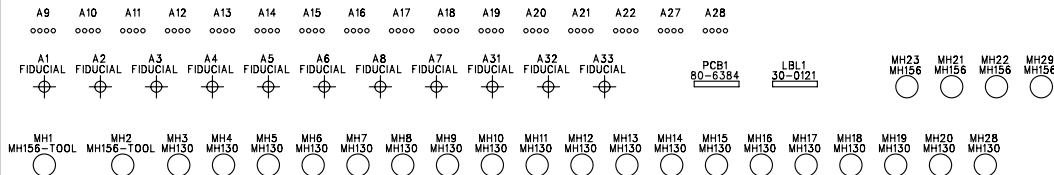
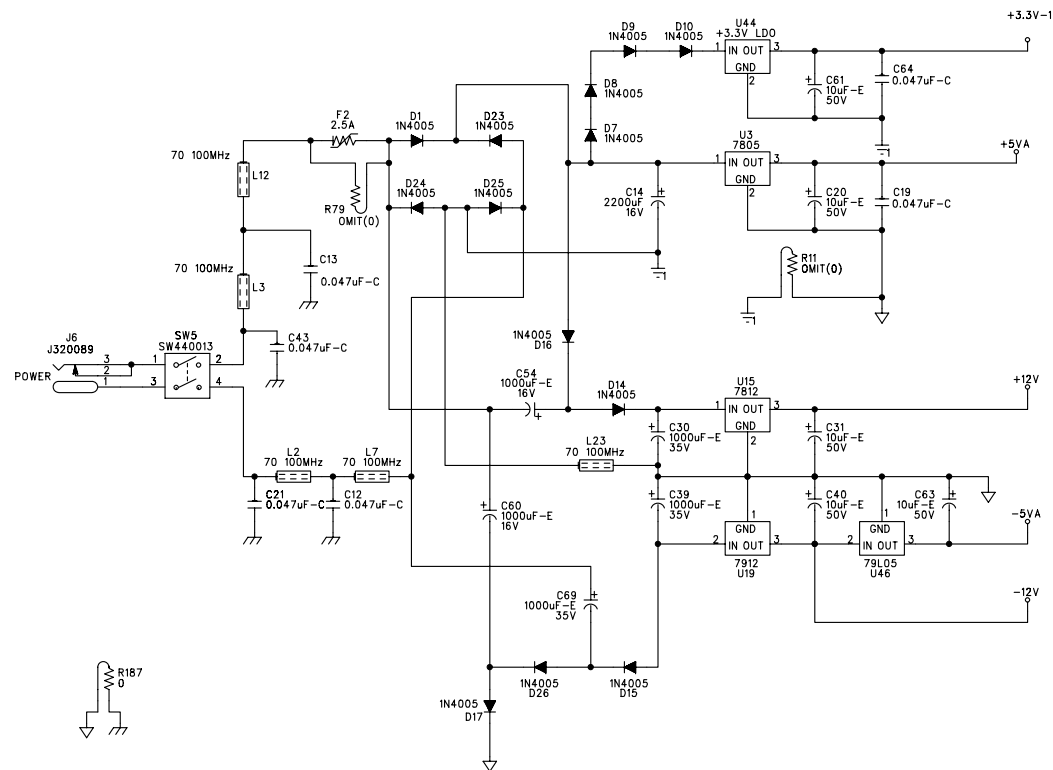


ANALOG BOARD



C3	CHANGE U5 FROM 72-6319 FROM 72-6322-02V1	2317	BDP	12-05-02
C2	MFG LABEL ADDED, NO REV CHANGE.	2090	MTB	8-28-02
C2	Changed XLR Jacks from 32-0204 to 32-0177 and 32-0206 to 320179	2108	MRC	08-01-02
C1	UN-OMIT SW2 (44-0188), OMIT SW1 (44-0116) UN-OMIT R71 (50-1531)	1867	MTB	11-26-01
C0	Release to Production	1761	JB	08-08-01
Y1	INTERIM PROTOTYPE	N/A	MTB	7-31-01
Y0	INTERIM PROTOTYPE	N/A	MTB	7-13-01
B2	CHANGE CODEC FROM CS4224 (72-1470) TO CS4221 (72-6309).	1723	MTB	6-25-01
B1	PRODUCTION RELEASE	1713	MTB	6-20-01
B0	PRODUCTION	N/A	MTB	6-13-01
A0	PRE-PRODUCTION	N/A	MTB	5-22-01
REV	DESCRIPTION	ECN #	INIT	DATE

REVISION HISTORY

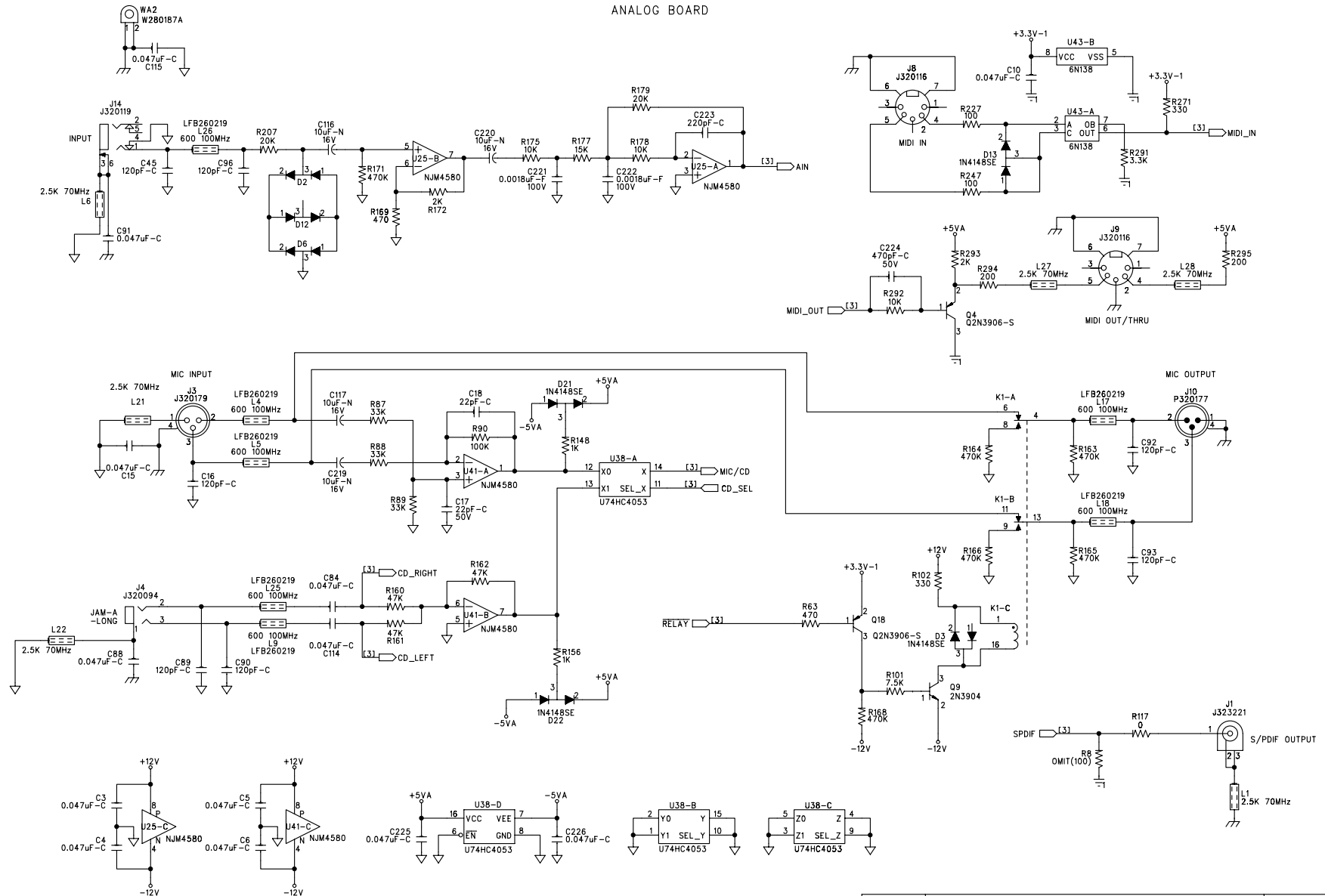
DigiTech
8760 South Sandy Parkway Sandy Utah 84070

