

DISPLY

PAT. PENDING

DISPLY

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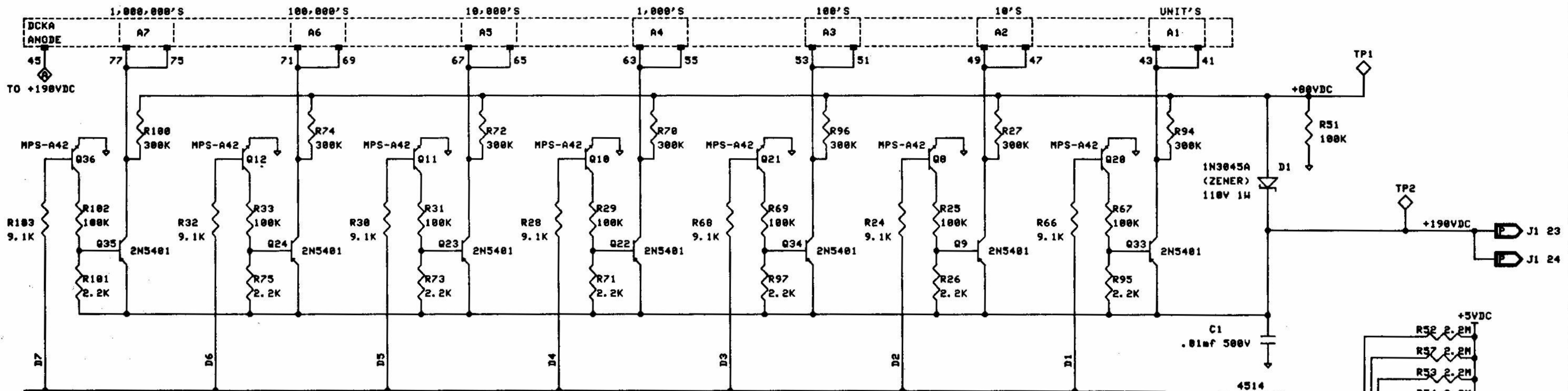
THIS DWG. IS CONFIDENTIAL & PROPERTY OF BALLY/MIDWAY MFG. CO.

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	PINBALL	
	DRN	DATE	SCALE
	MECH/CHK.	MAT'L.	
	ELEC CHK.	FINISH	
	<i>QBB</i>	5/15/87	FULL
	<i>QBB</i>		

