

SECTION VI

ILLUSTRATED PARTS LISTS

6.1 INTRODUCTION

This section provides the parts list information for the Printed Circuit Board Assembly and the Disk Drive Mechanical Kit.

6.2 INDEX OF ASSEMBLIES

The following is an index of the assemblies covered in this section (the HDA is a sealed unit and not repairable):

ASSEMBLY	FIGURE	TABLE
Printed Circuit Board Assembly (P/N 59055)	6-1	6-1
Mechanical Kit (P/N 50461)	N/A	6-2
HDA (P/N 50454)	N/A	N/A

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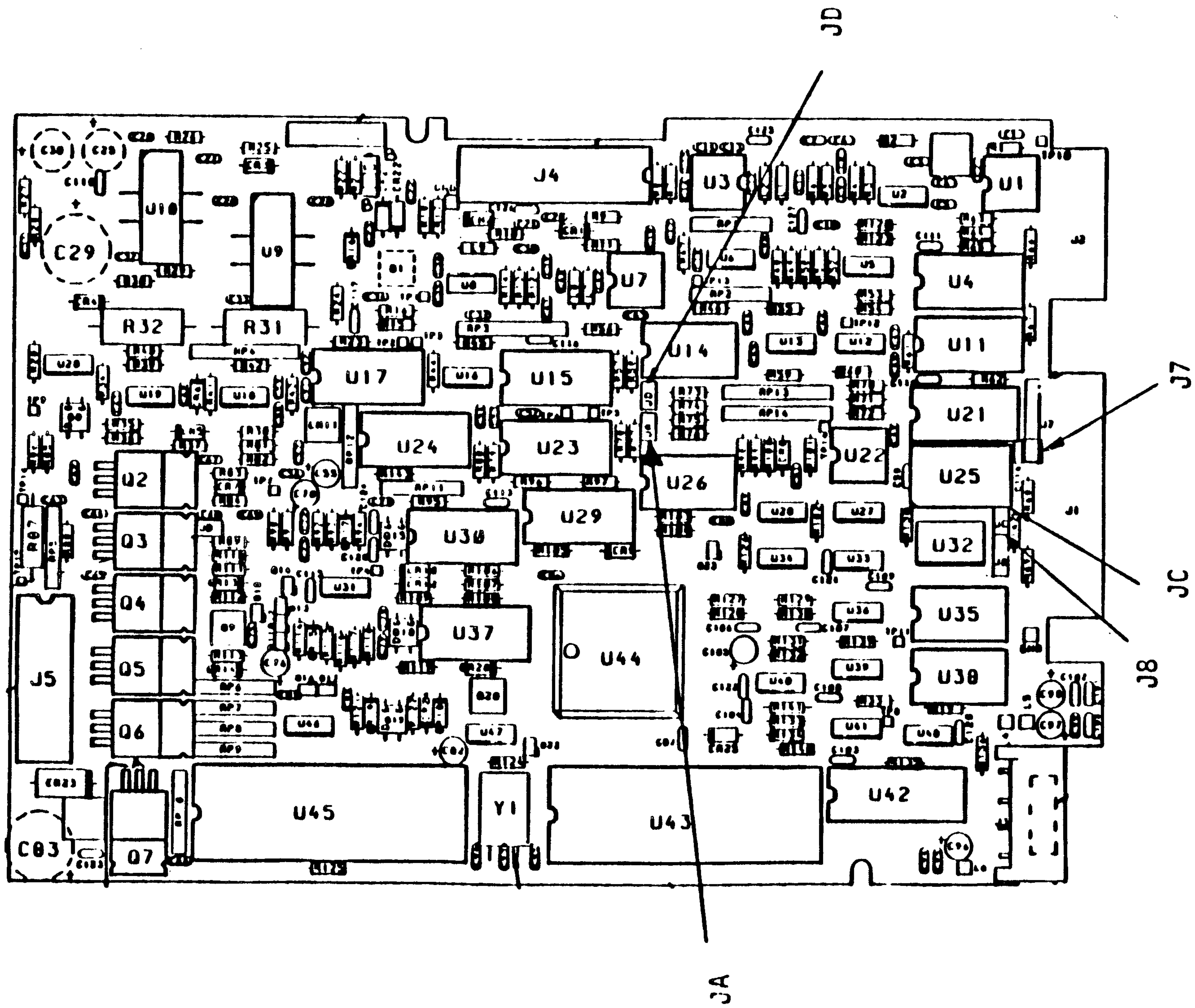


Figure 6-1. Printed Circuit Board Assembly (P/N 59055)

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Table 6-1. Printed Circuit Board Assembly (P/N 59055)

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATION
30091	Adhesive, Tak Pack	
30104	Adhesive Accelerator	
30108	Shrink Tubing PVC 3/8 ID	
40109	Plug, Shorting	
40114	Pin, IC	
40119	Post, Feedthru	
47015	MCU, Z-8 4K, 12Mhz	U43
48010	Crystal, 12Mhz, HC-18	Y1
50487	Label, PCB Asm	
59056	Fabrication, PCB	
59058	Schematic, Control Module	
<u>CAPACITORS</u>		
43000	Capac, 10.0PF, 5% (NPO), 50V	C1
43004	Capac, 22.0PF, 5% (NPO), 50V	C40, 84, 85
43006	Capac, 33.0PF, 5% (NPO), 50V	C11
43008	Capac, 47.0PF, 5% (NPO), 50V	C37
43010	Capac, 68.0PF, 5% (NPO), 50V	C128
43012	Capac, 100PF, 5% (NPO), 50V	C42, 88, 91
43014	Capac, 150PF, 5% (NPO), 50V	C12, 43
43018	Capac, 330PF, 5% (NPO), 50V	C44, 45, 46, 51, 52
43030	Capac, 3900pf, 5%, NPO 50V	C67, 68
43300	Capac, 0.01UF, +80/-20%, 50V	C6, 7, 13, 14, 17, 19, 22,
43301	Capac, 0.10UF, +80/-20%, 50V	C2, 3, 18, 23, 26, 34, 48, 49, 66, 71, 72, 73, 81, 86, 87, 89, 90, 93, 94, 100, 102, 103, 104, 107, 108, 109, 110, 111, 113, 116, 117, 118, 120, 121, 122, 123, 124, 125, 126, 127
43552	Capac, 10.0UF, 25V, Bulk	C55, 70, 76, 82, 96, 97, 98, 105
43560	Capac, 2200UF, 16V	C29, 83
43562	Capac, 220UF Elect, 16V Min	C25, 30
43600	Capac, 0.001UF, 10% X 7R, 50V	C20, 21, 24, 27, 50, 59, 62, 64, 65, 79, 99, 114
43608	Capac, 0.0047UF, 10% X 7R, 50V	C32, 33, 35, 36, 53, 54
43612	Capac, 0.01UF, 10% X 7R, 50V	C39, 41, 92, 106
43614	Capac, 0.015UF, 10% X 7R, 50V	C61, 69
43618	Capac, 0.033UF, 10% X 7R, 50V	C10
43624	Capac, 0.1UF, 10% (NPO), 50V	C4, 5, 8, 9, 15, 16, 28, 31, 47, 60, 63, 75, 78, 115

