	1	R9	100E-00005-0031
100 OHM 1/4W 5%	1	R8	100E-00005-0033
110 OHM 1/4W 5%	1	R83	100E-00005-0034
120 OHM 1/4W 5%	21	R24, R85, R87, R89, R91, P121, R136-R138, R151-R155, R165-R168, R191-R193	100E-00005-0035
270 OHM 1/4W 5%	1	R28	100E-00005-0044
330 OHM 1/4W 5%	23	R92-R95, R139-R141, R156-R160, R169-R172, R194-R196, R231-R234	100E-00005-0047
470 OHM 1/4W 5%	9	R96-R104	100E-00005-0051
560 OHM 1/4W 5%	1	R1	100E-00005-0054
680 OHM 1/4W 5%	1	R25	100E-00005-0056
750 OHM 1/4W 5%	1	R19	100E-00005-0057
910 OHM 1/4W 5%	1	R18	100E-00005-0059
1K 1/4W 5%	3	R3, R29, R32	100E-00005-0061
1.2K 1/4W 5%	60	R44-R50, R59-R61, R63, R65, R67, R69, R71-R76 R78-R82, R105-R119, R122 R133-R135, R146-R150, R161-R164, R188-R190, R227, R228, R230, R236	100E-00005-0063
1.5K 1/4W 5%	1	R20	100E-00005-0065
2K 1/4W 5%	46	R123, R173-R187 R197-R226	100E-00005-0068
2.7K 1/4W 5%	2	R2, R6	100E-00005-0071
3K 1/4W 5%	1	R17	100E-00005-0073
3.3K 1/4W 5%	18	R21-R23, P35, R51-R58, R124, R142-R145, R235	100E-00005-0074
3.9K 1/4W 5%	4	P84, R86, R88, R90	100E-00005-0077
4.7K 1/4W 5%	8	R36-R43	100E-00005-0079
5.6 1/4W 5%	1	R16	100E-00005-0082

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<u>DESCRIPTION</u>	<u>QTY.</u>	<u>DESIGNATION NO.</u>	<u>PART NOS.</u>
7.5 1/4W 5%	1	R5	100E-00005-0085
9.1 1/4W 5%	1	R4	100E-00005-0087
10K 1/4W 5%	4	R12, R13, R30, R33	100E-00005-0088
15K 1/4W 5%	2	R31, R34	100E-00005-0092
39K 1/4W 5%	1	R7	100E-00005-0102
47K 1/4W 5%	2	R10, R11	100E-00005-0104
56K 1/4W 5%	14	R62, R64, R66, R68 R70, R125-R132, R229	100E-00005-0106
62K 1/4W 5%	1	R15	100E-00005-0107
82K 1/4W 5%	1	R14	100E-00005-0112
100K 1/4W 5%	2	R26, R237	100E-00005-0115
270K 1/4W 5%	1	R77	100E-00005-0126
82 OHM 1W 10%	1	R27	100E-00007-0014
IN958B ZENER	1	D1	103E-00001-0002
IN4004	20	D19-D38	103E-00003-0005
IN4148	13	D3, D6, D9-D18, D39	103E-00002-0005
IN4606	5	D2, D4, D5, D7, D8	103E-00002-0006
2N3904	3	Q2, Q4, Q6	104E-00001-0006
2N4403	2	Q3, Q5	104E-00002-0006
2N5060	35	Q23-Q33, Q37, Q41-Q50, Q54-Q64, Q69, Q70	104E-00015-0001
2N5305	1	Q1	104E-00007-0003
MCR106-1	10	Q34-Q36, Q51-Q53 Q65-Q68	0360-00802-0009
SE9302	19	Q7-Q22, Q38-Q40	0360-00802-0008
4011	1	U11	0360-00803-0010
4502	1	U13	0360-00803-0005
4514B	3	U15-U17	0360-00803-0013
4584	1	U12	0066-090RX-XXDX
6116 RAM	1	U4	0365-00803-0013
6803 MPU	1	U1	0360-00803-0048
6821 PIA	2	U7, U8	0360-00803-0017
74LS04	1	U10	0A15-00803-0010
74LS10	1	U9	0A89-00803-0007
75LS154	1	U14	0360-00803-0024
74HCT245	1	U5	0365-00803-0014
74LS373	1	U6	0A89-00803-0006
CA3081	3	U18-U20	0360-00803-0007
3.580 MHz CRYSTAL	1	XTAL-1	109E-00001-0003
LED GREEN	1	LED 1	0017-00007-0131
TEST POINTS	7	TP1-TP7	0017-00007-0131
SWITCH P.B.	1	SW1	0017-00032-0038
BATTERY 3.6V	1	BATT-1	0017-00003-0172
ZERO OHM RES. JUMPER	5	JW2, JW4, JW6, JW8, JW10	117E-00001-0001
RELAY 48VDC	1	K1	114E-00001-0011
40 PIN I.C. SOCKET	3	XU1, XU7, XU8	110E-00001-0011
28 PIN I.C. SOCKET	2	XU2, XU3	110E-00001-0010
24 PIN I.C. SOCKET	1	XU4	110E-00001-0007
FERRITE BEAD	4	FR1-FR4	0316-00804-0002