MIDWAY MFG. CO.
FRANKLIN PARK, IL 60131

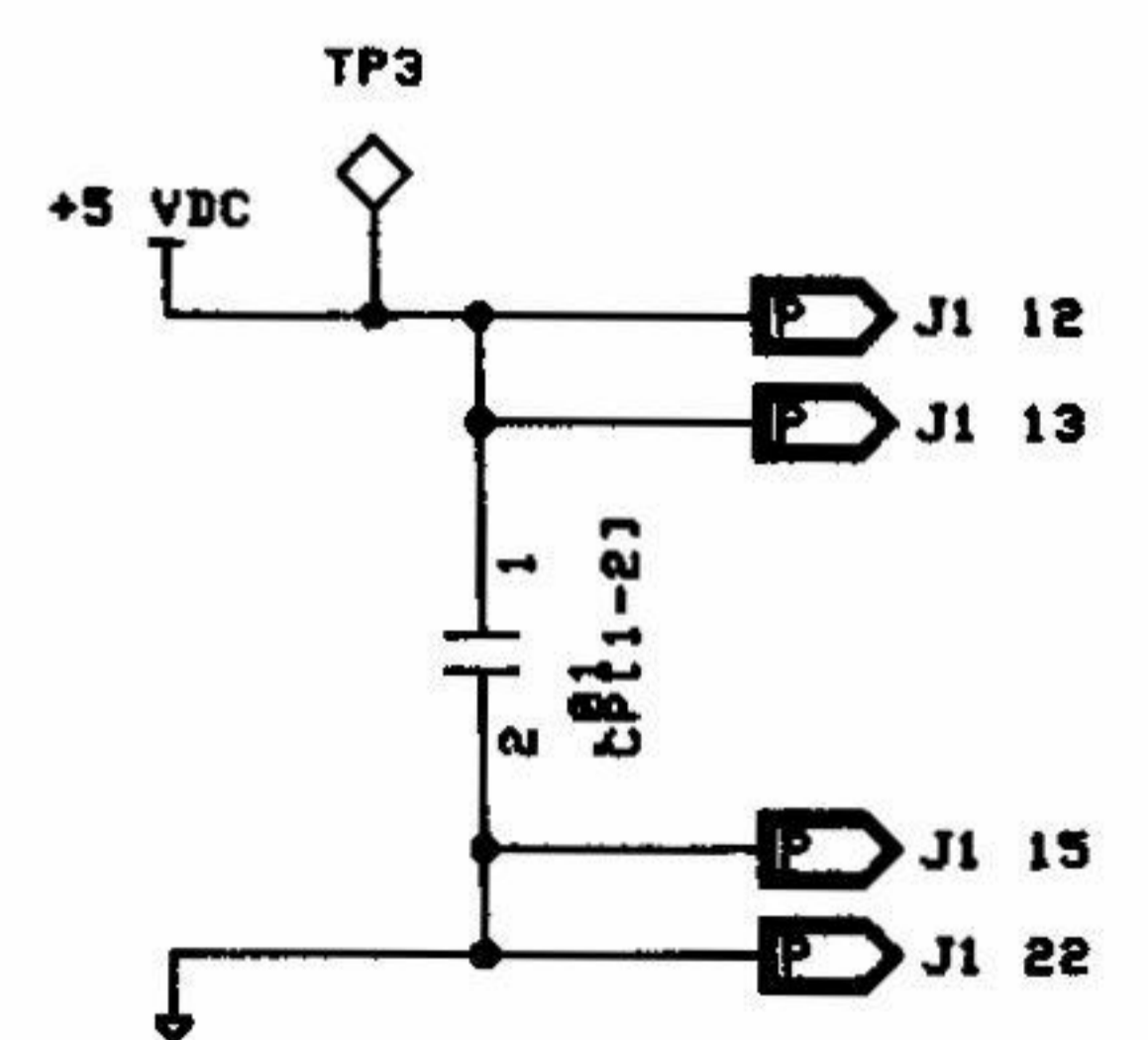
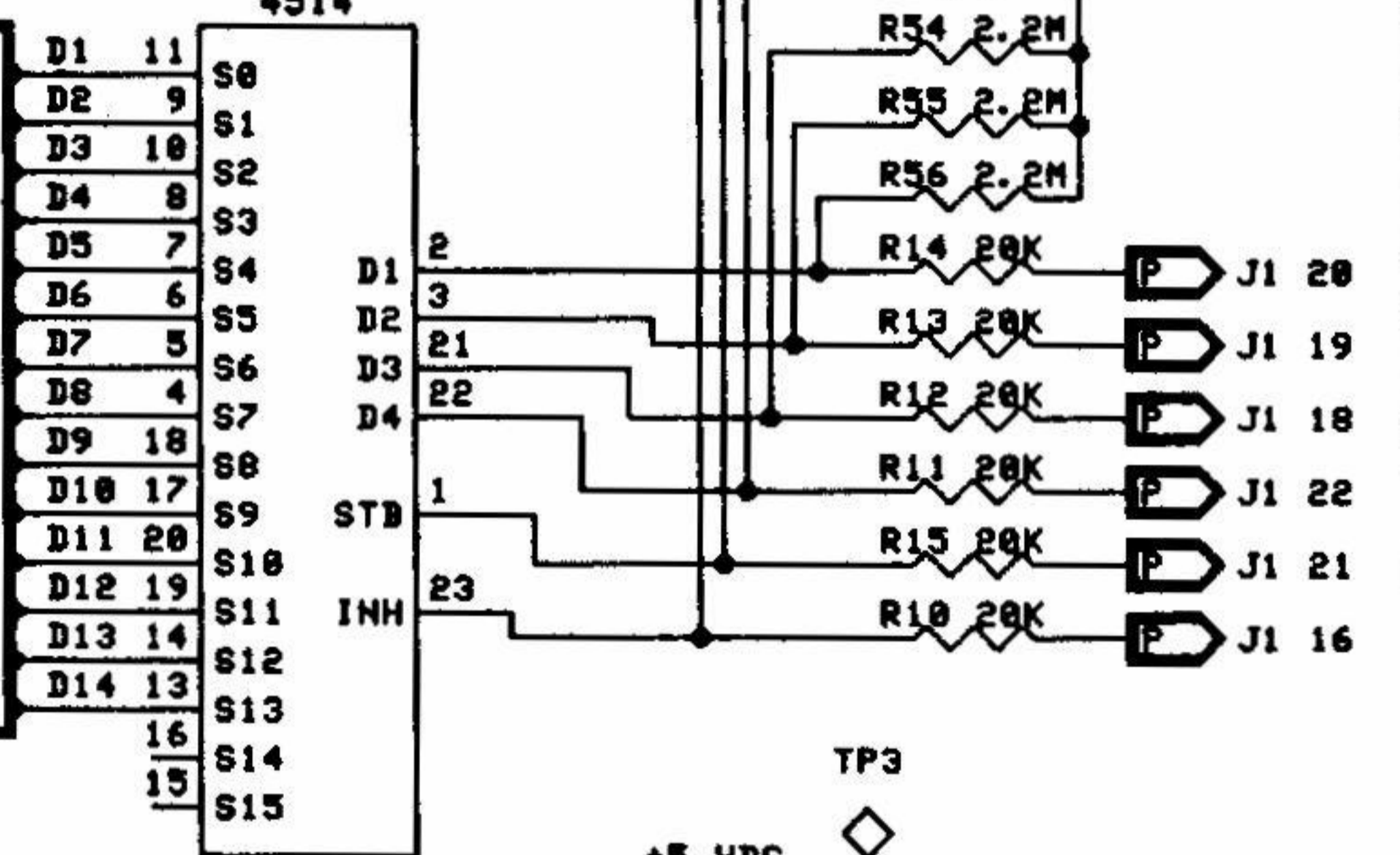