Table 6-1. Printed Circuit Board Assembly (P/N 59055) continued

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATION
<u>CONNECTORS</u>		
40104	Conn, 28 Contact, Fem	J4
40120	Conn, 24 Contact, Fem	J5
40123	Conn 4 Contact, Fem	J3
<u>DIODES</u>		
46001	Diodes Switching, 1N914	CR1, 2, 5, 6, 7, 8, 10, 12, 13, 15, 17, 18, 19, 20, 25
46002	Diodes Schottky, 1N6263	CR16
46004	Diodes, 1N4001, Pwr, 50V (DD-41)	CR3, 4, 14, 22
46005	Diodes, 80SQ030, Scottky Pwr	CR23
46007	Diodes, 1N5818	CR9, 21, 24
<u>INTEGRATED CIRCUITS</u>		
44010	IC, 26LS31 QD, Hgh Spd Ln Drvr	U4
44011	IC, 26LS32 QD, Diff Ln Recv	U11
44051	SOIC14, 74LS00D QD, 2-In ND Gate	U33
44053	SOIC14, 74LS74AD, DL-D TP ET F-F	U41
44058	SOIC20, 74LS240D OCT INV BUF 3S	U32
44062	SOIC14, 74LS04D, Hex Inverter	U39
44067	SOIC14, 74LS02D, QD 2-in NOR GA	U36
44202	IC, QD 7438, 2-in NAND Buf (OC)	U35, 38
44203	IC, 7445 BCD, DECI/DECD DR (OC)	U29, 30
44251	SOIC14, 7406D, HX INV Buf/Dr (OC)	U27, 34, 46, 47
44300	IC, Quad, Ex-Dr ECL, 10107	U15
44301	IC, 10131 ECL Dual D F-F	U23
44302	IC, Triple Rec ECL, 10114	U17
45001	IC, LM318N, Hi Speed OP-AMP	U1
45003	IC, Ref 2.5V, LM336BZ-2.5	CR11
45005	IC, OP-AMP, LF356	U22
45007	IC, MC1350PIF AMP	U3, 7
45008	IC, DAC0832 88TuP, D-Buf D-A Con	U42
45009	IC, Volt Reg Low P. 8V, 78L08	Q1
45013	IC, LF347, WD BDWTH QD JFT OP-AM	U14
45014	IC, TBA810P, 7W Audio Amp	U9, 10
45052	SOIC14, LM324D, 6-P S-S OP-AMP	U6, 12, 18, 31
45054	SOIC14, LM339D, QD Volt Comparat	U5, 20, 40 48
45056	SOIC14, NE592D, Video Amplifier	U2, 8, 16
45060	SOIC14, HEF4066B, QDRUF Bilt Swt	U13, 19, 28
47011	IC, Z8-2K, MCU 8Mhz 40-Pin DIP	U45
47013	IC, Gate Array, Servo Control	U44

Table 6-1. Printed Circuit Board Assembly (P/N 59055) continued

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATION
<u>RESISTORS</u>		
41001	Resis, 10.0 Ohms, 1%, 0.25W	R116
41009	Resis, 21.5 Ohms, 1%, 0.25W	R109
41025	Resis, 100.0 Ohms, 1%, 0.25W	R2, 43, 55, 59, 66, 76, 78
41027	Resis, 121.0 Ohms, 1%, 0.25W	R98
41028	Resis, 133.0 Ohms, 1%, 0.25W	R7, 8
41032	Resis, 196.0 Ohms, 1%, 0.25W	R9, 10, 103, 106
41033	Resis, 215.0 Ohms, 1%, 0.25W	R69
41035	Resis, 261.0 Ohms, 1%, 0.25W	R86
41037	Resis, 316.0 Ohms, 1%, 0.25W	R5, 6, 45, 68, 79, 80, 95,
41038	Resis, 348.0 Ohms, 1%, 0.25W	R99
41041	Resis, 464.0 Ohms, 1%, 0.25W	R23, 24, 96, 96, 124
41043	Resis, 562.0 Ohms, 1%, 0.25W	R11, 12, 13, 56
41044	Resis, 619.0 Ohms, 1%, 0.25W	R119
41046	Resis, 750.0 Ohms, 1%, 0.25W	R29
41047	Resis, 825.0 Ohms, 1%, 0.25W	R62
41049	Resis, 1K Ohm, 1%, 0.25W	R14, 15, 16, 19, 50, 51, 61, 64, 65, 83, 100, 105, 108, 117, 128, 135, 143
41052	Resis, 1.33K Ohms, 1%, 0.25W	R44
41056	Resis, 1.96K Ohms, 1%, 0.25W	R114
41061	Resis, 3.16K Ohms, 1%, 0.25W	R1, 3, 4, 49, 52, 63, 115
41062	Resis, 3.48K Ohms, 1%, 0.25W	R17, 18, 21, 22
41063	Resis, 3.83K Ohms, 1%, 0.25W	R118
41066	Resis, 5.11K Ohms, 1%, 0.25W	R92, 107
41067	Resis, 5.62K Ohms, 1%, 0.25W	R130
41068	Resis, 6.19K Ohms, 1%, 0.25W	R73, 93
41069	Resis, 6.81K Ohms, 1%, 0.25W	R48
41071	Resis, 8.25K Ohms, 1%, 0.25W	R38
41073	Resis, 10K Ohms, 1%, 0.25W	R20, 33, 42, 47, 58, 77, 85, 94, 101, 104, 111, 120, 123, 125, 138, 139, 142
41075	Resis, 12.1K Ohms, 1%, 0.25W	R60
41076	Resis, 16.2K Ohms, 1%, 0.25W	R131
41079	Resis, 17.8K Ohms, 1%, 0.25W	R54, 75
41080	Resis, 19.6K Ohms, 1%, 0.25W	R57
41084	Resis, 28.7 Ohms, 1%, 0.25W	R133, 134
41089	Resis, 46.4K Ohms, 1%, 0.25W	R81
41090	Resis, 51.1K Ohms, 1%, 0.25W	R88
41093	Resis, 68.1K Ohms, 1%, 0.25W	R129
41097	Resis, 100K Ohms, 1%, 0.25W	R132, 140
41100	Resis, 133K Ohms, 1%, 0.25W	R34, 90
41106	Resis, 237K Ohms, 1%, 0.25W	R110
41108	Resis, 287K Ohms, 1%, 0.25W	R122
41125	Resis, 76.8K Ohms, 1%, 0.25W	R76
41211	Resis, 27.4 Ohms, 1%, 0.25W	R25, 28