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DESIGNATION LIST

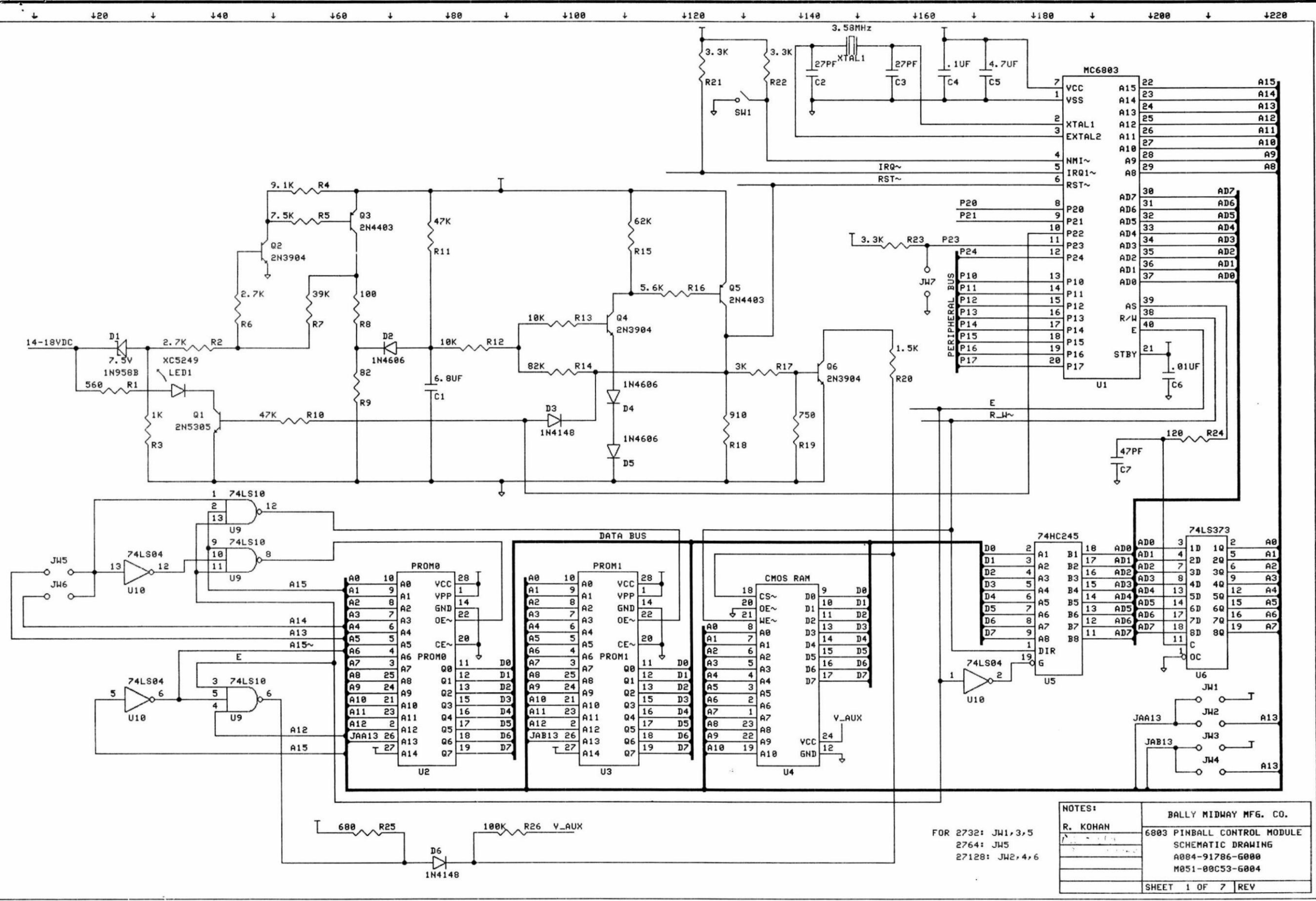
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C1	6.8UF 25V TANT.	R28	270 OHM 1/4W 5%	R165 - R168	120 OHM 1/4W 5%	U15 - U17	4514B
C2,C3	27PF 50V CER.	R29	1K 1/4W 5%	R169 - R172	330 OHM 1/4W 5%	U18 - U20	CA3081
C4	.1UF 50V CER.	R30	10K 1/4W 5%	R173 - R187	2K 1/4W 5%	XTAL-1	3.580 MHZ CRYSTAL
C5	4.7UF 25V TANT.	R31	15K 1/4W 5%	R188 - R190	1.2K 1/4W 5%	LED 1	LED GREEN
C6	.01UF 50V CER.	R32	1K 1/4W 5%	R191 - R193	120 OHM 1/4W 5%	TP1 - TP7	TEST POINTS
C7	47PF 50V CER.	R33	10K 1/4W 5%	R194 - R196	330 OHM 1/4W 5%	SW1	SWITCH P.B.
C8	470UF 16V FLEC.	R34	15K 1/4W 5%	R197 - R226	2K 1/4W 5%	BATT-1	BATTERY 3.6V
C9,C10	.01UF 50V CER.	R35	3.3K 1/4W 5%	R227,R228	1.2K 1/4W 5%	JW2	ZERO OHM RES. JUMPER
C11	470UF 25V FLEC.	R36 - R43	4.7K 1/4W 5%	R229	56K 1/4W 5%	JW4	ZERO OHM RES. JUMPER
C12,C13	.01UF 50V CER.	R44 - R50	1.2K 1/4W 5%	R230	1.2K 1/4W 5%	JW6	ZERO OHM RES. JUMPER
C14	4.7UF 25V TANT.	R51 - R58	3.3K 1/4W 5%	R231 - R234	330 OHM 1/4W 5%	JW8	ZERO OHM RES. JUMPER
C15,C16	.01UF 50V CER.	R59 - R61	1.2K 1/4W 5%	R235	3.3K 1/4W 5%	JW10	ZERO OHM RES. JUMPER
C17 - C23	470PF 1KV CER.	R62	56K 1/4W 5%	R236	1.2K 1/4W 5%	K1	RELAY 48V DC
C24 - C30	390PF 50V CER.	R63	1.2K 1/4W 5%	R237	100K OHM 1/4W 5%	XU1,XU7,XU8	40 PIN IC SOCKET
C31 - C36	470PF 1KV CER.	R64	56K 1/4W 5%	D1	1N958B	XU2, XU3	28 PIN IC SOCKET
C37	.05UF 16V CER.	R65	1.2K 1/4W 5%	D2	1N4606	XU4	24 PIN IC SOCKET
C38 - C41	470PF 1KV CER.	R66	56K 1/4W 5%	D3	1N4148	FB1 - FB4	FERRITE BEAD
C42	.01UF 50V CER.	R67	1.2K 1/4W 5%	D4,D5	1N4606	J1	11 - .045 SQ. PINS
C43	.003UF 1KV CER.	R68	56K 1/4W 5%	D6	1N4148	J2	18 - .025 SQ. PINS
C44 - C47	.002UF 1KV CER.	R69	1.2K 1/4W 5%	D7,D8	1N4606	J3	14 - .025 SQ. PINS
C48 - C56	470PF 1KV CER.	R70	56K 1/4W 5%	D9 - D18	1N4148	J4	14 - .025 SQ. PINS
C57 - C71	390PF 50V CER.	R71 - R76	1.2K 1/4W 5%	D19 - D38	1N4004	J5	14 - .025 SQ. PINS
C73 - C87	.002 1KV CER.	R77	270K 1/4W 5%	D39	1N4148	J6	8 - .045 SQ. PINS
C88 - C90	390PF 50V CER.	R78 - R82	1.2K 1/4W 5%	Q1	2N5305	J7	7 - .045 SQ. PINS
C91	470PF 1KV CER.	R83	110 OHM 1/4W 5%	Q2	2N3904	J8	6 - .045 SQ. PINS
CP1 - CP16	.01 50V CER.	R84	3.9K 1/4W 5%	Q3	2N4403	J9	10 - .045 SQ. PINS
R1	560 OHM 1/4W 5%	R85	120 OHM 1/4W 5%	Q4	2N3904	J10	18 - .025 SQ. PINS
R2	2.7K 1/4W 5%	R86	3.9K 1/4W 5%	Q5	2N4403	J11	17 - .025 SQ. PINS
R3	1K 1/4W 5%	R87	120 OHM 1/4W 5%	Q6	2N3904	J12	16 - .025 SQ. PINS
R4	9.1K 1/4W 5%	R88	3.9K 1/4W 5%	Q7 - Q22	SF9302	J13	12 - .025 SQ. PINS
R5	7.5K 1/4W 5%	R89	120 OHM 1/4W 5%	Q23 - Q33	2N5060	J14	5 - .045 SQ. PINS
R6	2.7K 1/4W 5%	R90	3.9K 1/4W 5%	Q34 - Q36	MCR 106-1	P/O BATT-1	TY-WRAP
R7	39K 1/4W 5%	R91	120 OHM 1/4W 5%	Q37	2N5060	6803 CONTROL BD.	P.C. BOARD
R8	100 OHM 1/4W 5%	R92 - R95	330 OHM 1/4W 5%	Q38 - Q40	SF9302		
R9	82 OHM 1/4W 5%	R96 - R104	470 OHM 1/4W 5%	Q41 - Q50	2N5060		
R10,R11	47K 1/4W 5%	R105 - R119	1.2K 1/4W 5%	Q51 - Q53	MCR 106-1		
R12,R13	10K 1/4W 5%	R121	120 OHM 1/4W 5%	Q54 - Q64	2N5060		
R14	82K 1/4W 5%	R122	1.2K 1/4W 5%	Q65 - Q68	MCR 106-1		
R15	62K 1/4W 5%	R123	2K 1/4W 5%	Q69,Q70	2N5060		
R16	5.6K 1/4W 5%	R124	3.3K 1/4W 5%	U1	6803		
R17	3K 1/4W 5%	R125 - R132	56K 1/4W 5%	U4	6116 RAM		
R18	910 OHM 1/4W 5%	R133 - R135	1.2K 1/4W 5%	U5	74HCT245		
R19	750 OHM 1/4W 5%	R136 - R138	120 OHM 1/4W 5%	U6	74LS373		
R20	1.5K 1/4W 5%	R139 - R141	330 OHM 1/4W 5%	U7,U8	6821		
R21 - R23	3.3K 1/4W 5%	R142 - R145	3.3K 1/4W 5%	U9	74LS10		
R24	120 OHM 1/4W 5%	R146 - R150	1.2K 1/4W 5%	U10	74LS04		
R25	680 OHM 1/4W 5%	R151 - R155	120 OHM 1/4W 5%	U11	4011		
R26	100K 1/4W 5%	R156 - R160	330 OHM 1/4W 5%	U12	4584		
R27	82 OHM 1W 10%	R161 - R164	1.2K OHM 1/4W 5%	U13	4502		
				U14	74LS154		

