

TOOLING

GSP 2101

Install 851-SS1D On Solder Side
Install 8811-SS13 On Comp Side

TOOLING
C8221
H81

DIGITECH
GSP 2101
REVISION F

Install PPC Card Here

ED -> Output DCB

Install H12A on Solder Side

SS1

DANGER!
High Voltage + BR3

H89 Soldered to U89 and DCB

Route This section
No Break Always

REPLACE WITH
CIRCUITRY
OR
EQUIVALENT

BTT

User Interface PCB

H3A
Install H3A On Solder Side

H5A

D41
PA2
C88
C89
C90
C91
C92
C93
C94
C95
C96
C97
C98
C99
C100

H2A
H2B
H2C
H2D
H2E
H2F
H2G
H2H
H2I
H2J
H2K
H2L
H2M
H2N
H2O
H2P
H2Q
H2R
H2S
H2T
H2U
H2V
H2W
H2X
H2Y
H2Z

H3B
H3C
H3D
H3E
H3F
H3G
H3H
H3I
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H3S
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H4A
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H5O
H5P
H5Q
H5R
H5S
H5T
H5U
H5V
H5W
H5X
H5Y
H5Z

Power PCB

D71

SS8

H1

H2
H3
H4
H5
H6
H7
H8
H9
H10
H11
H12
H13
H14
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H90
H91
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H93
H94
H95
H96
H97
H98
H99
H100

Install H2, H5, H7
On Solder Side

Encoder PCB

Install H6A On
Solder Side

Input Level PCB

Install H8A On
Component Side

D7

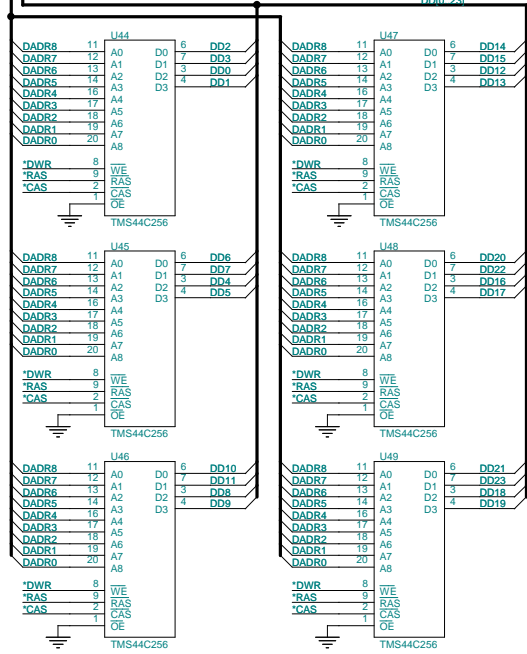
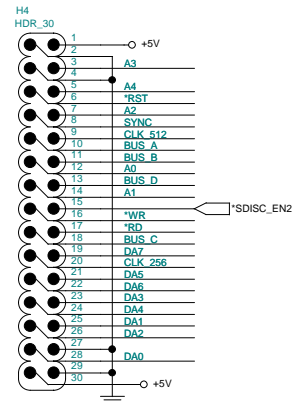
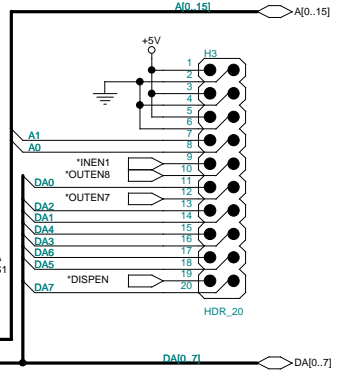
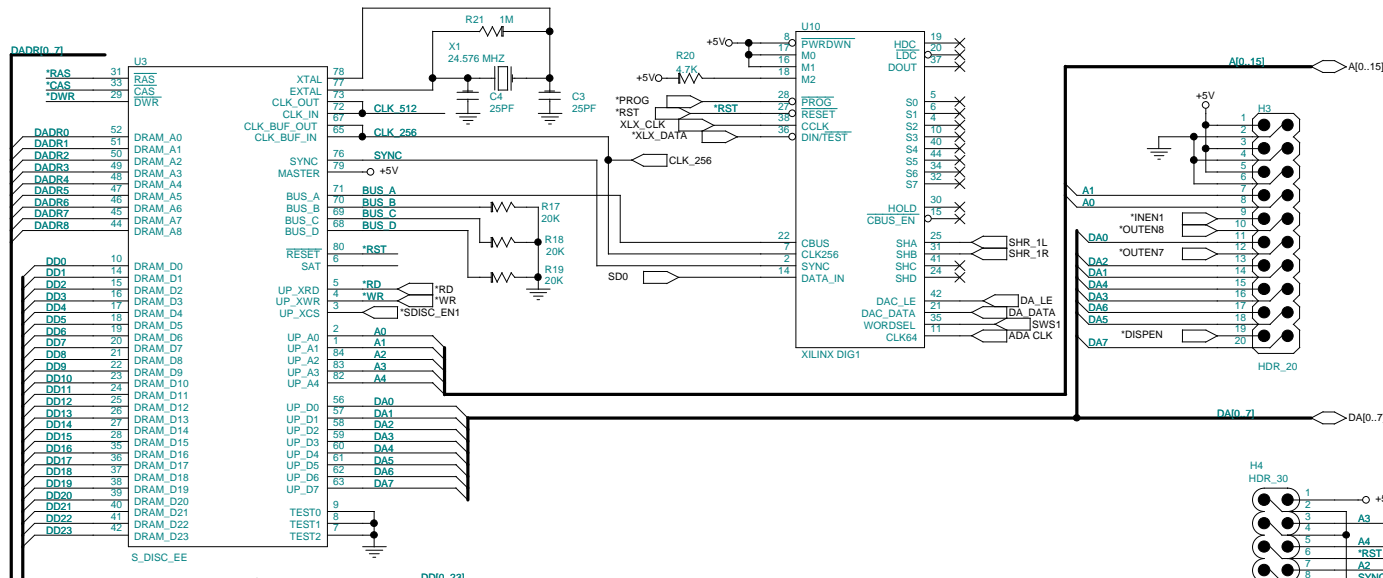
H8A