Table 6-1. Printed Circuit Board Assembly (P/N 59055) continued

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATION
<u>RESISTORS</u>		
41260	Resis, 3.01K Ohms, 1%, 0.25W	R30
41284	Resis, 30.1K Ohms, 1%, 0.25W	R70, 71, 72, 136
41291	Resis, 59.0K Ohms, 1%, 0.25W	R36, 37
41292	Resis, 64.9K Ohms, 1%, 0.25W	R102, 126
41557	Resis, 18.2K Ohms, 1%, 0.25W	R74
41560	Resis, 4.99K Ohms, 1%, 0.25W	R35, 82
41563	Resis, 10.0M Ohms, 1%, 0.25W	R112
41564	Resis, 26.7K Ohms, 1%, 0.25W	R46
41566	Resis, 10.7K Ohms, 1%, 0.25W	R53
41572	Resis, 13.7K Ohms, 1%, 0.25W	R39, 40
41573	Resis, 57.6K Ohms, 1%, 0.25W	R89
41574	Resis, 143K Ohms, 1%, 0.25W	R91
41575	Resis, 19.1K Ohms, 1%, 0.25W	R84
42000	Resis, 0.1 Ohms, 3%, 2W	R87
42007	Resis, 1.00 Ohm, 5%, 0.25W	R26, 27
42010	Resis, 0.5 Ohm, 1%, 1W	R31, 32
42016	Resis, 1.00M Ohm, 5%, 0.25W	R113, 141
42045	Resis, 309K Ohms, 5%, 0.25W	R41
42046	Resis, 200 Ohms, 5%, 0.50W	R121
42100	Resis, DIP TTL-ECL Xlator Network	U21
42101	Resis, DIP 14-Pin, 220/330	U25
42102	Resis, Network, 470 Ohms, DIP	U24
42106	Resis, SIP, 1.0K, 6-Pin Ind.	RP5
42109	Resis, SIP, 10K, 6-Pin IND	RP1, 2, 7, 12
42111	Resis, SIP, 68K, 6-Pin IND	RP8
42117	Resis, SIP, 680, 6-Pin COM	RP11
42121	Resis, SIP, 10K, 6-Pin COM	RP6, 9, 10
42131	Resis, SIP, 2.2K, 8-Pin COM	RP14
42152	Resis Netw, 180 Ohms, SIP, 8-Pin-4R	RP3
42157	Resis, SIP, 10K, 2%, 8-Pin IND	RP4, 13
<u>TRANSISTORS</u>		
46102	Tran, 2N3906	Q20
46103	Tran, Quad 2NPN/2PNP 6700	U26, 37
46107	Tran, IRFD123 N Ch Fet 4-Pin DIP	Q8, 18
46108	Tran, IRFD9123 P Ch Fet 4-Pin DIP	Q15, 19
46110	Tran, PN4393, N-CH JFET, TO-92	Q9
46111	Tran, IRF521, N-CH HEXFET TD220	Q5, 6, 7
46112	Tran, IRF9521, P-CH HEXFET, TO220	Q2, 3, 4
46151	Tran, 2N3904, NPN SOT-23	Q10, 22
46152	Tran, 2N3906, PNP SOT-23	Q14, 23
46153	Tran, SOT-23, NPN 2222A	Q11, 12, 13, 16, 17

Table 6-2. Mechanical Kit (P/N 50461)

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATION
<u>RESISTORS</u>		
41266	Resis, 5.36K Ohms, 1%, 0.25W	R2
41267	Resis, 5.90K Ohms, 1%, 0.25W	R2
41268	Resis, 6.49K Ohms, 1%, 0.25W	R2
41269	Resis, 7.15K Ohms, 1%, 0.25W	R2
41279	Resis, 18.7K Ohms, 1%, 0.25W	R1
41280	Resis, 20.5K Ohms, 1%, 0.25W	R1
41281	Resis, 22.6K Ohms, 1%, 0.25W	R1
41282	Resis, 24.9K Ohms, 1%, 0.25W	R1
41283	Resis, 27.4K Ohms, 1%, 0.25W	R1
41284	Resis, 30.1K Ohms, 1%, 0.25W	R1
41285	Resis, 33.2K Ohms, 1%, 0.25W	R1
41555	Resis, 17.4K Ohms, 1%, 0.25W	R1
41556	Resis, 22.1K Ohms, 1%, 0.25W	R1
41557	Resis, 18.2K Ohms, 1%, 0.25W	R1
41558	Resis, 20.0K Ohms, 1%, 0.25W	R1
41560	Resis, 4.99K Ohms, 1%, 0.25W	R2
41575	Resis, 19.1K Ohms, 1%, 0.25W	R1
41576	Resis, 6.34K Ohms, 1%, 0.25W	R2
41577	Resis, 6.65K Ohms, 1%, 0.25W	R2
41578	Resis, 6.98K Ohms, 1%, 0.25W	R2
<u>MISCELLANEOUS</u>		
30033	SCR 4-40 X 0.25 PAN PHIL	
30073	E-Ring	
30078	Washer, Lock Split #6 Set	
30088	Thread Locking Compound	
30110	Screw, Socket Head, 6-32 X 0.18	
30144	4-40 X 3/16 Flthd Rlvd Phillips	
30147	Washer, Flt Sm Pattern	
30148	Washer, Lock Ext Tooth	
40106	Ground Lug	
50091	ASM Face Plate	
50284	Label Warranty	
50288	Washer	
50458	ASM Chassis (SC2)	
50463	Label, Ser No.	
50468	PCB Insulator	
50475	Disk Drive ASM-Tab	

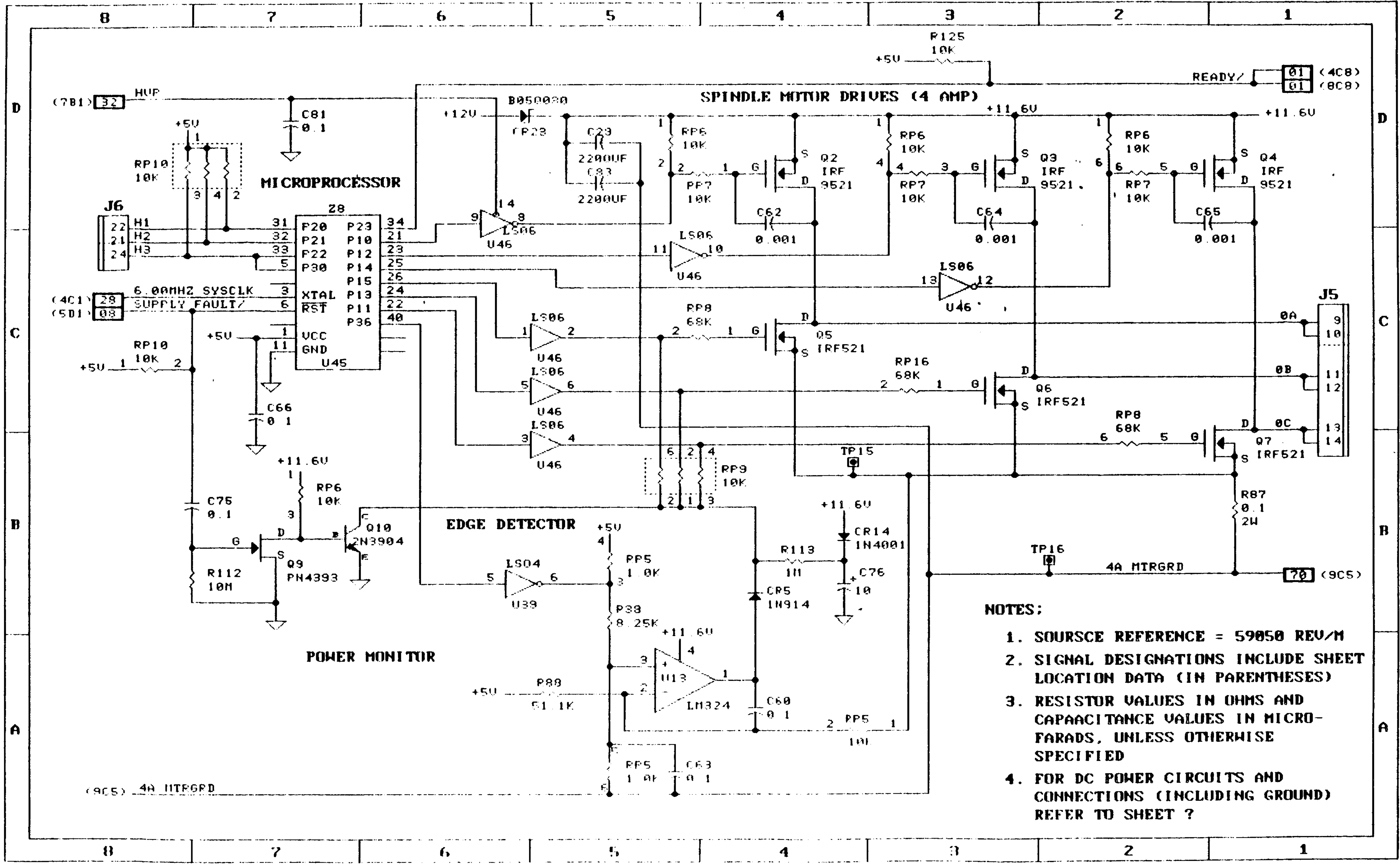
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SECTION VII

SCHEMATICS

7.1 INTRODUCTION

The schematic diagrams for the 5-1/4 Inch Fixed Media Disk Drive are located in figure 7-1.