6803 CONTROL BOARD
A084-91786-G000
M051-000C53-G003

CROSS REFERENCE LIST

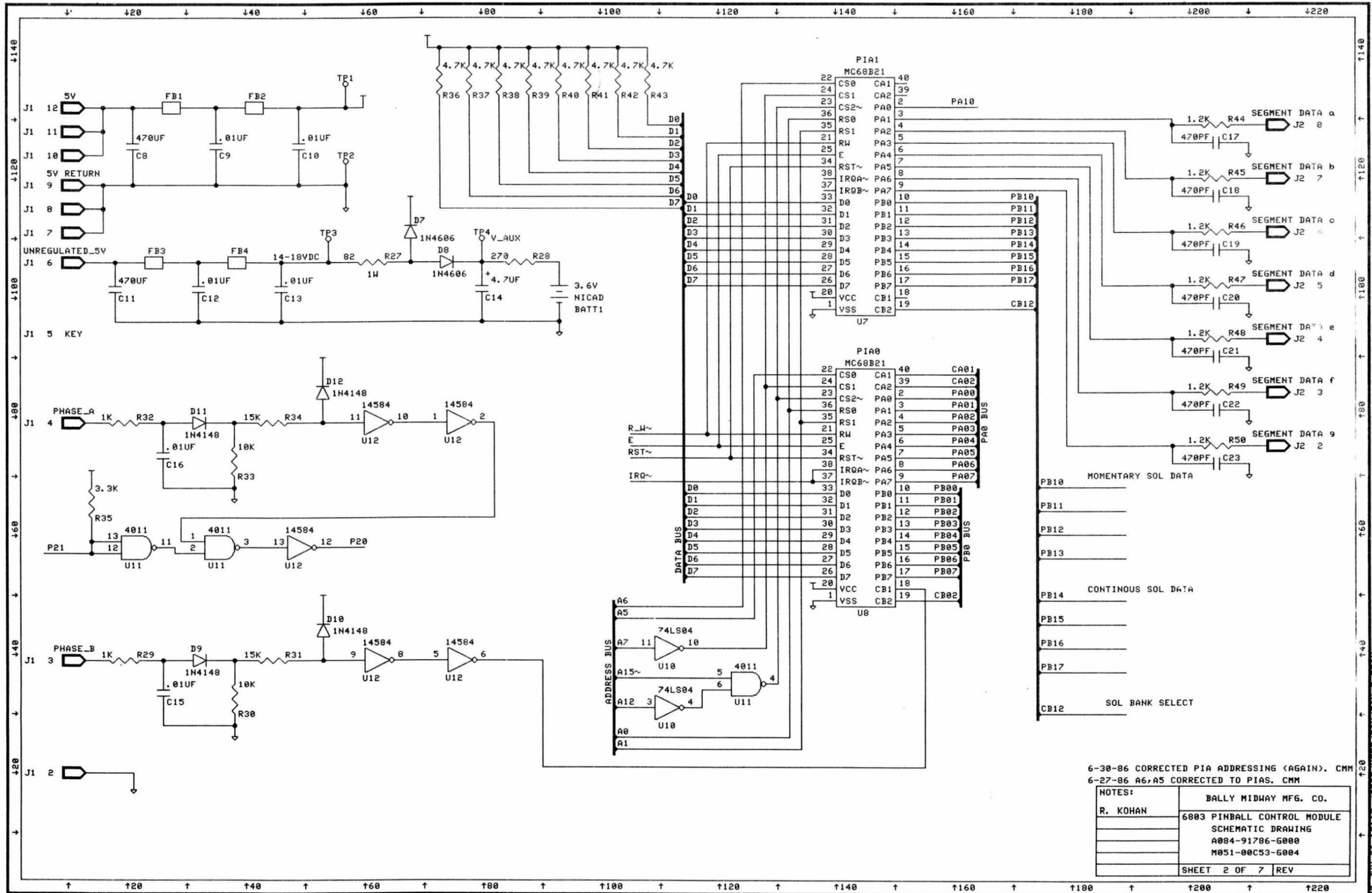
<u>DESCRIPTION</u>	<u>QTY.</u>	<u>DESIGNATION NO.</u>	<u>PART NOS.</u>
.025 SQ. PINS	123	J2, J3, J4, J5, J10, J11, J12, J13	0304-00804-0009
.045 SQ. PINS	47	J1, J6, J7, J8, J9, J14	0304-00804-0010
TY-WRAP	1	P/O BATT-1	0017-00042-0622
P.C. BOARD	1	6803 CONTROL BOARD	A080-91786-G000

4-23-86 REV. 1.0 Fixed Part Number for 470PF Cap.