SS10

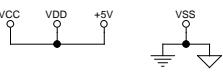
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H99
H100

R222B 240U
R222B 230U
R223D 117U
R224D 100U

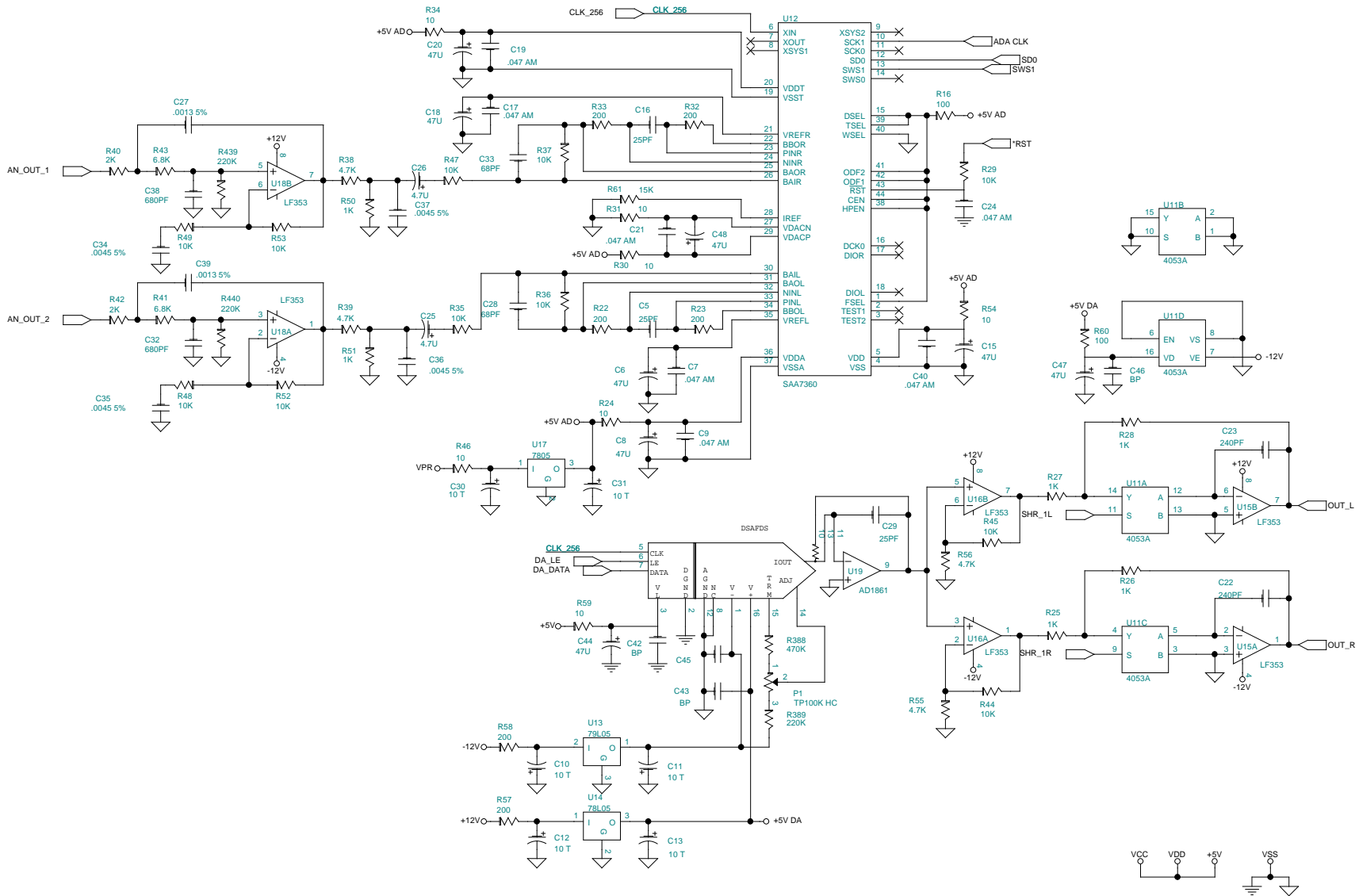