- NOTES:**
1. SOURCE REFERENCE = 59050 REV/M
 2. SIGNAL DESIGNATIONS INCLUDE SHEET LOCATION DATA (IN PARENTHESES)
 3. RESISTOR VALUES IN OHMS AND CAPACITANCE VALUES IN MICRO-FARADS, UNLESS OTHERWISE SPECIFIED
 4. FOR DC POWER CIRCUITS AND CONNECTIONS (INCLUDING GROUND) REFER TO SHEET ?

Figure 7-1. PCBA Schematic Diagram (sheet 1 of 10)
Z8 Microprocessor Circuits

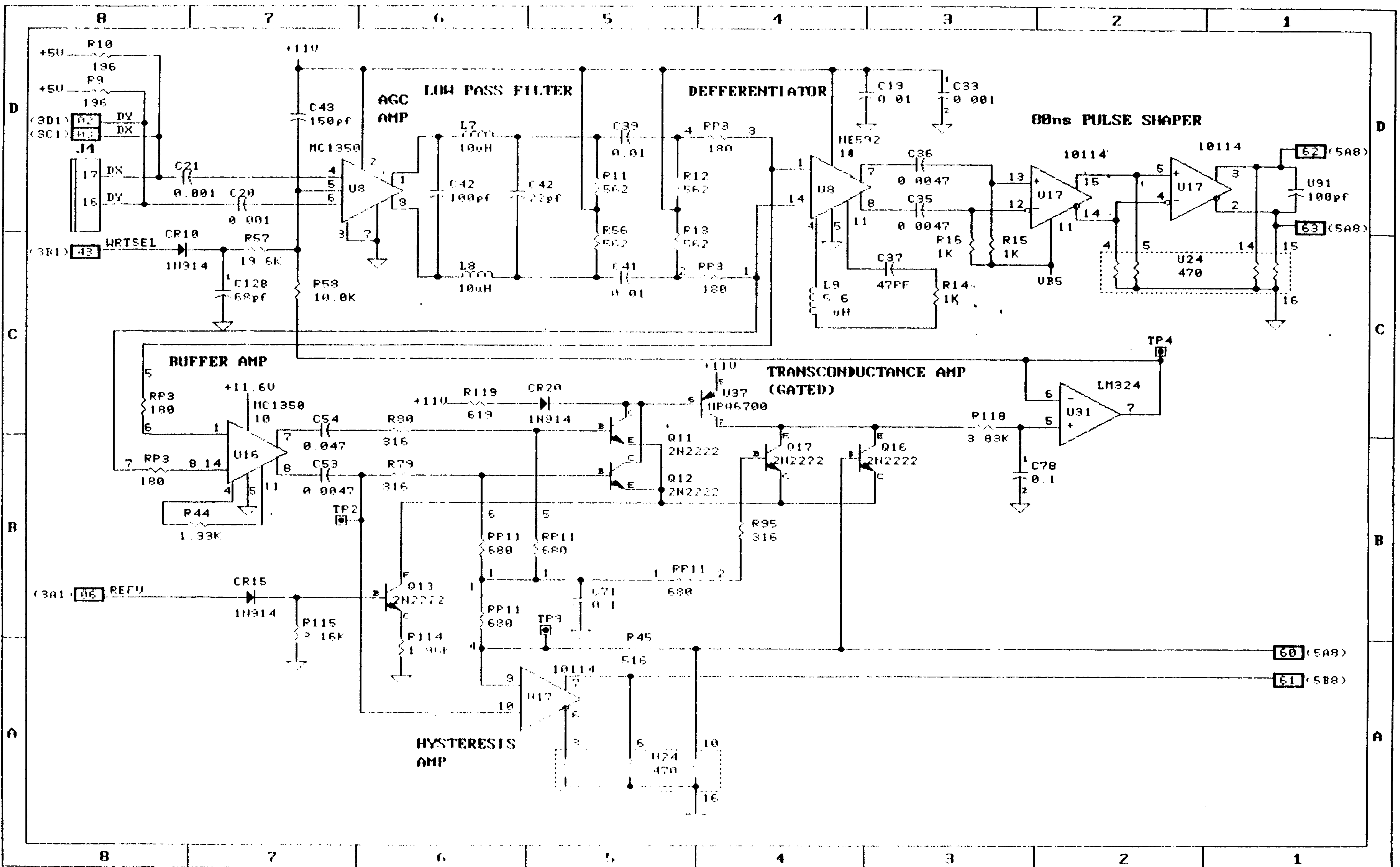