TITLE: GNX2

DESIGNER: M. BYBEE ENGINEER: C. A. HAHN

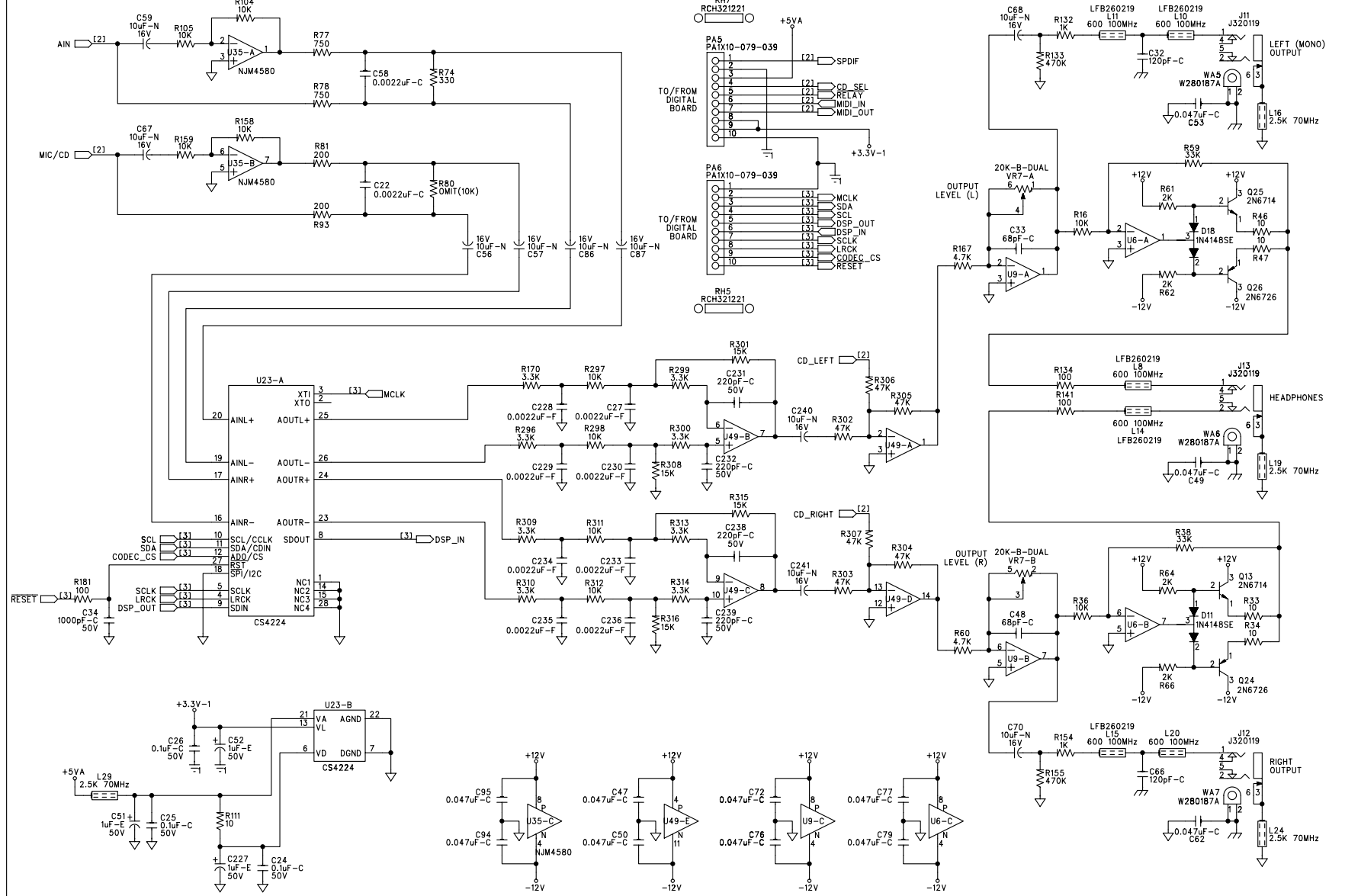
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 START DATE: 12-05-02 FILENAME: 056384C3.SCH SHEET: 1 OF 9