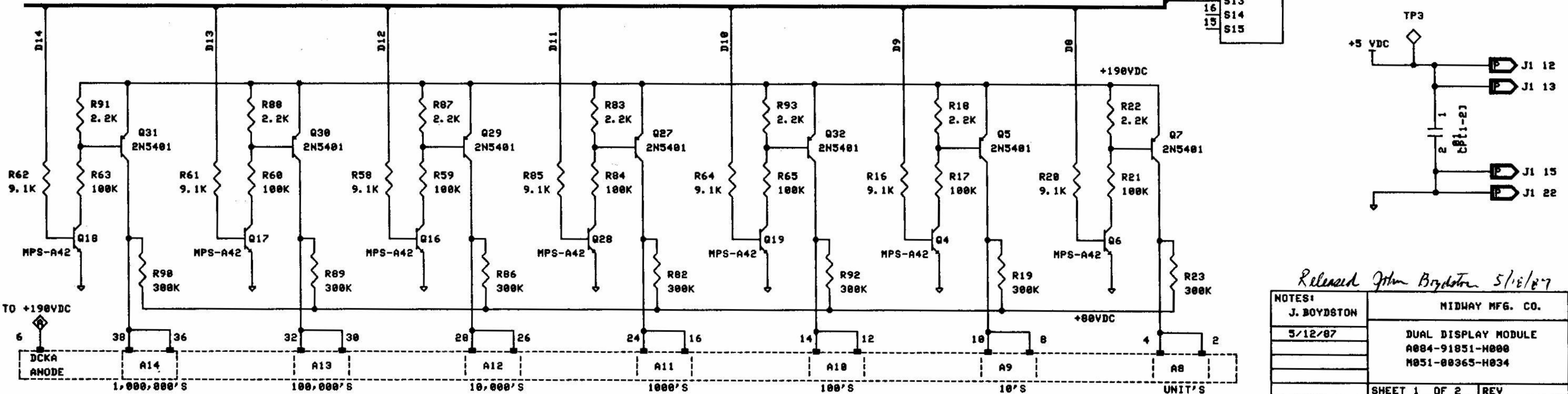
ASSEMBLY DRAWING
DUAL DISPLAY MODULE
A084-91851-H000