Figure 7-1. PCBA Schematic Diagram (sheet 2 of 10)
Z8 Microprocessor Circuits

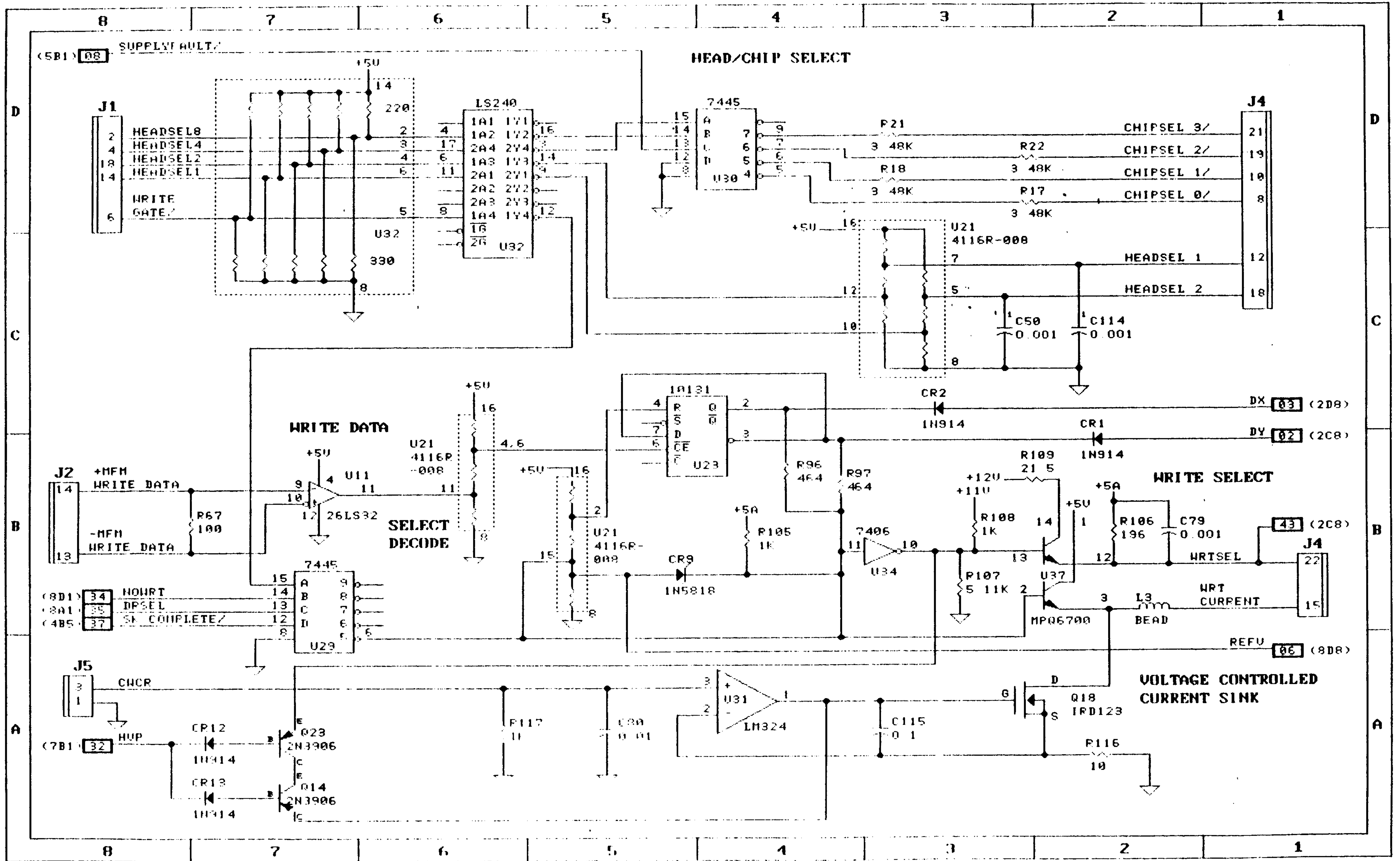
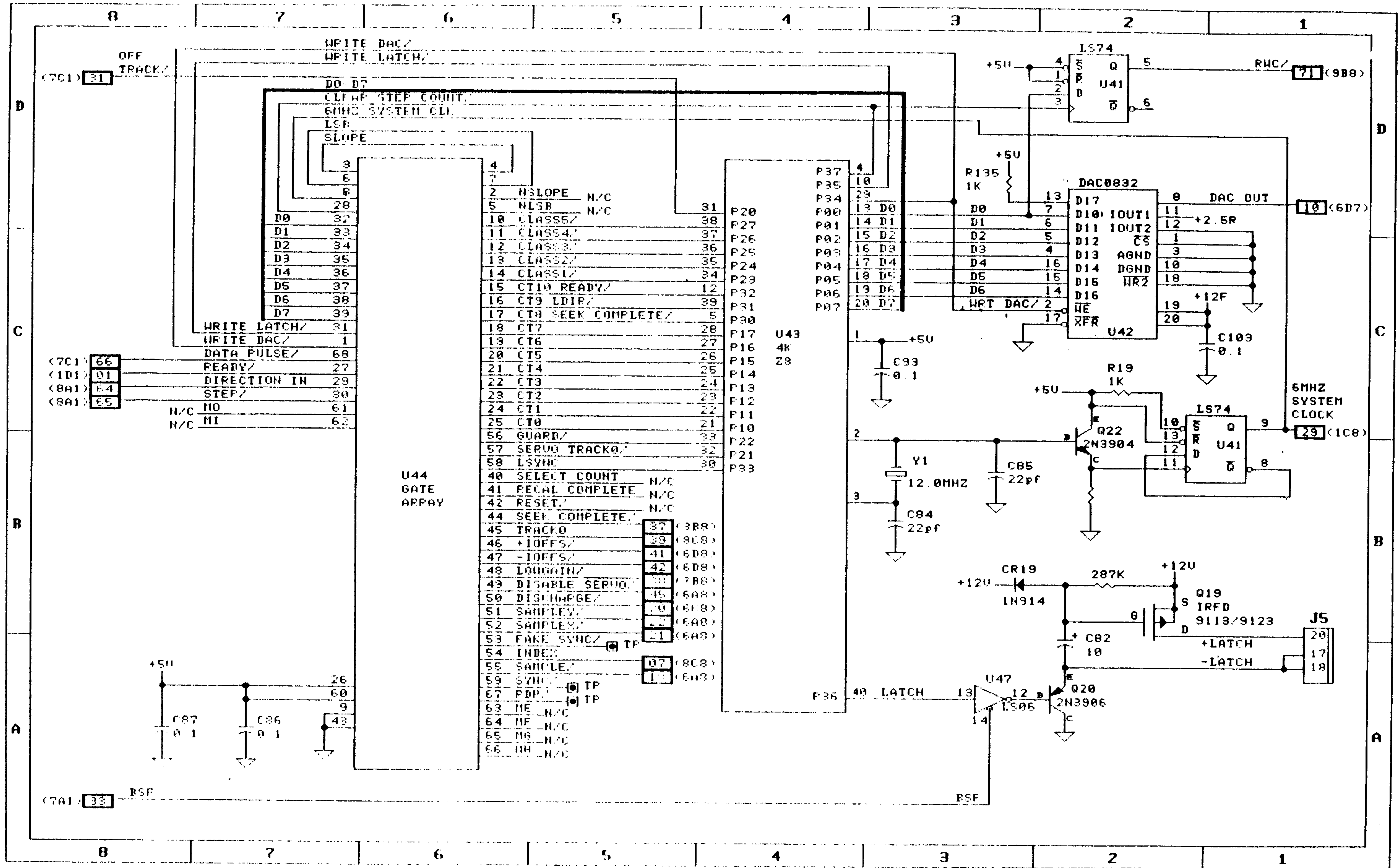


Figure 7-1. PCBA Schematic Diagram (sheet 3 of 10) Z8 Microprocessor Circuits

Figure 7-1. PCBA Schematic Diagram (sheet 4 of 10)
28 Microprocessor Circuits



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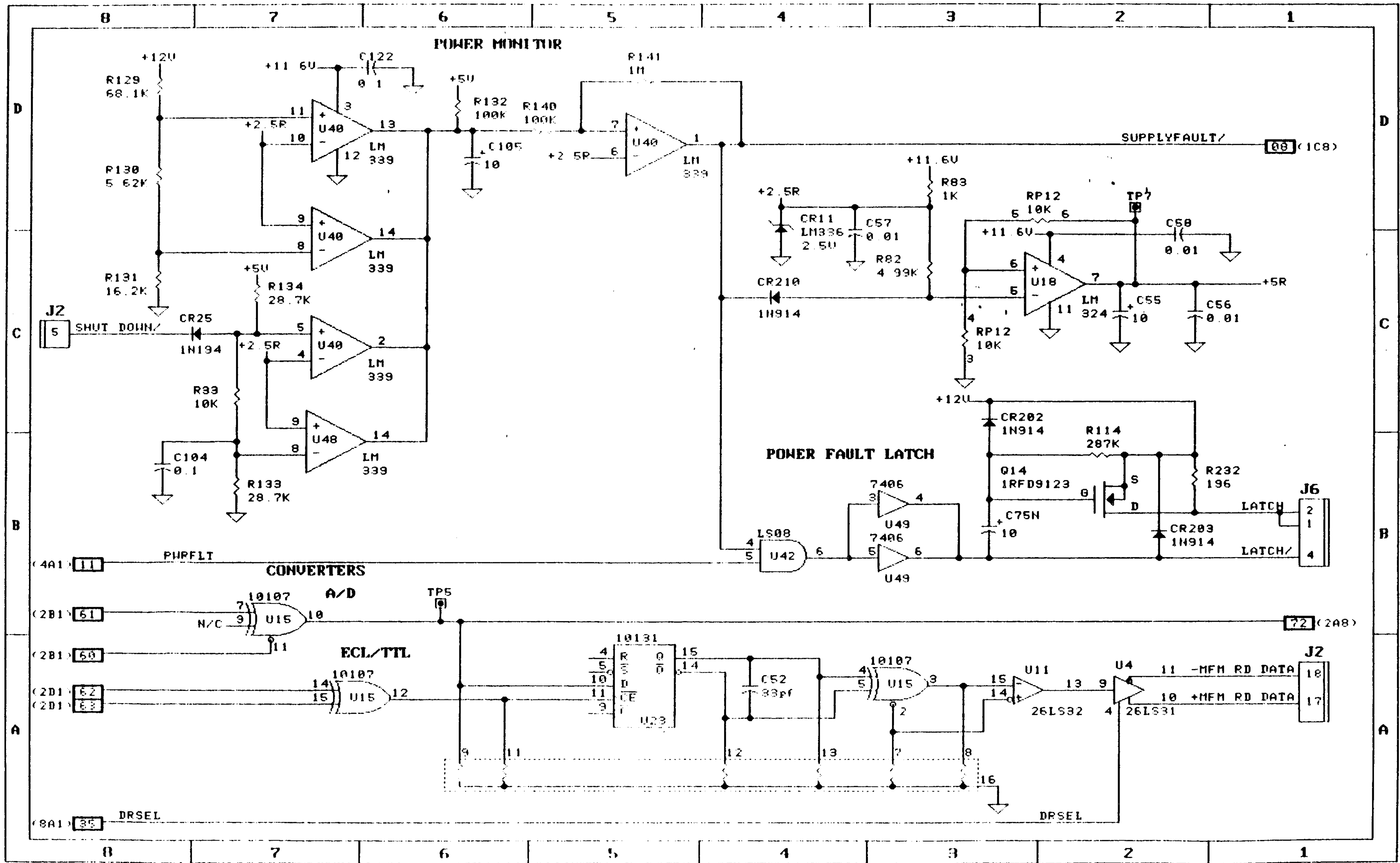