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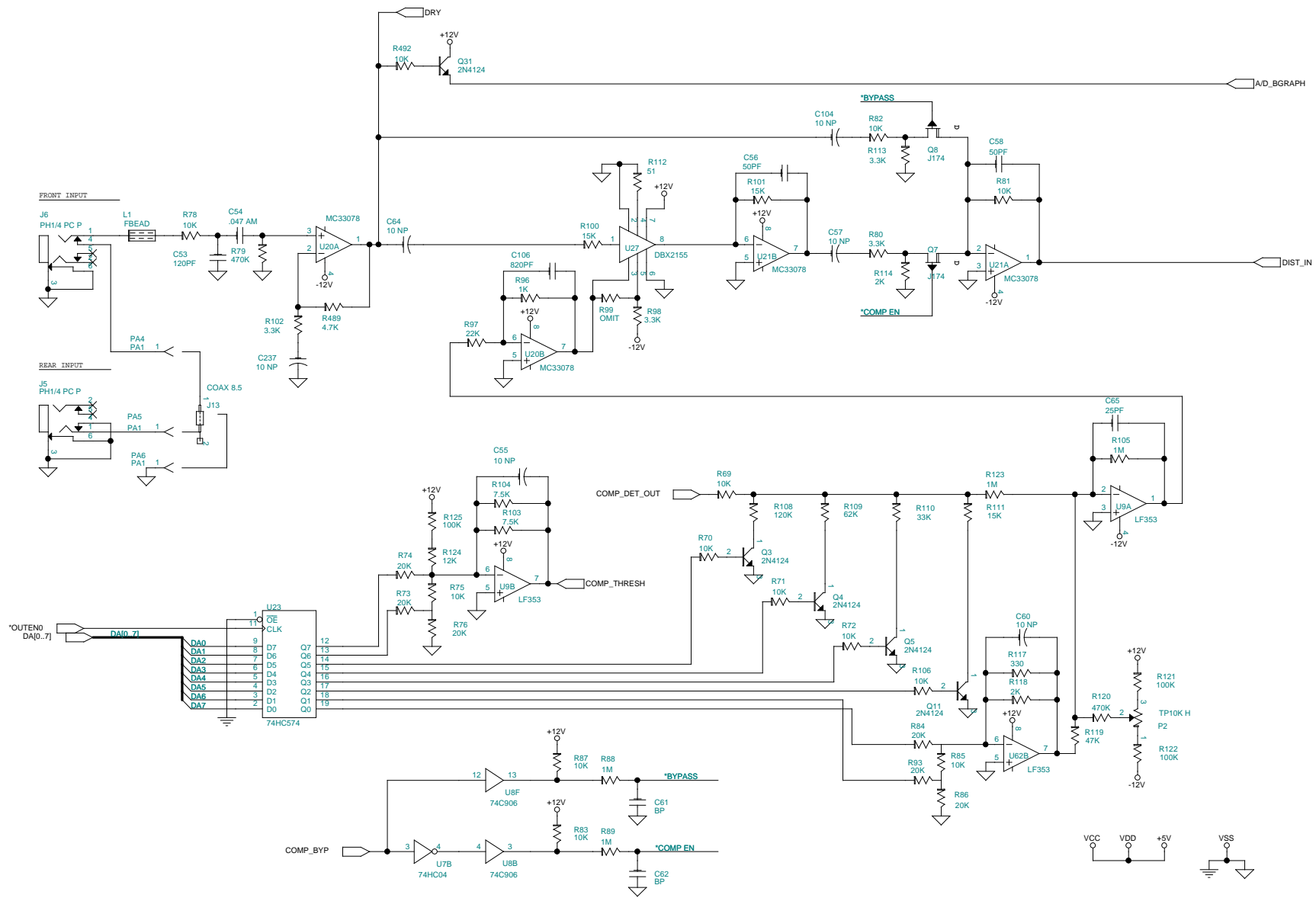
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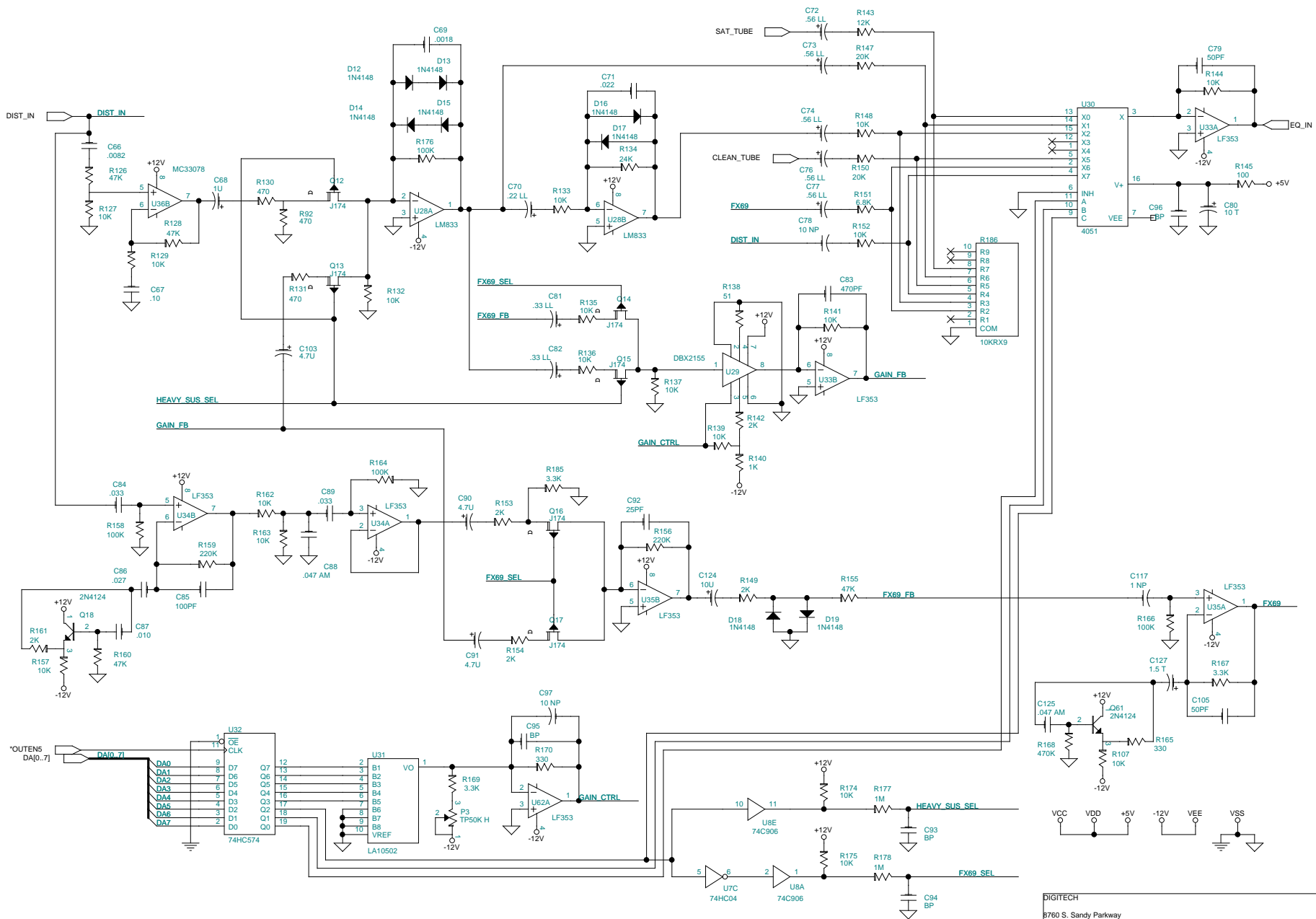