ANALOG BOARD

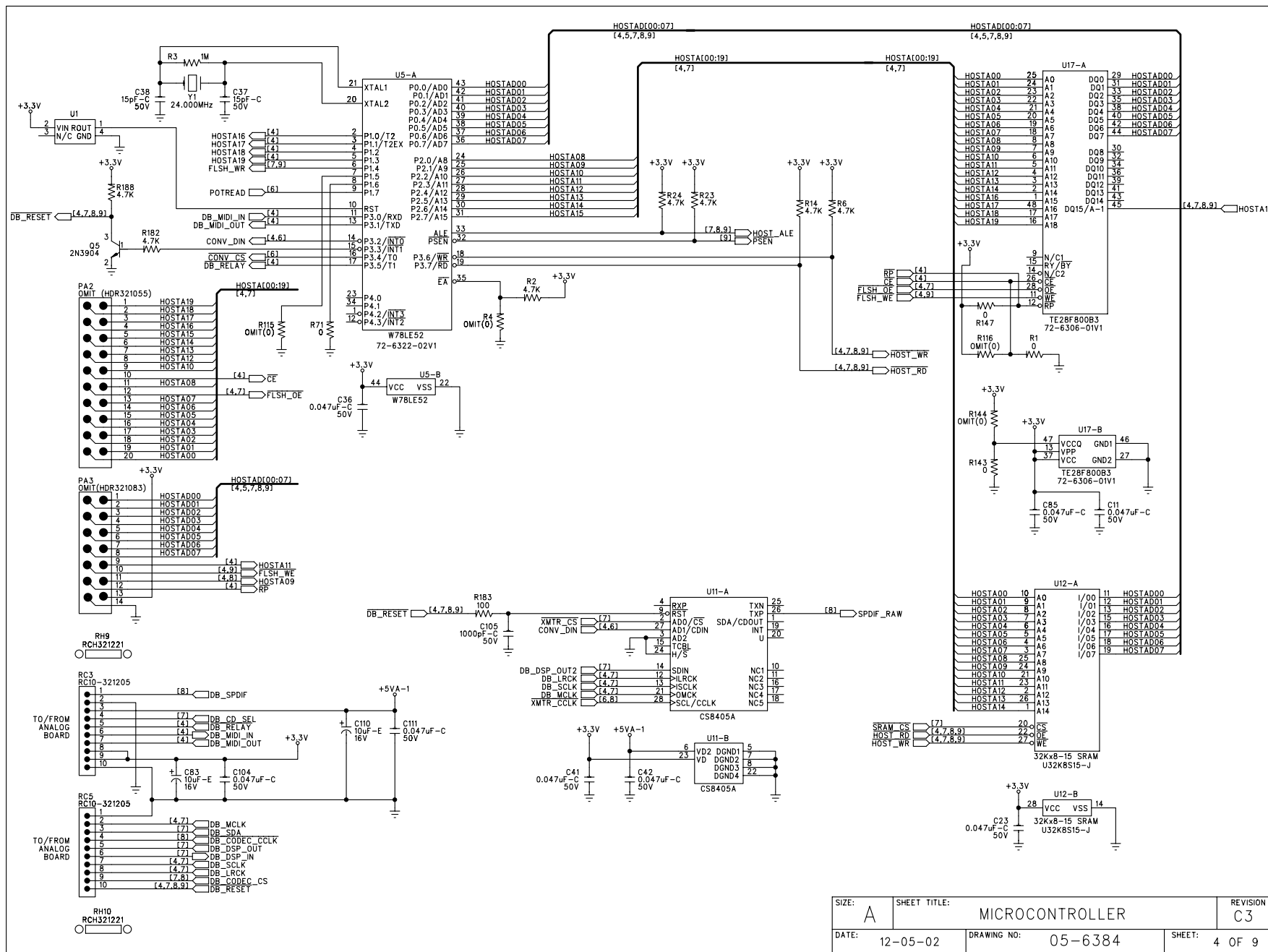


SIZE: A	SHEET TITLE: INPUTS/OUTPUTS	REVISION: C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 2 OF 9

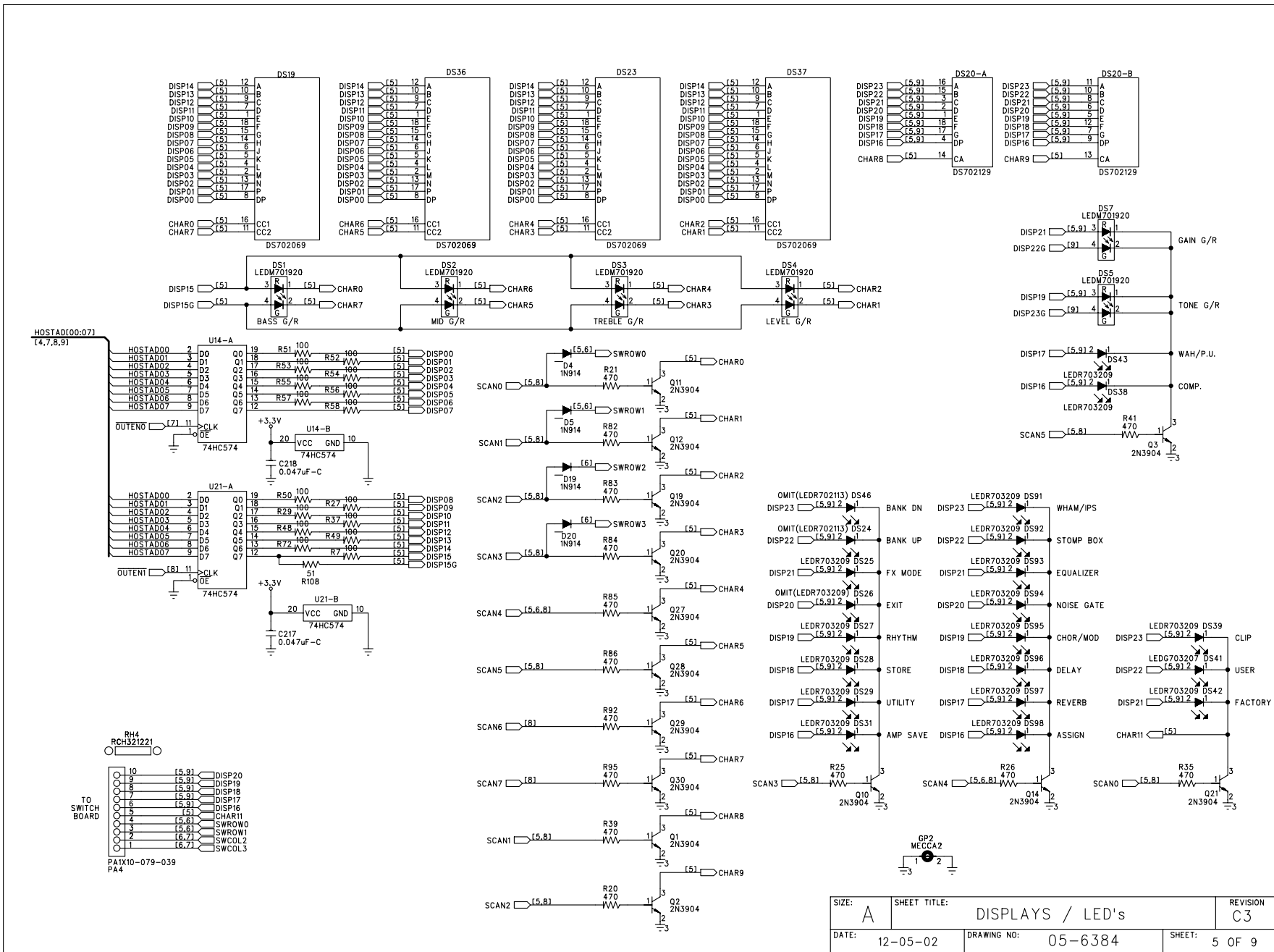
ANALOG BOARD



SIZE: A	SHEET TITLE: CODEC/AUDIO OUTPUT	REVISION: C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 3 OF 9