Figure 7-1. PCBA Schematic Diagram (sheet 5 of 10) Z8 Microprocessor Circuits

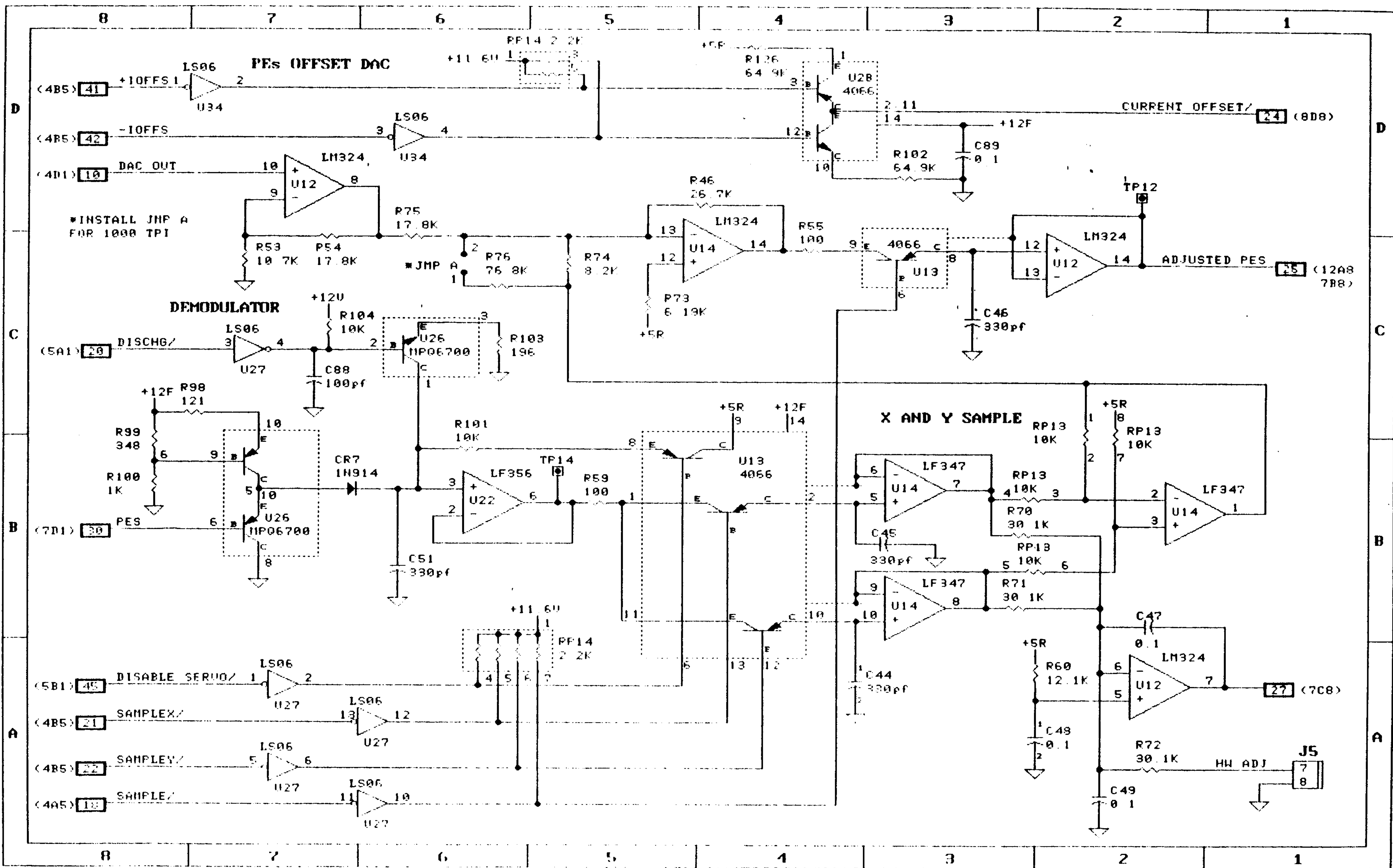