NOTES:	
R. KOHAN	BALLY MIDWAY MFG. CO.
FOR 2732: JW1,3,5	6803 PINBALL CONTROL MODULE
2764: JW5	SCHEMATIC DRAWING
27128: JW2,4,6	A084-91786-6000
	M051-00C53-6004
	SHEET 1 OF 7
	REV

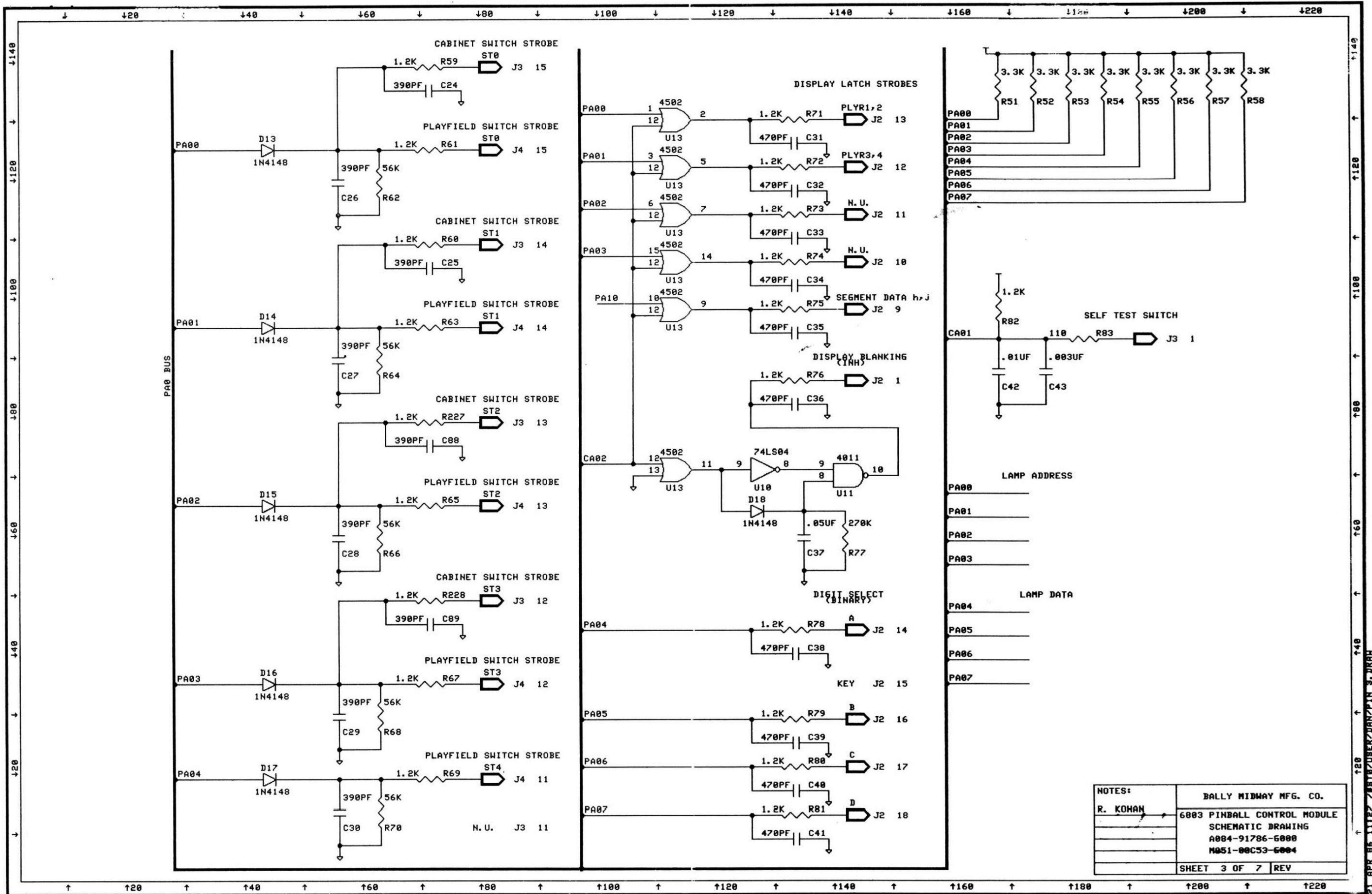
11 MAR 86 08138 USER/JAN/PIN 1. DRAM



6-30-86 CORRECTED PIA ADDRESSING (AGAIN). CMM
 6-27-86 A6,A5 CORRECTED TO PIAS. CMM

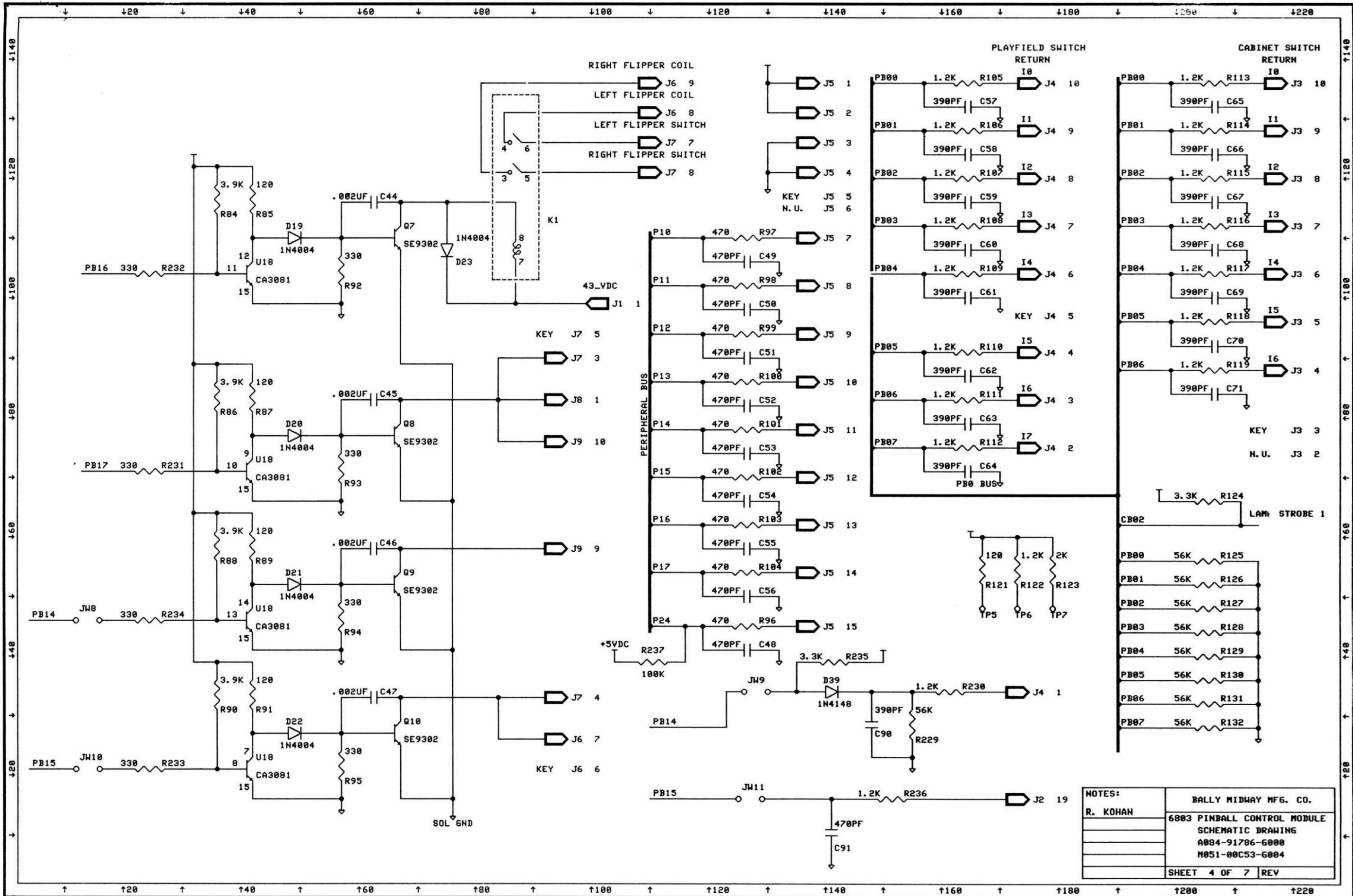
NOTES:	BALLY MIDWAY MFG. CO.
R. KOHAN	6803 PINBALL CONTROL MODULE
	SCHEMATIC DRAWING
	A084-91786-6000
	M051-00C53-6004
	SHEET 2 OF 7 REV