SIZE: A	SHEET TITLE: MICROCONTROLLER	REVISION: C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 4 OF 9

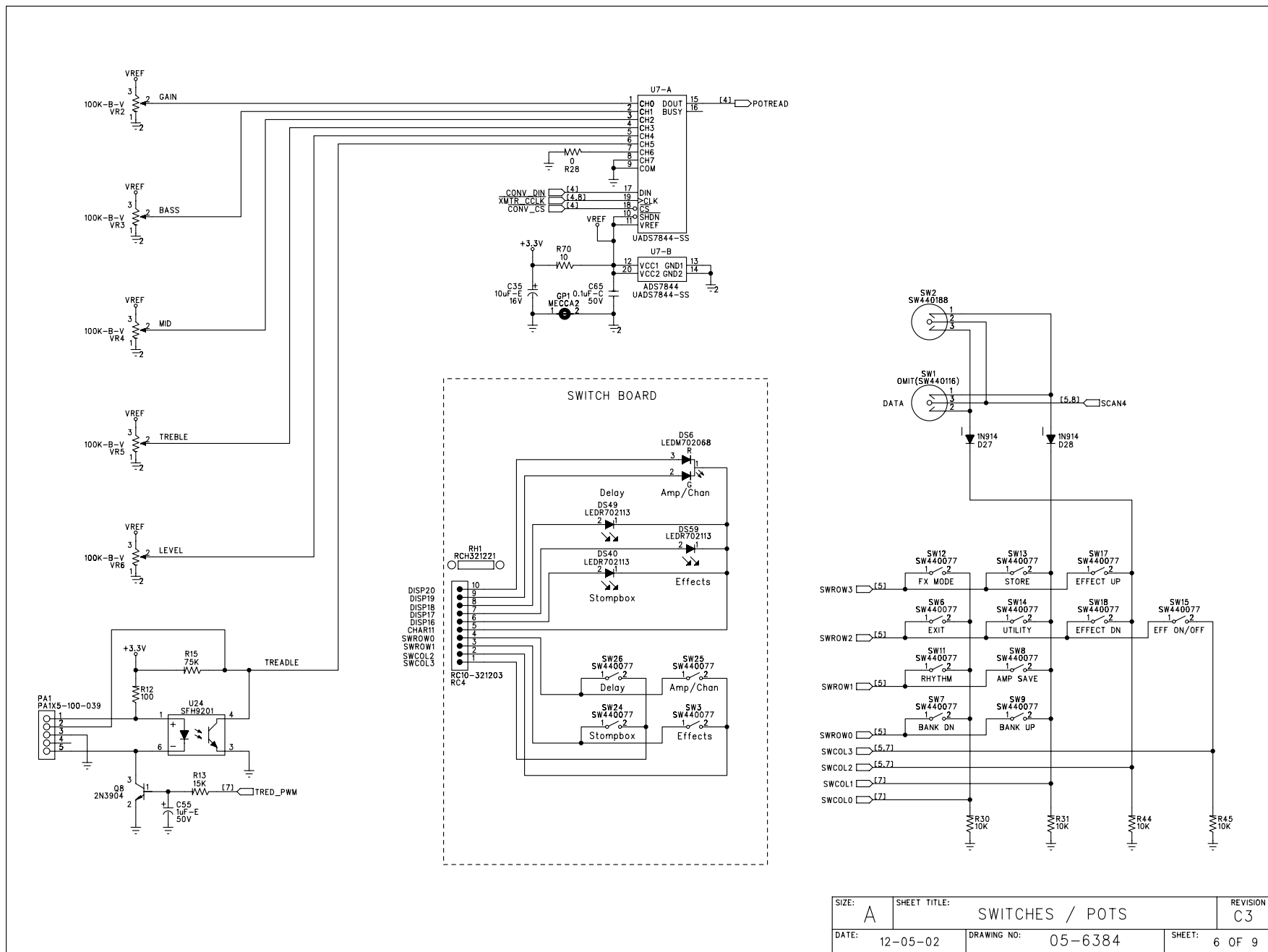


TO SWITCH BOARD

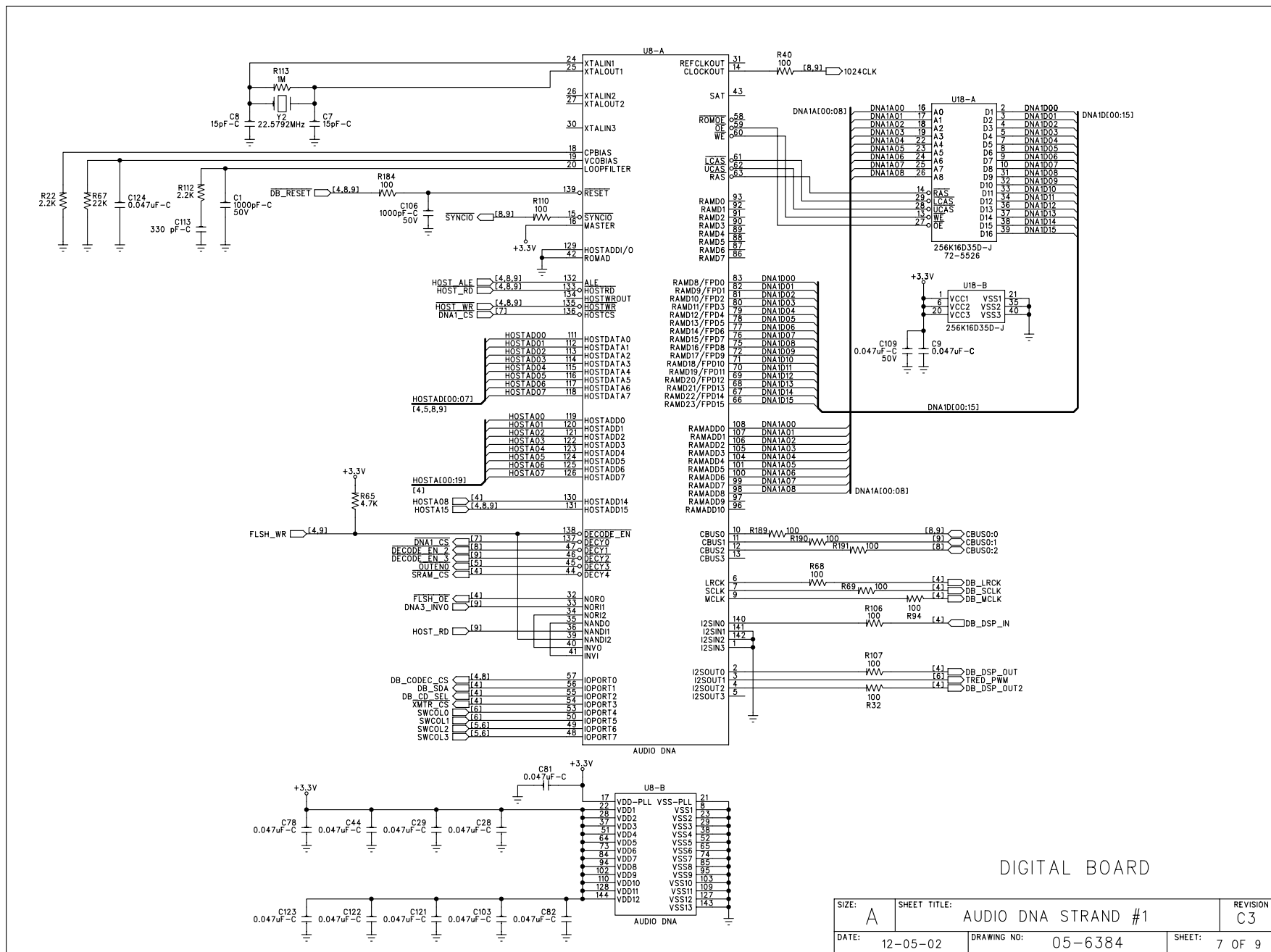
10	[5,8]	DISP20
9	[5,8]	DISP19
8	[5,8]	DISP18
7	[5,8]	DISP17
6	[5,8]	DISP16
5	[5,8]	CHAR11
4	[5,8]	SWROW0
3	[5,8]	SWROW1
2	[5,8]	SWCOL2
1	[6,7]	SWCOL3