Figure 7-1. PCBA Schematic Diagram (sheet 6 of 10)
Z8 Microprocessor Circuits

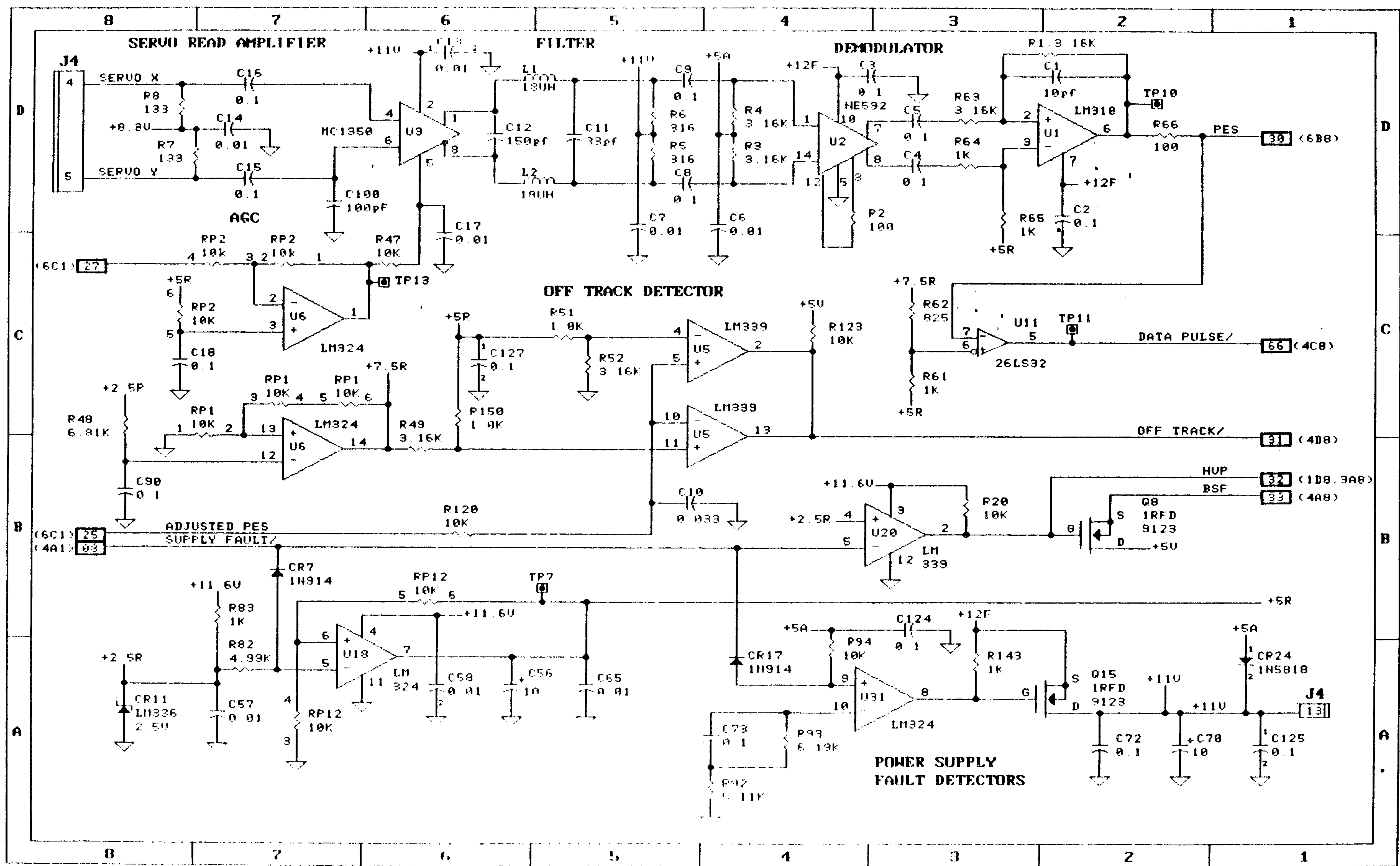
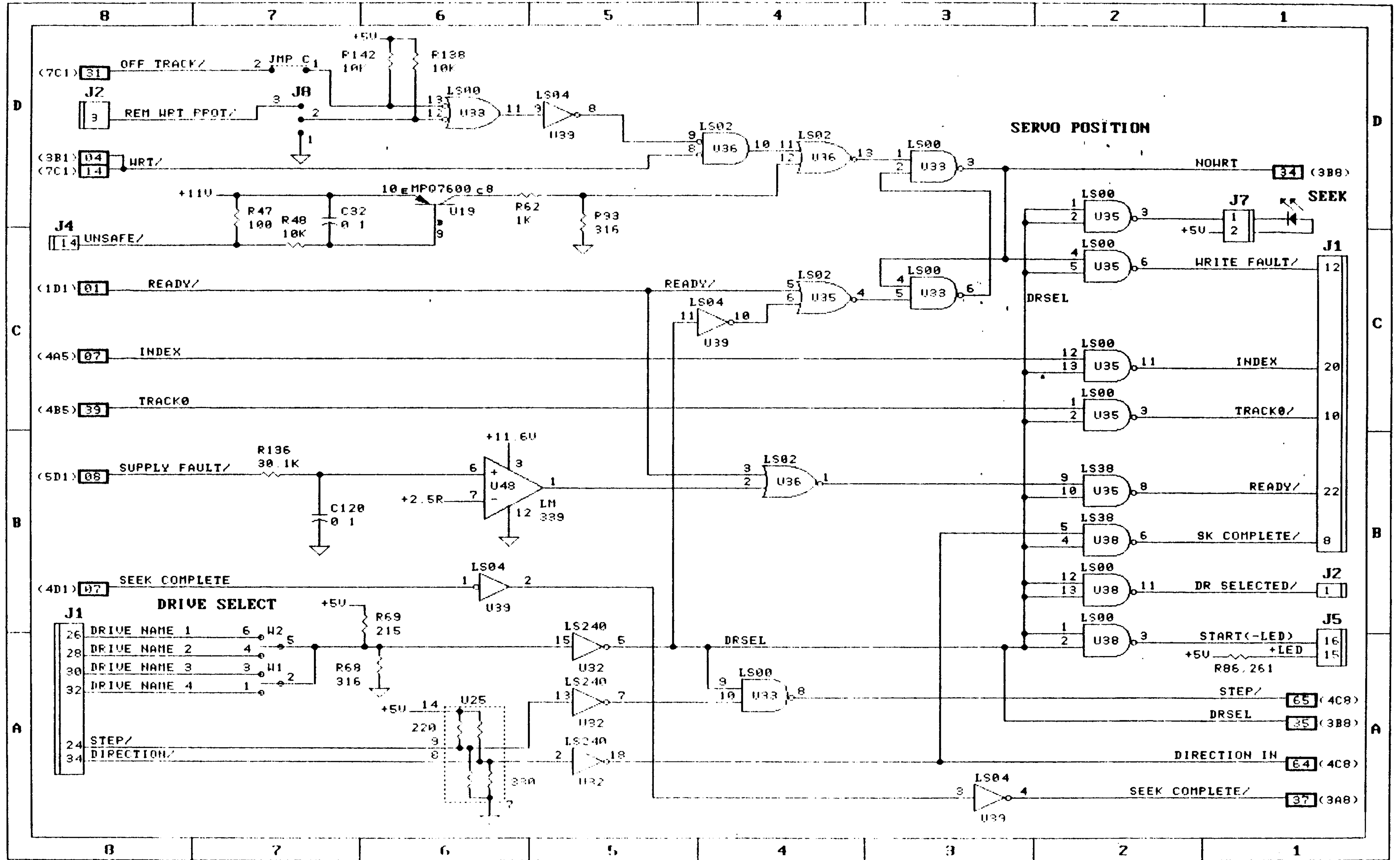