30 JUN 86 13119 7:5107USER/JAN/PIN 2: DRAM



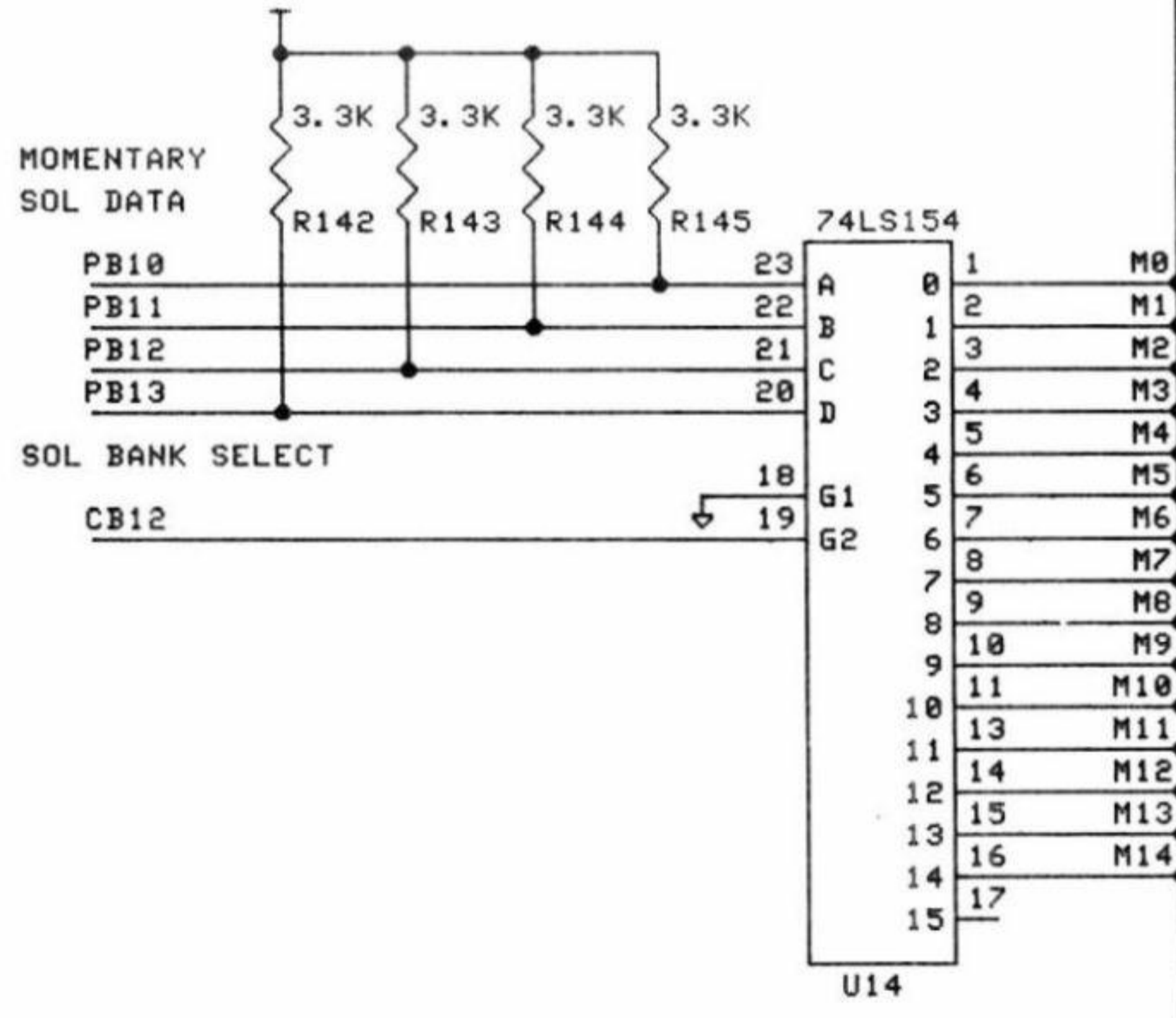
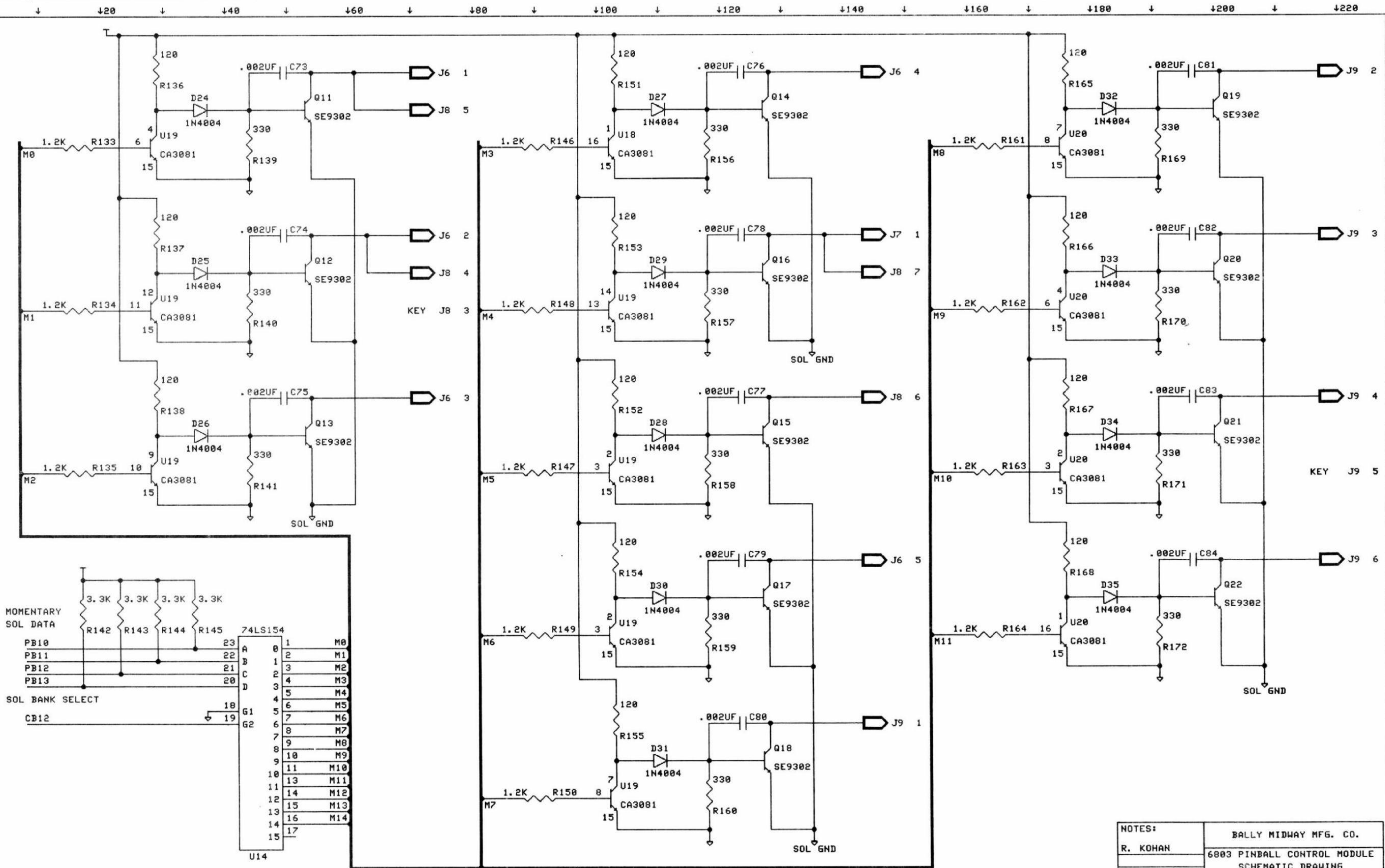
NOTES:	BALLY MIDWAY MFG. CO.
R. KOHAN	6803 PINBALL CONTROL MODULE
	SCHEMATIC DRAWING
	A084-91786-6000
	M051-00C53-6004
	SHEET 3 OF 7 REV