PA4X10-079-039
PA4

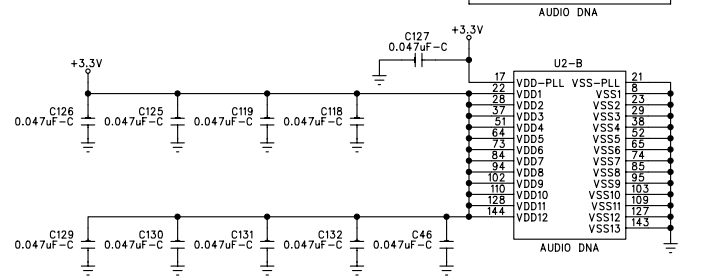
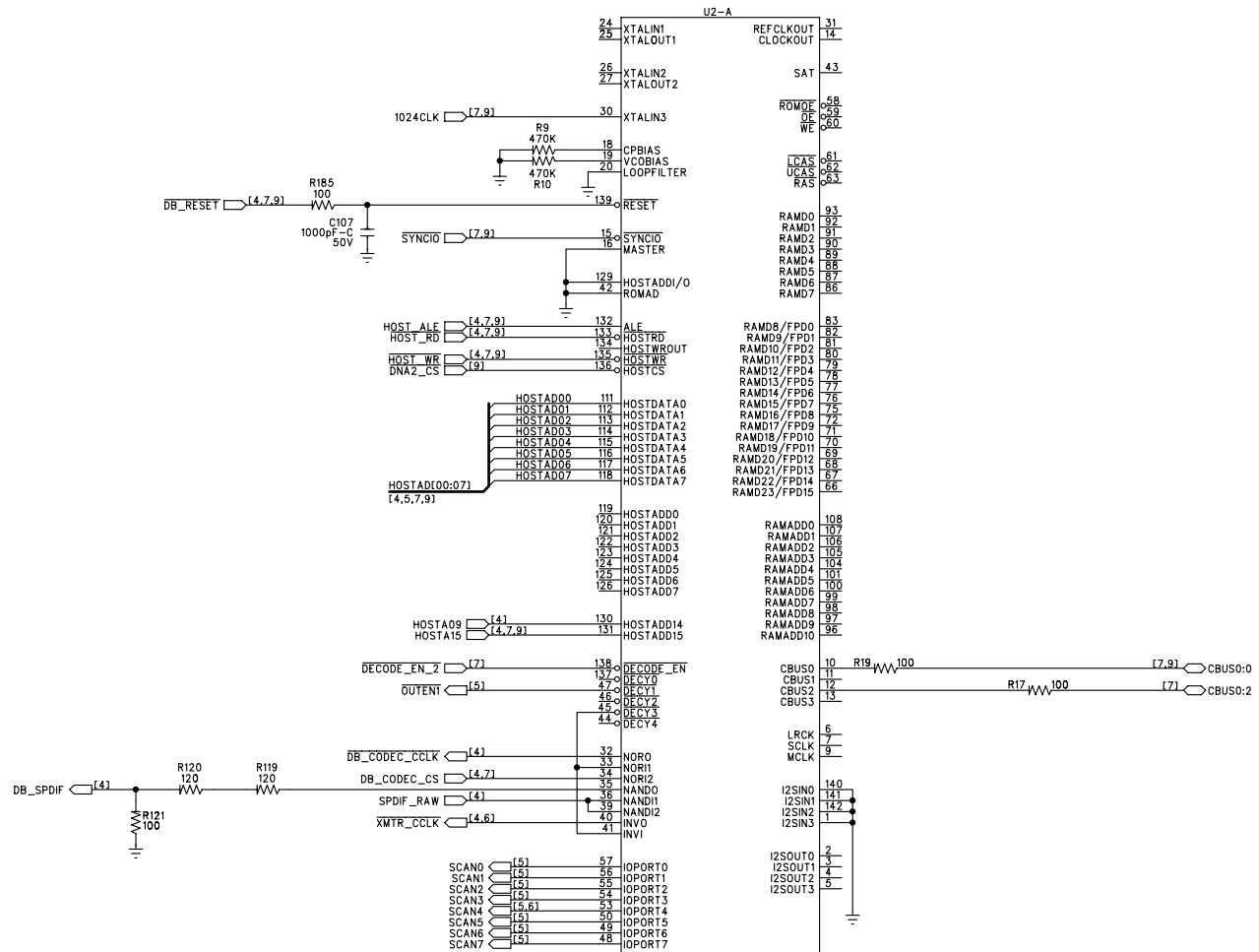
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DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 5 OF 9