REL. FOR PRODUCTION	5/15/87
REVISIONS	
PART NO.	M0-5-1-0-0-3-6-5-H0-3-3



LEFT DISPLAY

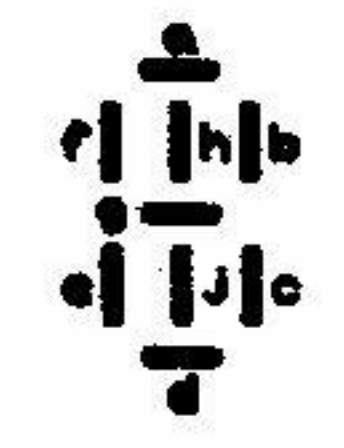
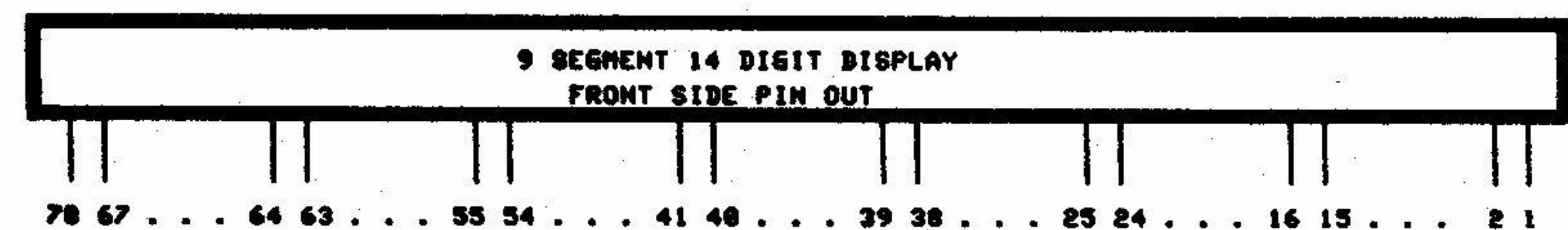
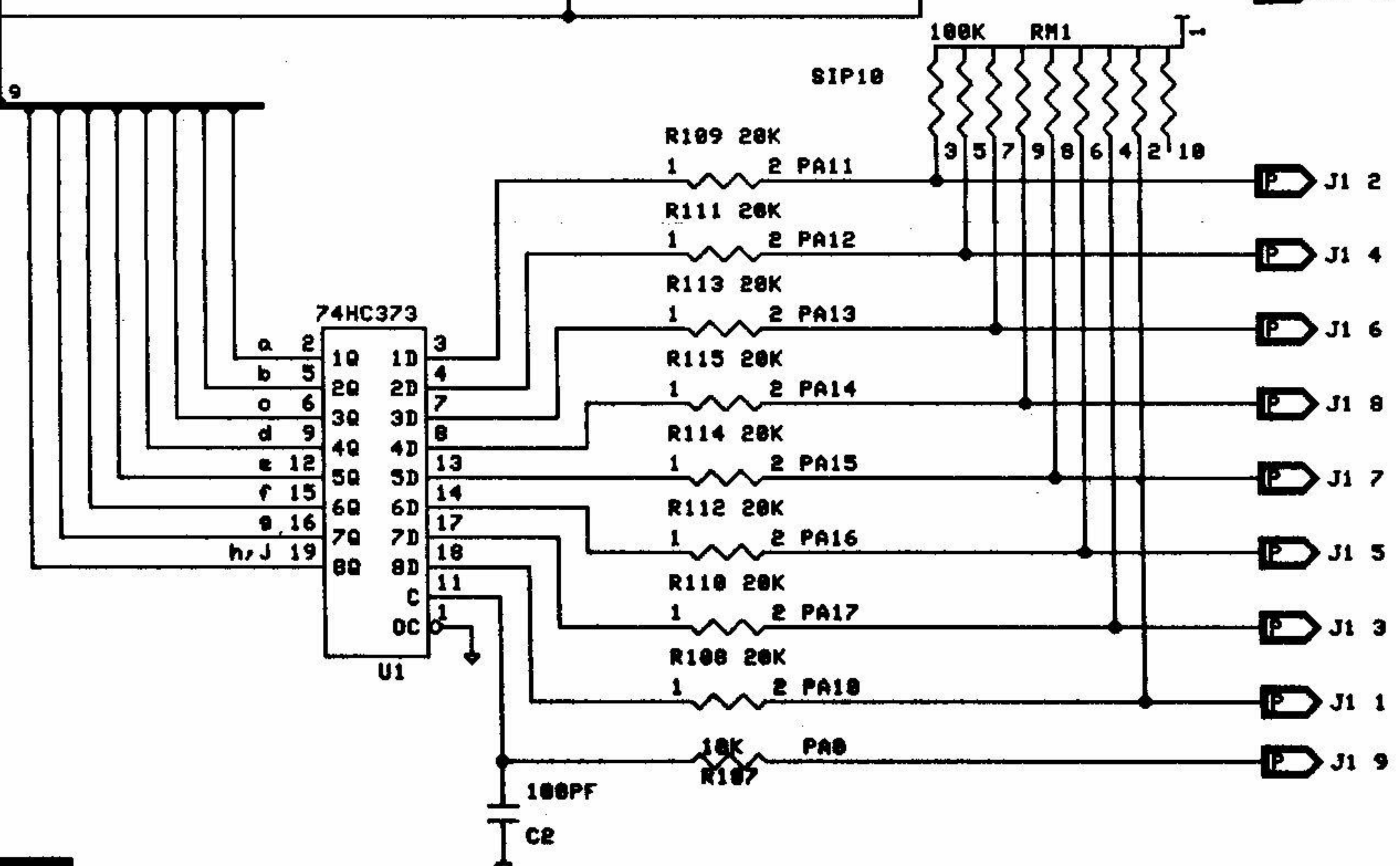
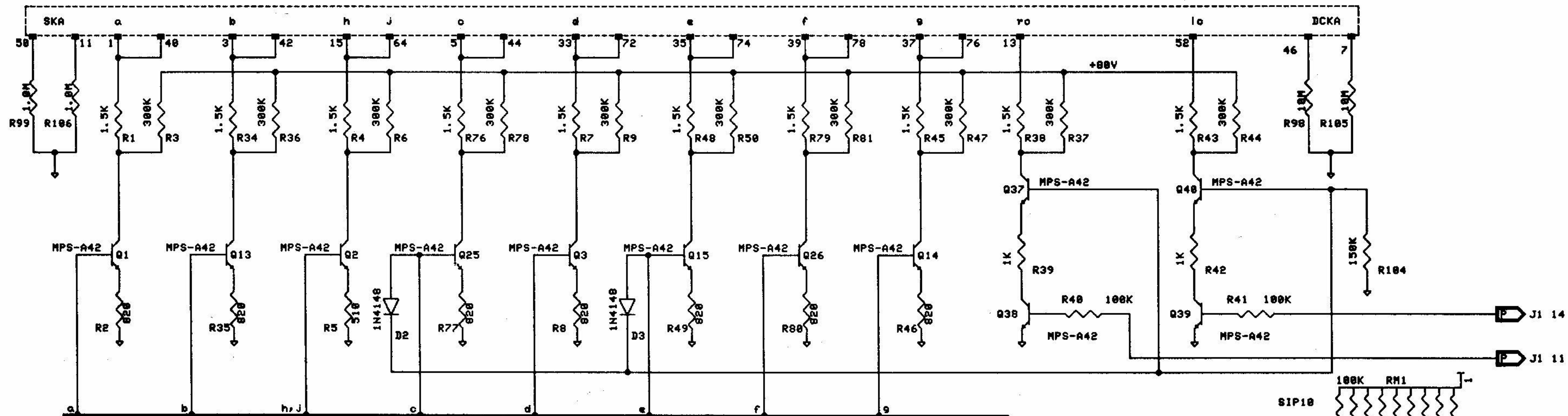
RIGHT DISPLAY