21 APR 86 11:27 78810708K/DAN/PIN 3. DRAN



NOTES:	BALLY MIDWAY MFG. CO.
	R. KOHAN
	6803 PINBALL CONTROL MODULE
	SCHEMATIC DRAWING
	A084-91786-6000
	M051-00C53-6004
	SHEET 4 OF 7
	REV

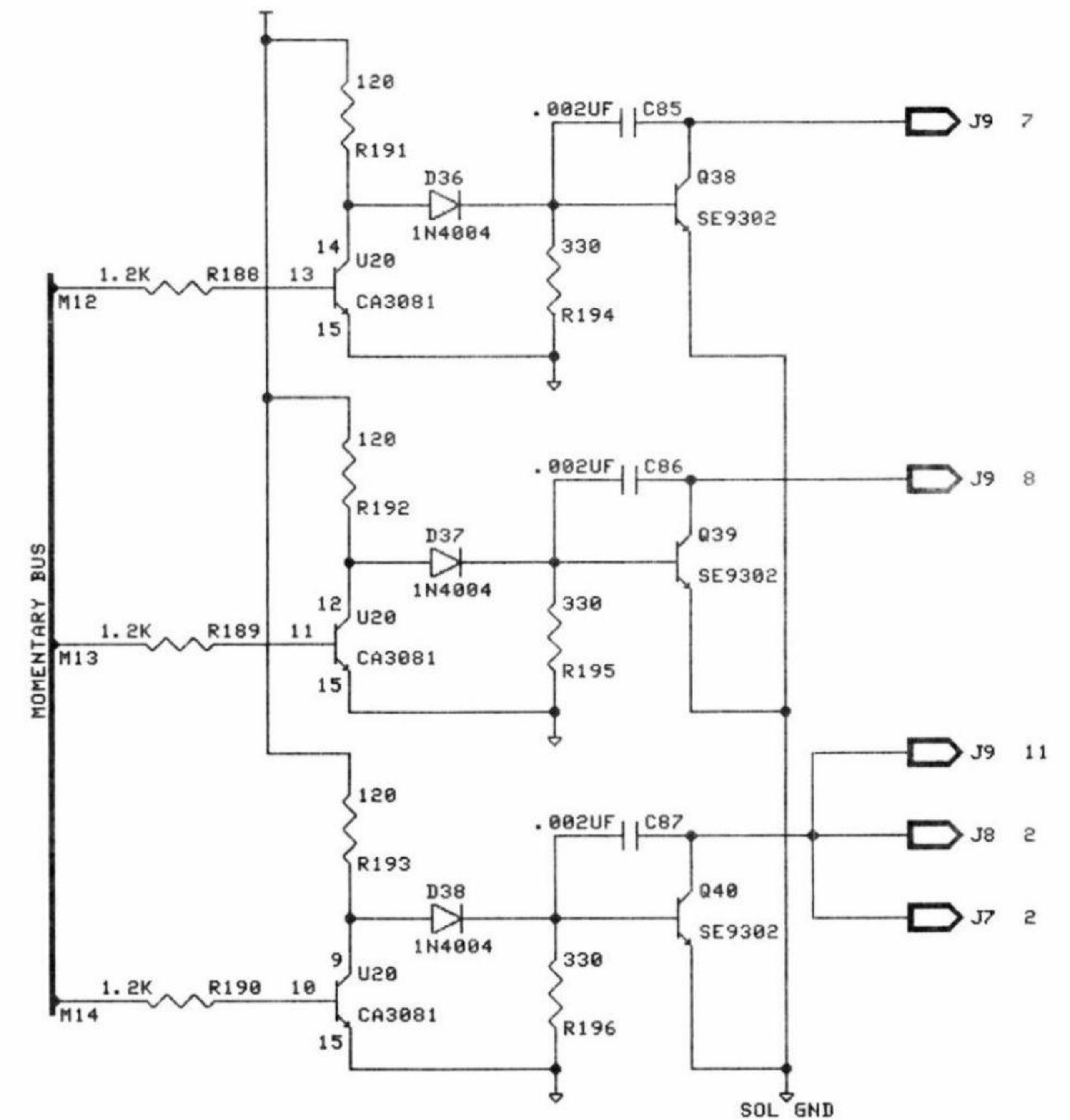
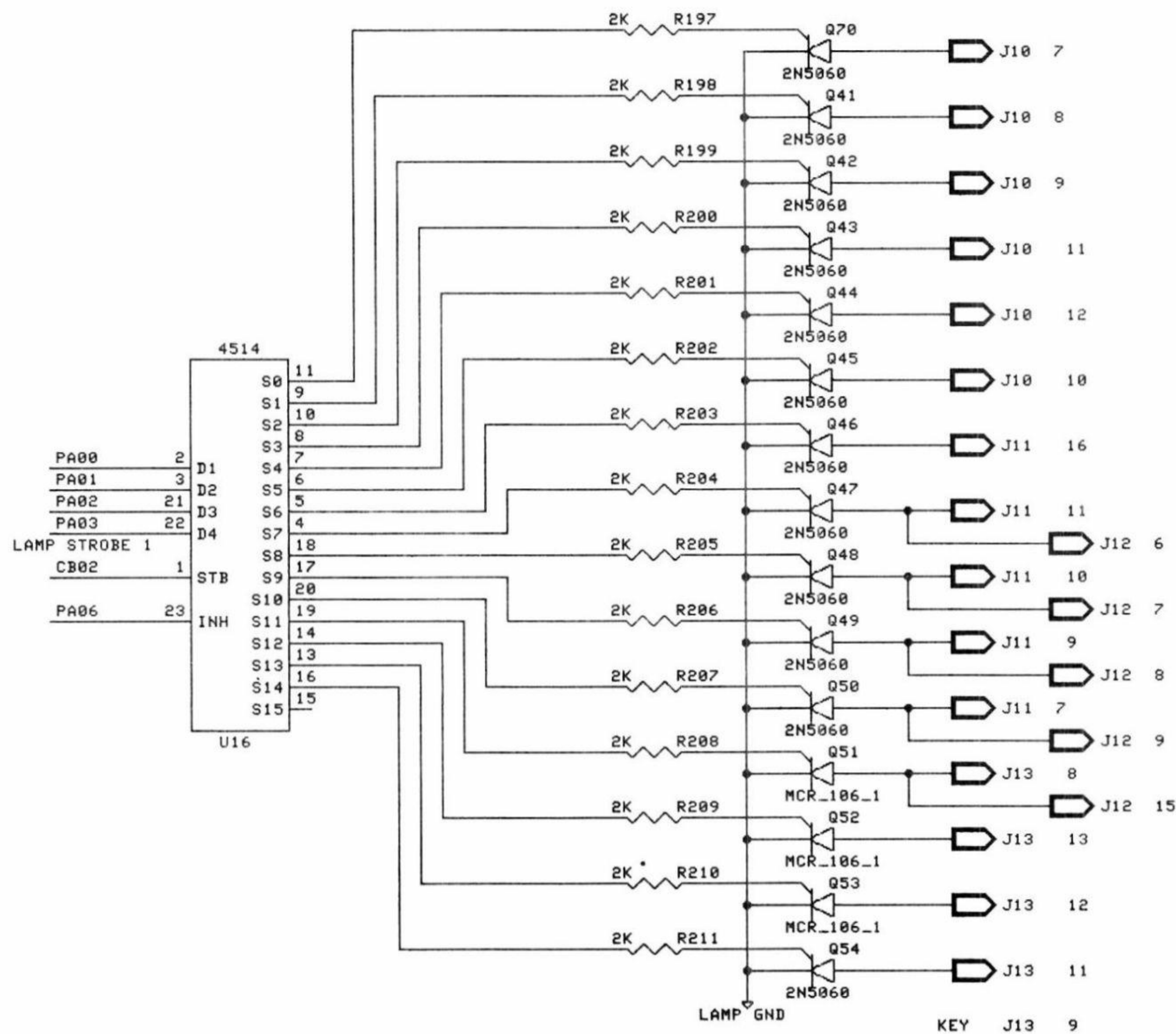
11 MAR 86 08:42 USER/JAN/PIN 4, DRAH