SIZE: A	SHEET TITLE: SWITCHES / POTS	REVISION C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 6 OF 9

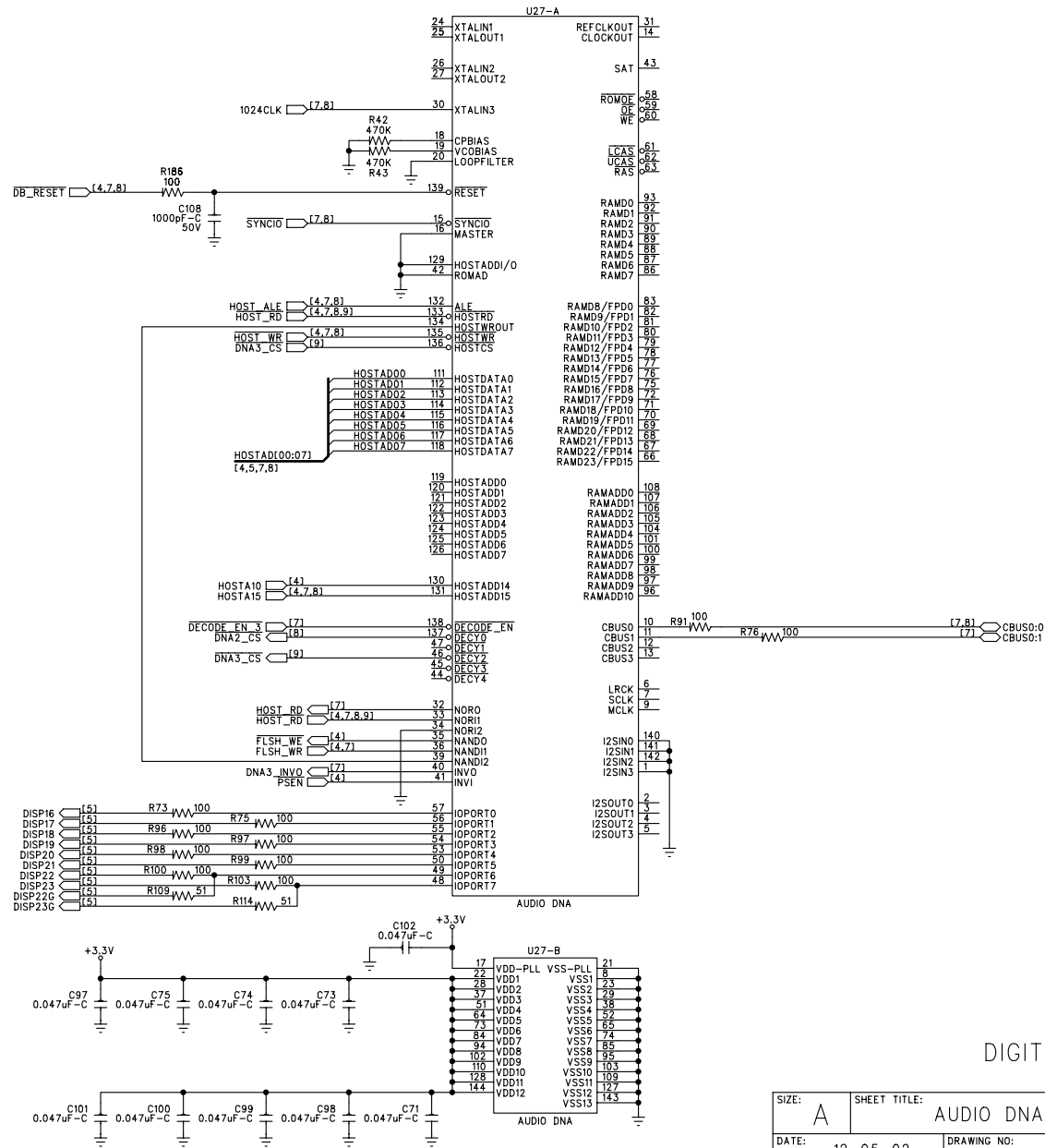


SIZE: A	SHEET TITLE: AUDIO DNA STRAND #1	REVISION: C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 7 OF 9



DIGITAL BOARD

SIZE: A	SHEET TITLE: AUDIO DNA STRAND #2	REVISION: C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 8 OF 9



DIGITAL BOARD

SIZE: A	SHEET TITLE: AUDIO DNA STRAND #3	REVISION: C3
DATE: 12-05-02	DRAWING NO: 05-6384	SHEET: 9 OF 9

Bill Of Materials for 056384C3.sch on Thu Dec 05 09:53:17 2002

Qty	Reference	HMG#	Description	Audit	Schematic Part	PCB Decal
1	PCB1	80-6384	PCB 80-6384 (GNX2)	PT2044	80XXXXYY	BARCODE
16	A9-22 A27-28	NON-PART	NON-PART, PCB ONLY, BREAKOFF PART	PT1481	BRKOFF	BRKOFF
2	C221-222	56-0026	CAP 0.0018uF FILM 100V 5% RF TA	PT2313	C0.0018UF100JR	RFDC200
2	C22 C58	56-3206	CAP 0.0022uF CER 50V 10% SM 0805 TA	PT2225	C0.0022UF50K0805	0805
8	C27 C228-230 C233-236	62-0002	CAP, 0.0022uF, FILM, 100V, 5%, RFCC200, AMMO	PT1001	C0.0022UF100JR	RFCC200
2	C104 C111	62-3144	CAP, 0.047uF, CER, 50V, 10%, 0805, T&R	PT1343	C0.047UC50J0805	0805
71	C3-6 C9-13 C15 C19 C21 C23 C28-29 C36 C41-44 C46-47 C49-50 C53 C62 C64 C71-79 C81-82 C84-85 C88 C91 C94-95 C97-103 C109 C114-115 C118-119 C121-127 C129-132 C217-218 C225-226	62-3129	CAP, 0.047uF, CER, 50V, 20%, 0805, T&R	PT1202	C0.047UC50M0805	0805
4	C24-26 C65	62-3139	CAP, 0.1uF, CER, 50V, 20%, 0805, T&R	PT1087	C0.1UC50M0805	0805
6	C1 C34 C105-108	62-3136	CAP, 1000pF, CER, 50V, 20%, 0805, T&R	PT1109	C1000PC50M0805	0805
2	C54 C60	60-0064	CAP, 1000uF, ELEC, 16V, 20%, LEAD LENGTH 5mm, REM200P, BULK	PT1334	C1000UE16MR	REM200P
3	C30 C39 C69	60-0094	CAP 1000uF ELEC 35V 20% 15mmLL BK	PT2425	C1000UE35MR2	REQ200PHT
3	C35 C83 C110	60-1071	CAP 10uF ELEC 16V 20% 4x5 0.1" LS TA	PT2197	C10UE16MR1	RED100P
5	C20 C31 C40 C61 C63	60-1074	CAP 10uF ELEC 50V 20% 105C 5 X 11 TA	PT1972	C10UE50MR1	REE200P
14	C56-57 C59 C67-68 C70 C86-87 C116-117 C219-220 C240-241	60-0051-01	CAP, 10uF, ELEC-NP, 16V, 20%, REE200, AMMO	PT1449	C10UN16MR	REE200
9	C16 C32 C45 C66 C89-90 C92-93 C96	62-3135	CAP, 120pF, CER, 50V, 5%, 0805, T&R	PT1440	C120PC50J0805	0805
4	C7-8 C37-38	62-3128	CAP, 15pF, CER, 50V, 5%, 0805, T&R	PT1106	C15PC50J0805	0805
3	C51-52 C227	60-0044-01	CAP, 1uF, ELEC, 50V, 20%, RED200P, AMMO	PT1079	C1UE50MR	RED200P
1	C55	60-1076	CAP 1uF EL 50V 20% GP 4x5R 2.5LS TA	PT2445	C1UE50MR1	RED100P
1	C14	60-0091	CAP 2200uF ELEC 16V 20%, 15mmLL BK	PT2424	C2200UE16MR1	REQ200PHT
5	C223 C231-232 C238-239	62-3138	CAP, 220pF, CER, 50V, 10%, 0805, T&R	PT1286	C220PC50K0805	0805
2	C17-18	62-3134	CAP, 22pF, CER, 50V, 5%, 0805, T&R	PT1107	C22PC50J0805	0805
1	C113	62-3131	CAP, 330pF, CER, 50V, 10%, 0805, T&R	PT1284	C330PC50K0805	0805
1	C224	62-3133	CAP, 470pF, CER, 50V, 10%, 0805, T&R	PT1086	C470PC50K0805	0805
2	C33 C48	62-3137	CAP, 68pF, CER, 50V, 5%, 0805, T&R	PT1285	C68PC50J0805	0805
13	D1 D7-10 D14-17 D23-26	70-0017	DIO, 1N4005, 600V, 1 AMP, RDB200, AMMO	PT1455	D1N4005-R	RDB200
9	D2-3 D6 D11-13 D18 D21-22	70-0113	DIO, MMBD4148SE, DUAL DIODE, 75V, 600mA, SOT-23, T&R	PT1326	D1N4148SE-S	SOT-23
6	D4-5 D19-20 D27-28	70-0110	DIO, 1N914, HIGH-SPEED SWITCHING, SOT-23, T&R	PT1004	D1N914-S	SOT-23
4	DS19 DS23 DS36-37	70-2069	DIS LTP3784 GRN DUAL 14 SEGMENT	PT2303	DS702069	DS14SEG2
1	DS20	70-2129	DIS RED DUAL 7-SEG DIP	PT2298	DS702129	DISPLAY18
1	F2	32-0024	FUSE, 2.5A, RESETTABLE FUSE, POLYSWITCH, BULK	PT1600	F2.5A320024	FUSE2
11	A1-8 A31-33	NON-PART	NON-PART, FIDUCIAL, TARGET FOR AUTO INSERTION	PT1271	FIDUCIAL	FIDUCIAL
1	PA2	OMIT	OMIT HDR 20 PIN 0.1" SPC 2 X 10 VERT MALE (32-1055)	PT2179	HDR321055-0	HC102
1	PA3	OMIT	OMIT HDR 14 PIN 0.1" SPC 2 X 7 VERT MALE (32-1083)	PT2127	HDR321083-0	HC72
1	J6	32-0089	JACK POWER BARREL JACK 2.5MM	PT1918	J320089	J320089
1	J4	32-0094	CON JACK 1/8" PHONE INS HZ MT	PT2443	J320094	J320094
2	J8-9	32-0116	CON JACK SHIELDED 5 PIN DIN PCB MOUNT	PT2370	J320116	J320116
4	J11-14	32-0119	CON, JACK, 1/4 PHONO, FULL NOSE THREAD, SLIMLINE	PT1359	J320119	J320119
1	J3	32-0179	CON JACK XLR R/A PCA A SERIES	PT2808	J320179	XLRF-1
1	J1	32-3221	CON JACK RCA SINGLE W/SHIELD HSP-241V2B	PT2327	J323221	JHSP-241V2
1	K1	72-5142	RELAY, DPDT, 24VDC POLARIZED	PT1384	K725142	K725142
1	LBL1	30-0121	LABEL BARCODE AUTOINSERTABLE RAW	PT2790	LABEL300121	LABEL300121
1	DS41	70-3207	LED GREEN D1206 T&R	PT1902	LEDG703207	D1206
6	DS1-5 DS7	70-1920	LED RED/GRN WT/DIF SM 1210 TA	PT2428	LEDM701920	LED1210
1	DS6	70-2068	LED, BI-CLR, RED/GRN, COMMON CATHODE, T-1	PT1568	LEDM702068	RL3E079
3	DS40 DS49 DS59	70-2113	LED, RED, T1, RADIAL, AMMO	PT1058	LEDR702113	RLC100
17	DS25 DS27-29 DS31 DS38-39 DS42-43	70-3209	LED RED D1206 T&R	PT1901	LEDR703209	D1206