Released John Boydston 5/18/87

NOTES:	J. BOYDSTON	MIDWAY MFG. CO.
	5/12/87	DUAL DISPLAY MODULE
		A084-91851-H000
		H051-00365-H034
		SHEET 1 OF 2 REV

12 MAY 87 1128 708K/387/P1RALL/DISPLAY 1-DRAW



NOTES:		MIDWAY MFG. CO.	
J. BOYDSTON	S/12/87	DUAL DISPLAY MODULE A004-91051-H000 N051-00365-H034	
		SHEET 2 OF 2 REV	

E:\WORK\11137\A004-91051\DISPLAY E.DRAW

DUAL DISPLAY MODULE
A084-91851-H000
M051-00365-H042 (Page 1 of 5) REV.1

DUAL DISPLAY MODULE
A084-91851-H000
M051-00365-H042 (Page 2 of 5) REV. 1

DUAL DISPLAY MODULE
A084-91851-H000
M051-00365-H042 (Page 3 of 5) REV. 1

DESIGNATION LIST

<u>DESIGNATION NO.</u>	<u>DESCRIPTION</u>
R1	1.5K 1/4W 5% CARBON
R2	820 OHM 1/4W 5% CARBON
R3	300K 1/4W 5% CARBON
R4	1.5K 1/4W 5% CARBON
R5	510 OHM 1/4W 5% CARBON
R6	300K 1/4W 5% CARBON
R7	1.5K 1/4W 5% CARBON
R8	820 OHM 1/4W 5% CARBON
R9	300K 1/4W 5% CARBON
R10 - R15	20K 1/4W 5% CARBON
R16	9.1K 1/4W 5% CARBON
R17	100K 1/4W 1% METAL FILM
R18	2.2K 1/4W 5% CARBON
R19	300K 1/4W 5% CARBON
R20	9.1K 1/4W 5% CARBON
R21	100K 1/4W 1% METAL FILM
R22	2.2K 1/4W 5% CARBON
R23	300K 1/4W 5% CARBON
R24	9.1K 1/4W 5% CARBON
R25	100K 1/4W 1% METAL FILM
R26	2.2K 1/4W 5% CARBON
R27	300K 1/4W 5% CARBON
R28	9.1K 1/4W 5% CARBON
R29	100K 1/4W 1% METAL FILM
R30	9.1K 1/4W 5% CARBON
R31	100K 1/4W 1% METAL FILM
R32	9.1K 1/4W 5% CARBON
R33	100K 1/4W 1% METAL FILM
R34	1.5K 1/4W 5% CARBON
R35	820 OHM 1/4W 5% CARBON
R36	300K 1/4W 5% CARBON
R37	300K 1/4W 5% CARBON
R38	1.5K 1/4W 5% CARBON
R39	1K 1/4W 5% CARBON
R40	100K 1/4W 5% CARBON
R41	100K 1/4W 5% CARBON
R42	1K 1/4W 5% CARBON
R43	1.5K 1/4W 5% CARBON
R44	300K 1/4W 5% CARBON
R45	1.5K 1/4W 5% CARBON
R46	820 OHM 1/4W 5% CARBON
R47	300K 1/4W 5% CARBON
R48	1.5K 1/4W 5% CARBON
R49	820 OHM 1/4W 5% CARBON
R50	300K 1/4W 5% CARBON
R51	100K 1/4W 1% METAL FILM
R52 - R57	2.2M 1/4W 5% CARBON
R58	9.1K 1/4W 5% CARBON

DESIGNATION LIST

DESIGNATION NO.

R59
R60
R61
R62
R63
R64
R65
R66
R67
R68
R69
R70
R71
R72
R73
R74
R75
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R94
R95
R96
R97
R98
R99
R100
R101
R102
R103
R104
R105
R106
R107
R108-R115
RM1

DESCRIPTION

100K 1/4W 1% METAL FILM
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
9.1K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
1.5K 1/4W 5% CARBON
820 OHM 1/4W 5% CARBON
300K 1/4W 5% CARBON
1.5K 1/4W 5% CARBON
820 OHM 1/4W 5% CARBON
300K 1/4W 5% CARBON
1.5K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
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2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
300K 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
10M 1/4W 5% CARBON
1M 1/4W 5% CARBON
300K 1/4W 5% CARBON
2.2K 1/4W 5% CARBON
100K 1/4W 1% METAL FILM
9.1K 1/4W 5% CARBON
150K 1/4W 5% CARBON
10M 1/4W 5% CARBON
1M 1/4W 5% CARBON
10K 1/4W 5% CARBON
20K 1/4W 5% CARBON
100K 10 PIN SIP

DESIGNATION LIST

DESIGNATION NO.