Figure 7-1. PCBA Schematic Diagram (sheet 7 of 10) Z8 Microprocessor Circuits

Figure 7-1. PCBA Schematic Diagram (sheet 8 of 10)
Z8 Microprocessor Circuits



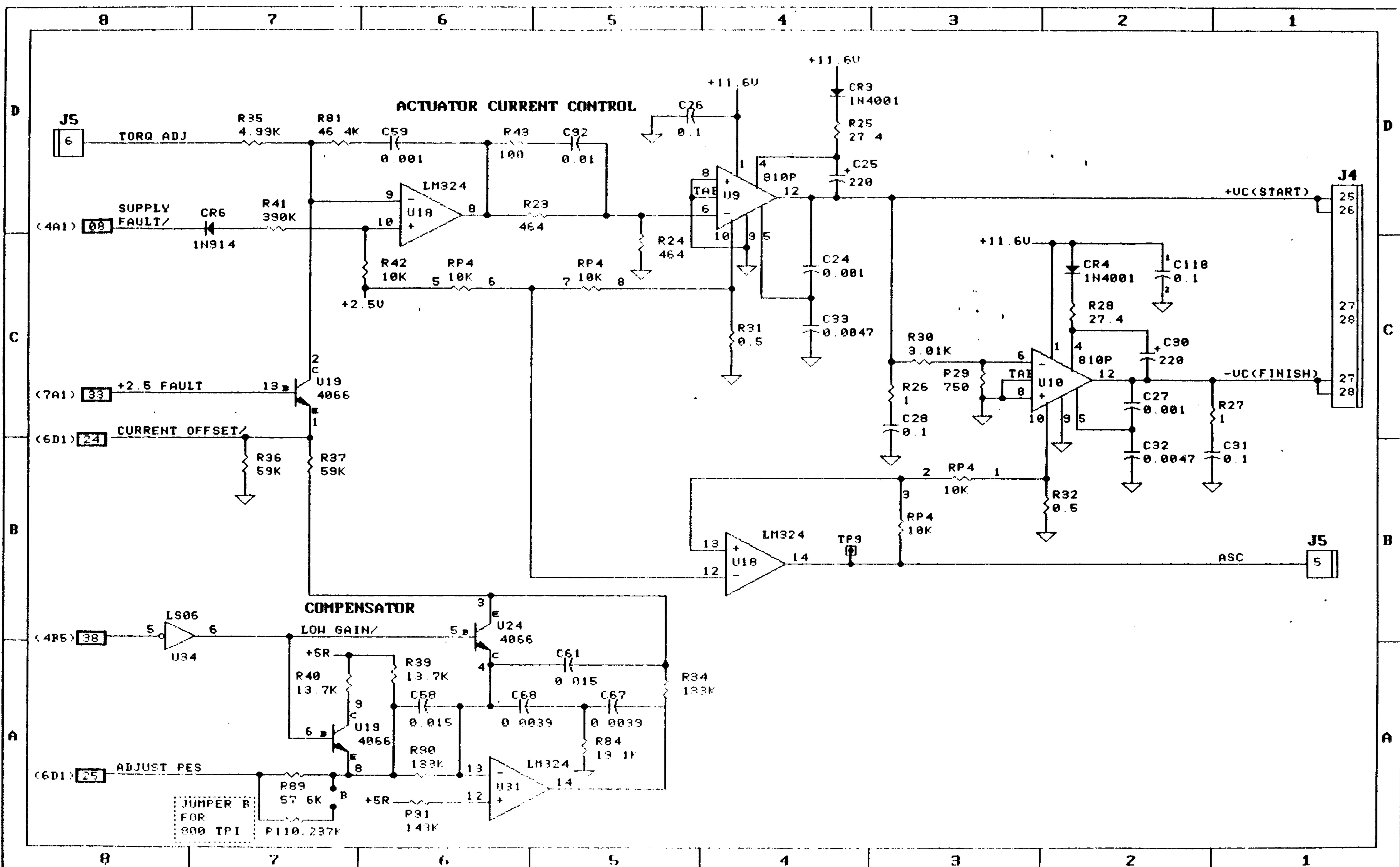
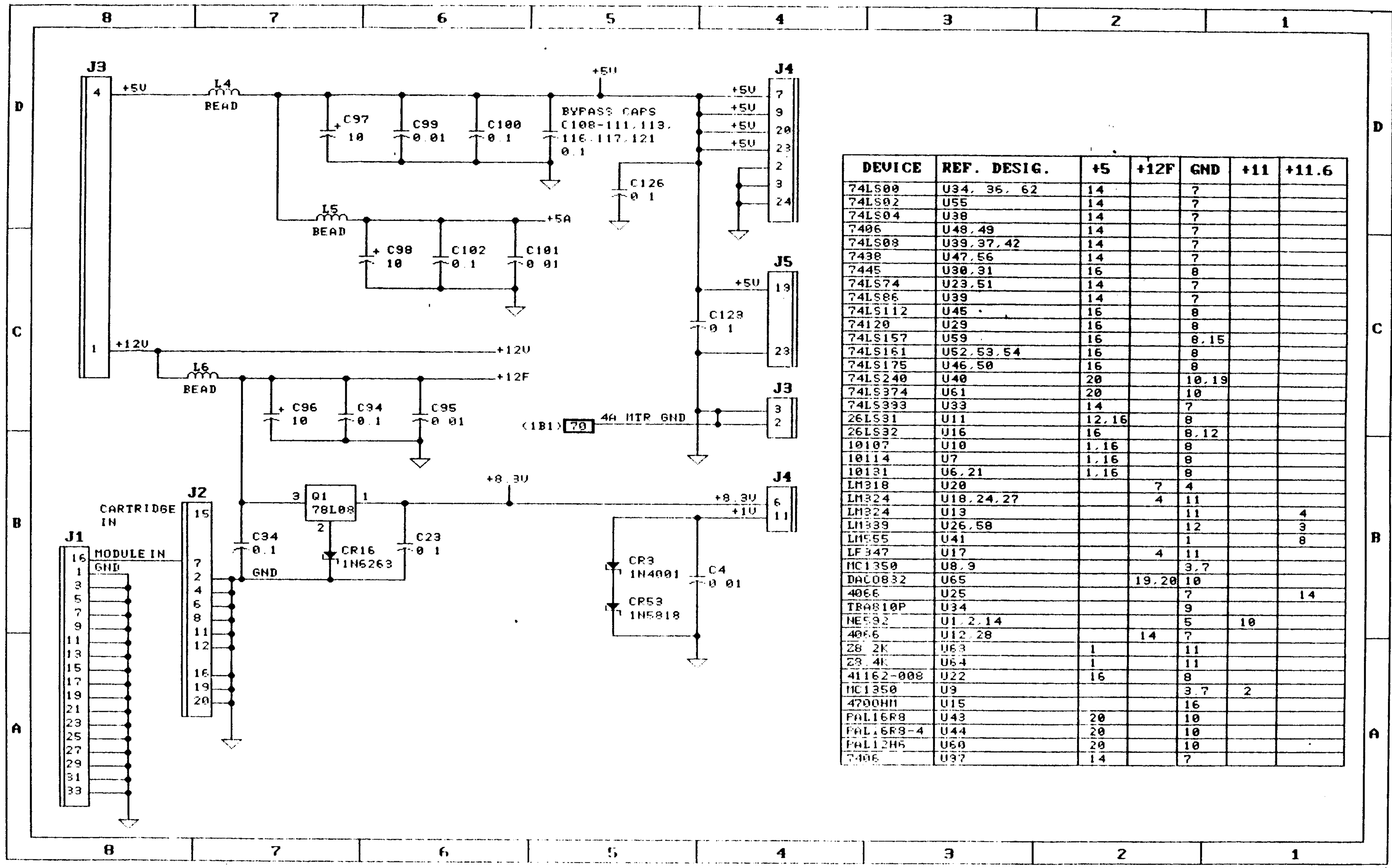


Figure 7-1. PCBA Schematic Diagram (sheet 9 of 10)
Z8 Microprocessor Circuits

Figure 7-1. PCBA Schematic Diagram (sheet 10 of 10)
Z8 Microprocessor Circuits



DEVICE	REF. DESIG.	+5	+12F	GND	+11	+11.6
74LS00	U34, 36, 62	14		7		
74LS02	U55	14		7		
74LS04	U38	14		7		
7406	U48, 49	14		7		
74LS08	U39, 37, 42	14		7		
7438	U47, 56	14		7		
7445	U30, 31	16		8		
74LS74	U23, 51	14		7		
74LS86	U39	14		7		
74LS112	U45	16		8		
74120	U29	16		8		
74LS157	U59	16		8, 15		
74LS161	U52, 53, 54	16		8		
74LS175	U46, 50	16		8		
74LS240	U40	20		10, 19		
74LS374	U61	20		10		
74LS393	U33	14		7		
26LS31	U11	12, 16		8		
26LS32	U16	16		8, 12		
10107	U10	1, 16		8		
10114	U7	1, 16		8		
10131	U6, 21	1, 16		8		
LM318	U20		7	4		
LM324	U18, 24, 27		4	11		
LM324	U19			11		4
LM339	U26, 58			12		3
LM555	U41			1		8
LF347	U17		4	11		
MC1350	U8, 9			3, 7		
DAC0832	U65		19, 20	10		
4066	U25			7		14
TRAB10P	U34			9		
NE592	U1, 2, 14			5	10	
4066	U12, 28		14	7		
28_2K	U63	1		11		
28_4K	U64	1		11		
41162-008	U22	16		8		
MC1350	U9			3, 7	2	
4700HM	U15			16		
FAL16R8	U43	20		10		
FAL16R8-4	U44	20		10		
FAL12H5	U60	20		10		
7406	U37	14		7		