2	DS91-98							
2	DS24 DS46	OMIT	OMIT LED RED T1 RADIAL AMMO (70-2113)		PT2492	LED702113-0	RLC100	
1	DS26	OMIT	OMIT LED RED D1206 T&R (70-3209)		PT2493	LED703209-0	D1206	
5	L2-3 L7 L12 L23	26-0215	IND, FERRITE BEAD, 70 OHM @ 100MHZ , RIC200, AMMO		PT1262	LFB260215	RIC200	
10	L1 L6 L16 L19	26-0217	IND, FERRITE BEAD, 2.5K OHM @ 70MHz, 0805, T&R		PT1261	LFB260217	0805	
	L21-22 L24 L27-29							
13	L4-5 L8-11 L14-15	26-0219	INDUCTOR, FERRITE BEAD, 600 OHM @ 100MHZ, 0805, T&R		PT1453	LFB260219	0805	
	L17-18 L20 L25-26							
2	GP1-2	NON-PART	NON-PART MECCA GND/PWR TIE POINT 2 POS		PT2480	MECCA2	MECCA2	
19	MH3-20 MH28	NON-PART	NON-PART, MOUNTING HOLE, 0.130" NON-PLATED, #4		PT1242	MH130	MH130	
4	MH21-23 MH29	NON-PART	NON-PART, MOUNTING HOLE, 0.156" NON-PLATED,#6		PT1044	MH156	MH156	
2	MH1-2	NON-PART	NON-PART, TOOLING PIN HOLE, 156MIL HOLE		PT1416	MH156-TOOL	MH156-TOOL	
1	J10	32-0177	CON PLUG XLR R/A PCA A SERIES		PT2807	P320177	XLRM-1	
3	PA4-6	NON-PART	NON-PART, PAD ARRAY, 10 PIN, 2mm SPACING, 0.039" HOLE		PT1548	PA1X10-079-039	PA1X10-079-039	
1	PA1	NON-PART	NON-PART, PAD ARRAY, 5 PIN, 0.100" SPACING, 0.039" HOLE		PT1547	PA1X5-100-039	PA1X5-100-039	
2	Q13 Q25	70-1155	XSTR, 2N6714, NPN, MEDIUM POWER, RADIAL		PT1595	Q2N6714	TO92(EBC)-V	
2	Q24 Q26	70-1156	XSTR, 2N6726, PNP, MED POWER TRANSISTOR, TO92(EBC)-V, AMMO		PT1534	Q2N6726	TO92(EBC)-V	
17	Q1-3 Q5 Q8-12 Q14	70-1058	XSTR, 2N3904, NPN, SOT-23, T&R		PT1203	Q2N3904-S	SOT-23	
	Q19-21 Q27-30							
2	Q4 Q18	70-1059	XSTR, 2N3906, PNP, SOT-23, T&R		PT1057	Q2N3906-S	SOT-23	
6	R1 R28 R71 R117	50-1531	RES 0 5% 1/10W SM 0805 TA		PT1099	R0-C5-0805	0805	
	R143 R147							
4	R4 R115-116 R144	OMIT	OMIT RES 0 5% 1/10W SM 0805 TA (50-1531)		PT1006	R0-C5-08050	0805	
1	R187	50-0317	RES 0 5% 1/4W CF RR TA		PT1008	R0-E5-R	RRA200	
2	R11 R79	OMIT	OMIT RES 0 5% 1/4W CF RR TA (50-0317)		PT1596	R0-E5-RO	RRA200	
6	R33-34 R46-47 R70	50-1500	RES 10 5% 1/10W SM 0805 TA		PT1309	R10-C5-0805	0805	
	R111							
50	R7 R12 R17 R19 R27	50-1515	RES 100 5% 1/10W SM 0805 TA		PT1018	R100-C5-0805	0805	
	R29 R32 R37 R40							
	R48-58 R68-69							
	R72-73 R75-76 R91							
	R94 R96-100 R103							
	R106-107 R110 R121							
	R134 R141 R181							
	R183-186 R189-191							
	R227 R247							
1	R8	OMIT	OMIT RES 100 5% 1/10W SM 0805 TA (50-1515)		PT1411	R100-C5-08050	0805	
1	R90	50-1504	RES 100K 5% 1/10W SM 0805 TA		PT1096	R100K5-0805	0805	
17	R16 R30-31 R36	50-1503	RES 10K 5% 1/10W SM 0805 TA		PT1095	R10K5-0805	0805	
	R44-45 R104-105							
	R158-159 R175 R178							
	R292 R297-298							
	R311-312							
1	R80	OMIT	OMIT, RES, 10K OHM, 5%, 1/10W, 0805, T&R (50-1503)		PT1304	R10K5-08050	0805	
2	R119-120	50-1534	RES 120 5% 1/10W SM 0805 TA		PT1367	R120-C5-0805	0805	
6	R13 R177 R301 R308	50-1516	RES 15K 5% 1/10W SM 0805 TA		PT1019	R15K5-0805	0805	
	R315-316							
4	R132 R148 R154 R156	50-1505	RES 1K 5% 1/10W SM 0805 TA		PT1010	R1K5-0805	0805	
2	R3 R113	50-1506	RES 1M 5% 1/10W SM 0805 TA		PT1011	R1MC5-0805	0805	
2	R22 R112	50-1529	RES 2.2K 5% 1/10W SM 0805 TA		PT1127	R2.2K5-0805	0805	
4	R81 R93 R294-295	50-1510	RES 200 5% 1/10W SM 0805 TA		PT1013	R200-C5-0805	0805	
2	R179 R207	50-1507	RES 20K 5% 1/10W SM 0805 TA		PT1098	R20K5-0805	0805	
1	R67	50-1522	RES 22K 5% 1/10W SM 0805 TA		PT1126	R22K5-0805	0805	
6	R61-62 R64 R66 R172	50-1508	RES 2K 5% 1/10W SM 0805 TA		PT1278	R2K5-0805	0805	
	R293							
9	R170 R291 R296	50-1525	RES 3.3K 5% 1/10W SM 0805 TA		PT1097	R3.3K5-0805	0805	
	R299-300 R309-310							
	R313-314							
3	R74 R102 R271	50-1517	RES 330 5% 1/10W SM 0805 TA		PT1020	R330-C5-0805	0805	
5	R38 R59 R87-89	50-1512	RES 33K 5% 1/10W SM 0805 TA		PT1015	R33K5-0805	0805	
10	R2 R6 R14 R23-24	50-1509	RES 4.7K 5% 1/10W SM 0805 TA		PT1012	R4.7K5-0805	0805	
	R60 R65 R167 R182							
	R188							
16	R20-21 R25-26 R35	50-1518	RES 470 5% 1/10W SM 0805 TA		PT1021	R470-C5-0805	0805	
	R39 R41 R63 R82-86							
	R92 R95 R169							
12	R9-10 R42-43 R133	50-1523	RES 470K 5% 1/10W SM 0805 TA		PT1025	R470K5-0805	0805	