C1
C2
CP1, CP2
D1
D2, D3
Q1 - Q4
Q5
Q6
Q7
Q8
Q9
Q10 - Q21
Q22 - Q24
Q25
Q26
Q27
Q28
Q29 - Q35
Q36 - Q40
U1
U2
DISPLAY 1
J1
TP1, TP2, TP3
M051-00365- A041
A080-91851-H000

DESCRIPTION

.01UF 500V CER.
100PF 50V AX. CER.
.01UF 50V CER.
1M110ZS10 110V ZENER DIODE
1N4148 DIODE
MPS-A-42 NPN XSTR
2N5401 PNP XSTR
MPS-A-42
2N5401
MPS-A-42
2N5401
MPS-A-42
2N5401
MPS-A-42
2N5401
MPS-A-42
2N5401
MPS-A-42
2N5401
MPS-A-42
74HC373 CMOS OCTAL LATCH
14514 1-16 DECODER
14 DIGIT, 9 SEGMENT GAS DISCHARGE DISPLAY
.025 SQ. PINS
TEST LOOPS
FOAM TAPE
BUMPER
DISPLAY MTG. CLIPS
SCREWS
DISPLAY MTG. PROCEDURE
DUAL DISPLAY MODULE P.C.B.

DUAL DISPLAY MODULE
A084-91851-H000
M051-00365-H042 (Page 4 of 5) REV. 1

CROSS REFERENCE LIST

DESCRIPTION	QTY.	DESIGNATION NO.	PART NOS.
510 OHM 1/4W 5% CARBON	1	R5	100E-00005-0053
820 OHM 1/4W 5% CARBON	7	R2, R8, R35, R46 R49, R77, R80	100E-00005-0058
1K 1/4W 5% CARBON	2	R39, R42	100E-00005-0061
1.5K 1/4W 5% CARBON	10	R1, R4, R7, R34, R38 R43, R45, R48 R76, R79	100E-00005-0065
2.2K 1/4W 5% CARBON	14	R18, R22, R26, R71 R73, R75, R83, R87 R88, R91, R93, R95 R97, R101	100E-00005-0069
9.1K 1/4W 5% CARBON	14	R16, R20, R24, R28 R30, R32, R58, R61 R62, R64, R66, R68 R85, R103	100E-00005-0087
10K 1/4W 5% CARBON	1	R107	100E-00005-0088
20K 1/4W 5% CARBON	14	R10-R15, R108-R115	100E-00005-0095
100K 1/4W 5% CARBON	2	R40, R41	100E-00005-0115
100K 1/4W 1% METAL FILM	15	R17, R21, R25, R29 R31, R33, R51, R59 R60, R63, R65, R67 R69, R84, R102	100E-00001-0046
150K 1/4W 5% CARBON	1	R104	100E-00005-0120
300K 1/4W 5% CARBON	24	R3, R6, R9, R19, R23 R27, R36, R37, R44, R47, R50, R70, R72, R74, R78, R81, R82, R86, R89, R90, R92, R94, R96, R100	100E-00005-0127
1.0M OHM 1/4W 5% CARBON	2	R99, R106	100E-00005-0140
2.2M OHM 1/4W 5% CARBON	6	R52 - R57	100E-00005-0147
100K 10 PIN SIP	1	RM1	102E-00004-0045
10.0M OHM 1/4W 5% CARBON	2	R98, R105	100E-00005-0162
100PF AX. CER.	1	C2	0639-00800-0003
.01UF	2	CP1, CP2	0360-00800-0005
.01UF 500V	1	C1	0360-00800-0013
1N4148	2	D2, D3	103E-00002-0005
1M110ZS10 110V ZENER DIODE	1	D1	103E-00001-0028
2N5401 PNP XSTR	14	Q5, Q7, Q9, Q22, Q23 Q24, Q27, Q29, Q30 Q31, Q32, Q33, Q34 Q35	0360-00802-0006
MPS-A-42 NPN XSTR	26	Q1-Q4, Q6, Q8, Q10- Q21, Q25, Q26, Q28 Q36-Q40	0360-00802-0007
14514 1-16 DECODER	1	U2	0360-00803-0013
74HC373 OCTAL LATCH	1	U1	0365-00803-0015
.025SQ. PINS	23	J1	0304-00804-0009
14 DIGIT, 9 SEGMENT GAS DISCHARGE DISPLAY	1	DISPLAY 1	119E-00002-0006
TEST LOOPS	3	TP1 - TP3	0017-00007-0131
FOAM TAPE	2		0017-00081-0289
BUMPER	1		0017-00041-0598
DISPLAY MTG. CLIP	2		0365-00174-00XF
SCREW	2		0017-00101-0175
DISPLAY MTG. PROCEDURE	1		M051-00365-A041
DUAL DISPLAY MODULE PCB	1		A080-91851-H000