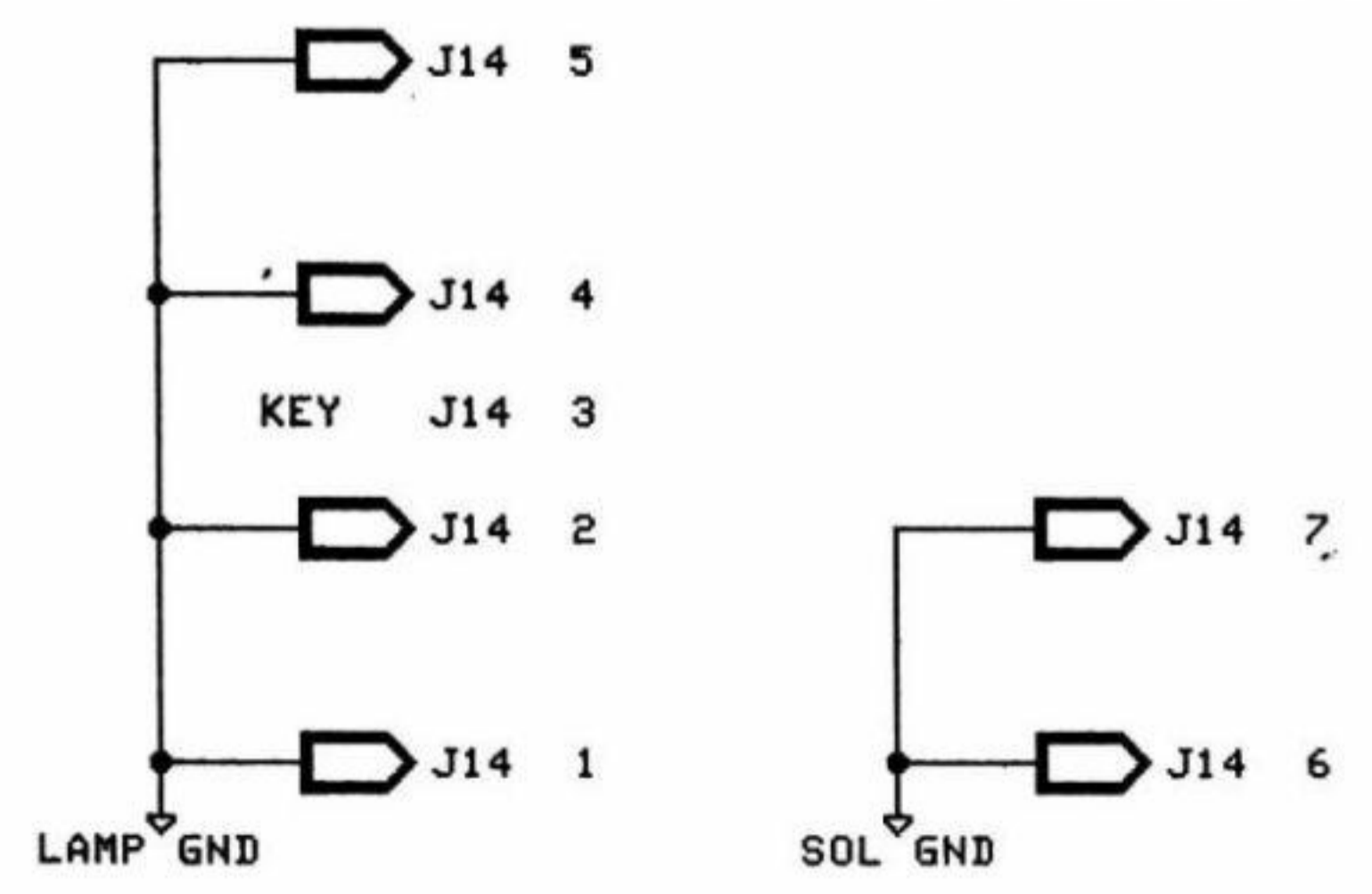
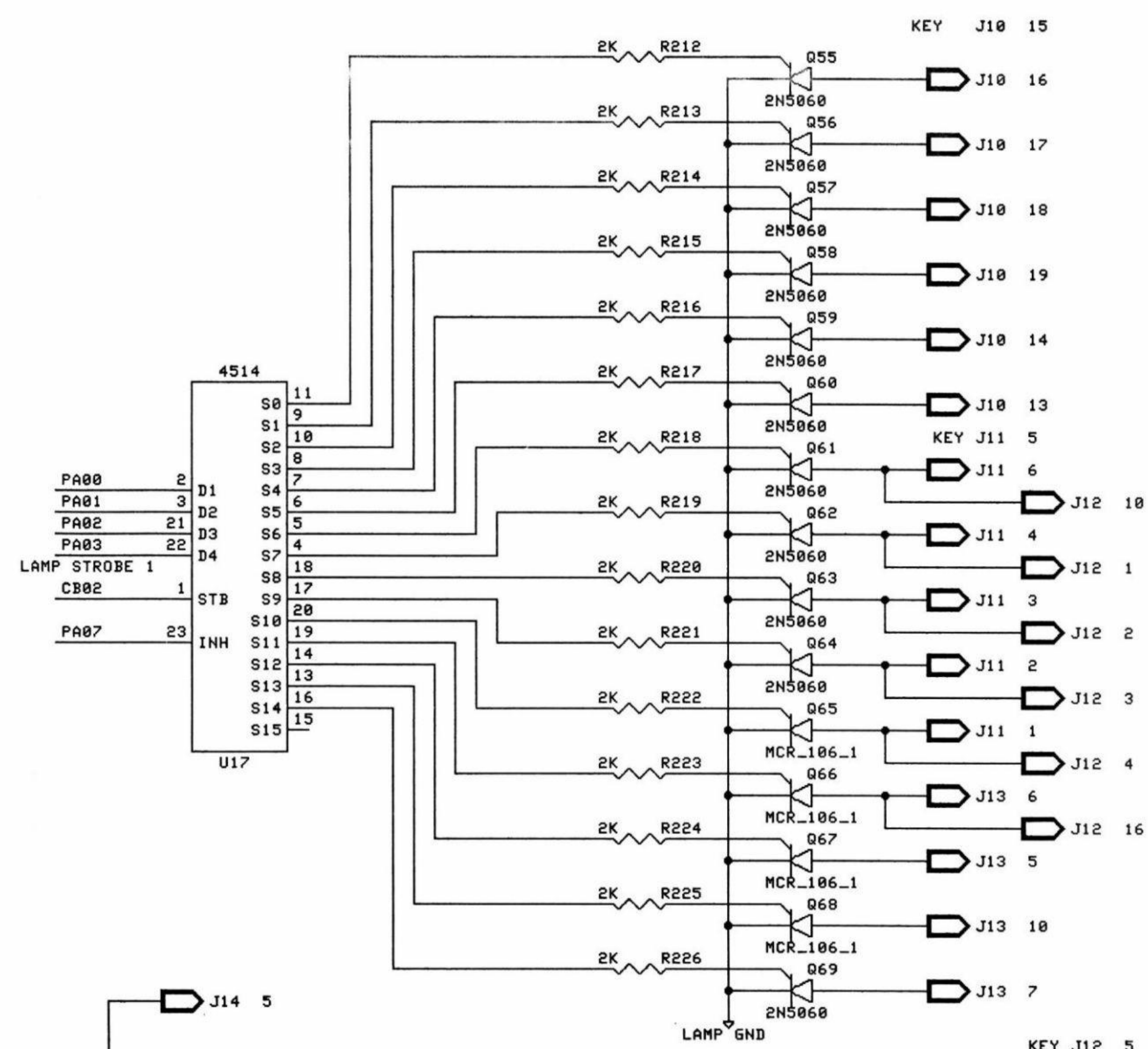
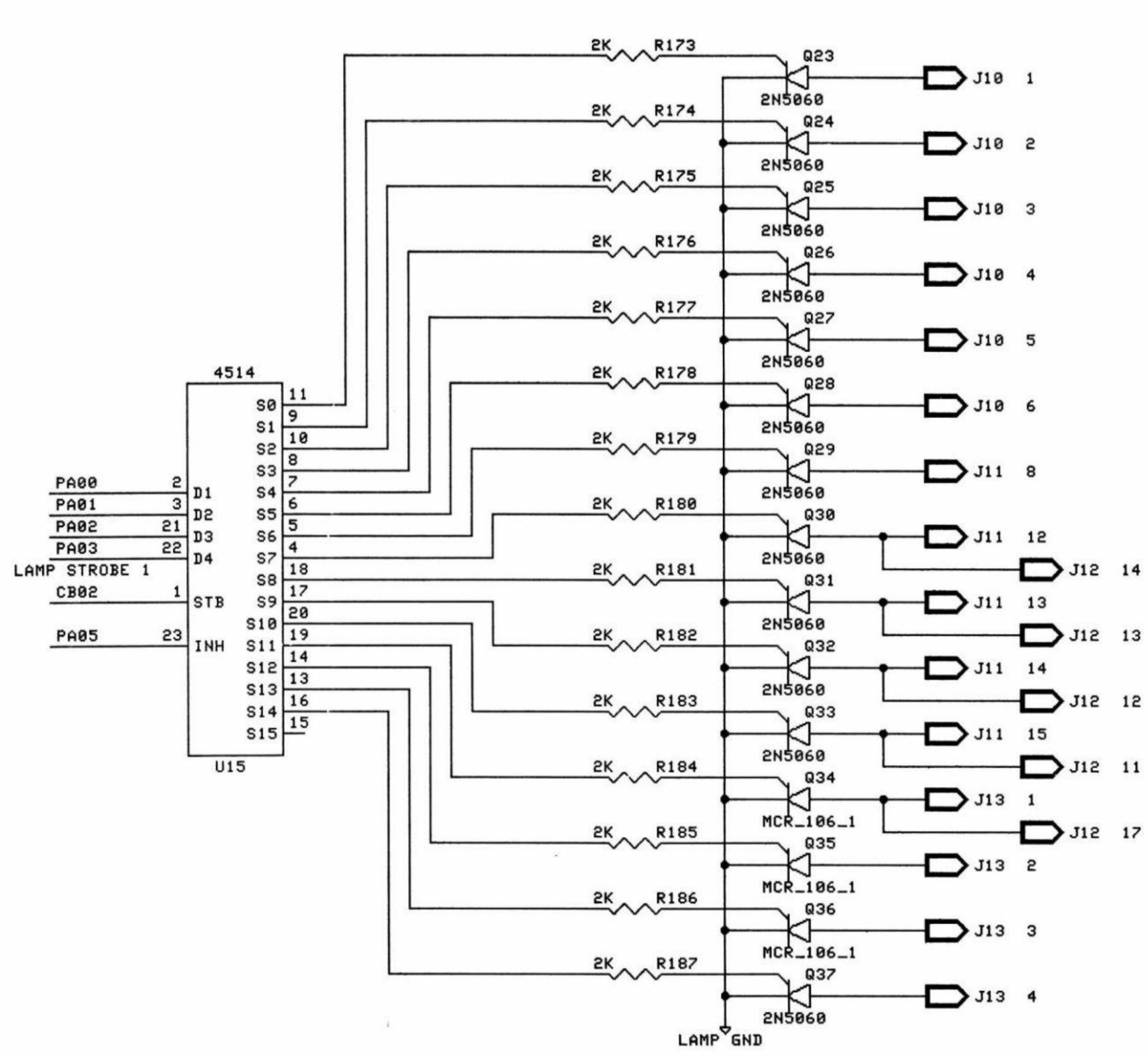
NOTES:

R. KOHAN	BALLY MIDWAY MFG. CO.
	6803 PINBALL CONTROL MODULE
	SCHEMATIC DRAWING
	A084-91786-G000
	M051-00C53-G004
	SHEET 5 OF 7 REV

11 MAR 86 08T43 / USER/DAN/PIN 5, DRAW



NOTES:	BALLY MIDWAY MFG. CO.
R. KOHAN	6803 PINBALL CONTROL MODULE
	SCHEMATIC DRAWING
	A084-91786-G000
	M051-00C53-G004
	SHEET 6 OF 7 REV



NOTES:	BALLY MIDWAY MFG. CO.
R. KOHAN	6803 PINBALL CONTROL MODULE
	SCHEMATIC DRAWING
	A084-91786-G000
	M051-00C53-G004
	SHEET 7 OF 7 REV