	R155 R163-166 R168						
9	R171		RES 47K 5% 1/10W SM 0805 TA		PT1009	R47KC5-0805	0805
3	R160-162 R302-307	50-1502	RES 51 5% 1/10W SM 0805 TA		PT1279	R51-C5-0805	0805
1	R108-109 R114	50-1524	RES 7.5K 5% 1/10W SM 0805 TA		PT1024	R7.5KC5-0805	0805
2	R101	50-1521	RES 750 5% 1/10W SM 0805 TA		PT1029	R750-C5-0805	0805
1	R77-78	50-1530	RES 75K 5% 1/10W SM 0805 TA		PT1023	R75KC5-0805	0805
1	R15	50-1520	RBN CBL 10 COND 2mm SPC 2" LONG		PT2392	RC10-321203	PA1X10-079-039
2	RC4	32-1203	RIBBON CABLE, 10 COND., 2mm SPACING, 8" LONG		PT1598	RC10-321205	PA1X10-079-039
2	RC3 RC5	32-1205	RIBBON CABLE HOLDER, 10 PIN, 2mm PITCH		PT1604	RCH321221	RCH10-079
6	RH1 RH4-5 RH7	32-1221					
	RH9-10						
1	SW5	44-0013	SWITCH PWR ROCKER DPST DA250VAC		PT2394	SW440013	SW440013-AL1
15	SW3 SW6-9 SW11-15	44-0077	SWITCH, SPST, TACT, RADIAL		PT1612	SW440077	SW440077
	SW17-18 SW24-26						
1	SW2	44-0188	ENCODER 12mm 24 DTNT 20mm SHAFT VERT		PT2661	SW440188	SW440188
1	SW1	OMIT	OMIT ENCODER ROT 20mm VERT 24 DTNT LONG SHFT (44-0116)		PT2725	SW440116-0	SW440116
1	U3	70-4014	V-REG, 7805, +5V, 1.5 AMP, TO-220		PT1591	U7805	TO220(IGO)-V
1	U15	70-4013	V-REG, 7812, +12V, 1 AMP, TO-220		PT1646	U7812	TO220(IGO)-V
1	U19	70-4017	V-REG, 7912, -12V, 1 AMP, TO-220		PT1654	U7912	TO220(GIO)-V
1	U18	72-5526	IC DRAM CMOS 256K x 16 35ns SOJ40-400		PT1923	U256K16D35-J	SOJ40-400
1	U12	72-6318	IC 32K x 8 SRAM 15ns SOJ28		PT2294	U32K8S15-J	SOJ28-300
1	U43	70-2146	IC, 6N138, OPTO ISOLATOR, DIP8-300-S		PT1492	U6N138-S1	DIP8-300-S
1	U38	72-0087	IC, 74HC4053, MUX, TRIPLE 2 CHANNEL ANALOG, SO16		PT1566	U74HC4053-S	SO16
2	U14 U21	72-1263	IC, 74HC574, FLIP-FLOP, EDGE TRIGGERED, OCTAL, SO20W, T&R		PT1352	U74HC574-S	SO20W
1	U46	70-4127	REG, 79L05, -5V, 100ma, 3-TERMINAL NEGATIVE, TO-92, AMMO		PT1651	U79L05	TO92(GIO)-V
1	U7	72-5540	IC ADS7844 12-BIT ADC 8CH MUX 3.3V SSOP20		PT2315	UADS7844-SS	SSOP20
3	U2 U8 U27	72-5433	IC AUDIO DNA ATMEL QFP-144		PT2374	UAUDIODNA	QFP144-20x20
1	U44	70-4146	V-REG +3.3V Low Dropout 1 AMP TO-220		PT2261	UBA033T/FP	TO220(IGO)-V
1	U23	72-1470	IC, CS4224, 24 BIT CODEC CONVERTER, SSOP28		PT1483	UCS4224-SS	SSOP28
1	U11	72-6317	IC CS8405A 96kHz DIGITAL AUDIO INTERFACE XMITTER		PT2449	UCS8405A-S	SO28W
1	U1	72-6308	IC NCP304 VOLTAGE DETECTOR SC-82AB		PT2393	UNCP304	SC-82AB
5	U6 U9 U25 U35 U41	72-1480	IC, NJM4580, DUAL OP-AMP, SO8		PT1374	UNJM4580-S	SO8
1	U17	72-6306-01V1	IC TE28F00B3T110 8 MEG FLASH GNX2 V1		PT2430	UP726306	TSOP48
1	U5	72-6322-02V1	IC W78LE52 8 BIT MCU 3.3V 24MHZ MTP GENETX		PT2439	UP726322	PLCC-44
1	U24	70-3169	IC SFH9201 REFLECTIVE INTERRUPTER SM SO6		PT2333	USFH9201-S	SO6-1
1	U49	72-1450	IC, TL074, OP-AMP, QUAD, JFET, -INPUT, SO14, T&R		PT1049	UTL074-S	SO14
5	VR2-6	40-0081	POT 100K B 9mm ROT 300Deg 25mm D-SFT-V		PT2411	VR100K400081	VR9-25DV
1	VR7	40-2162	POT 20K B DUAL 14mm ROT 25mm D-SHAFT		PT2476	VR20K402162	VR14-25DH
4	WA2 WA5-7	28-0187-A	WASHER, GROUNDING FOR 32-0118/32-0119		PT1361	WA280187A	WA280187A
1	Y2	76-0316	XTAL, 22.5792MHZ, 18pF, LOW PROFILE, HC-49, T&R		PT1479	Y22.5792M760316	XTALV
1	Y1	76-0202	XTAL 24.000MHZ METAL CAN SURFACE MOUNT T&R		PT1928	Y24.000M760202	XTAL2-V