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Size B	Document Number 115029A0.001
Date: Wednesday, April 05, 2000	Sheet 1 of 13
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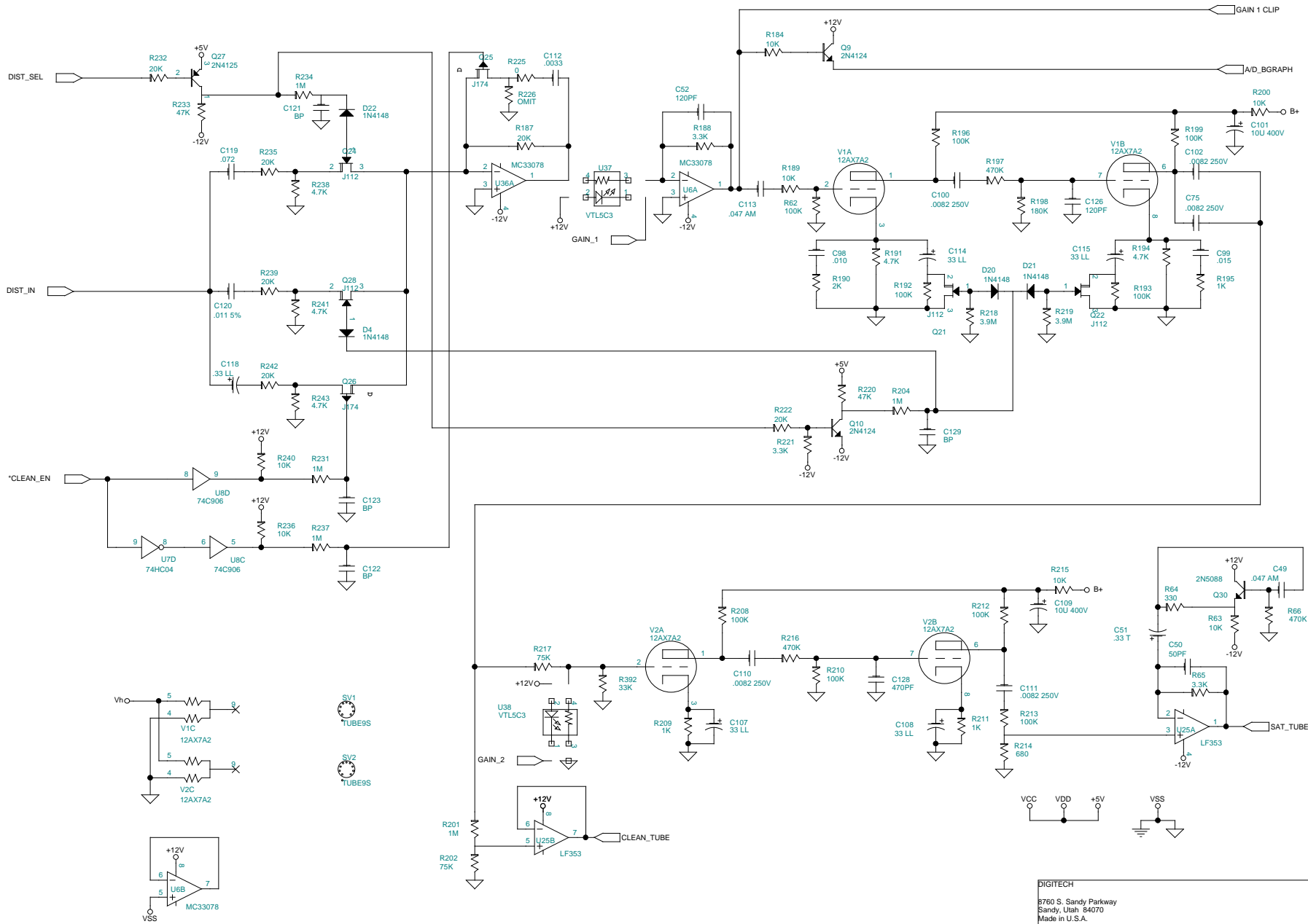
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Date: Wednesday, April 05, 2000	Sheet 2 of 13
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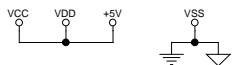
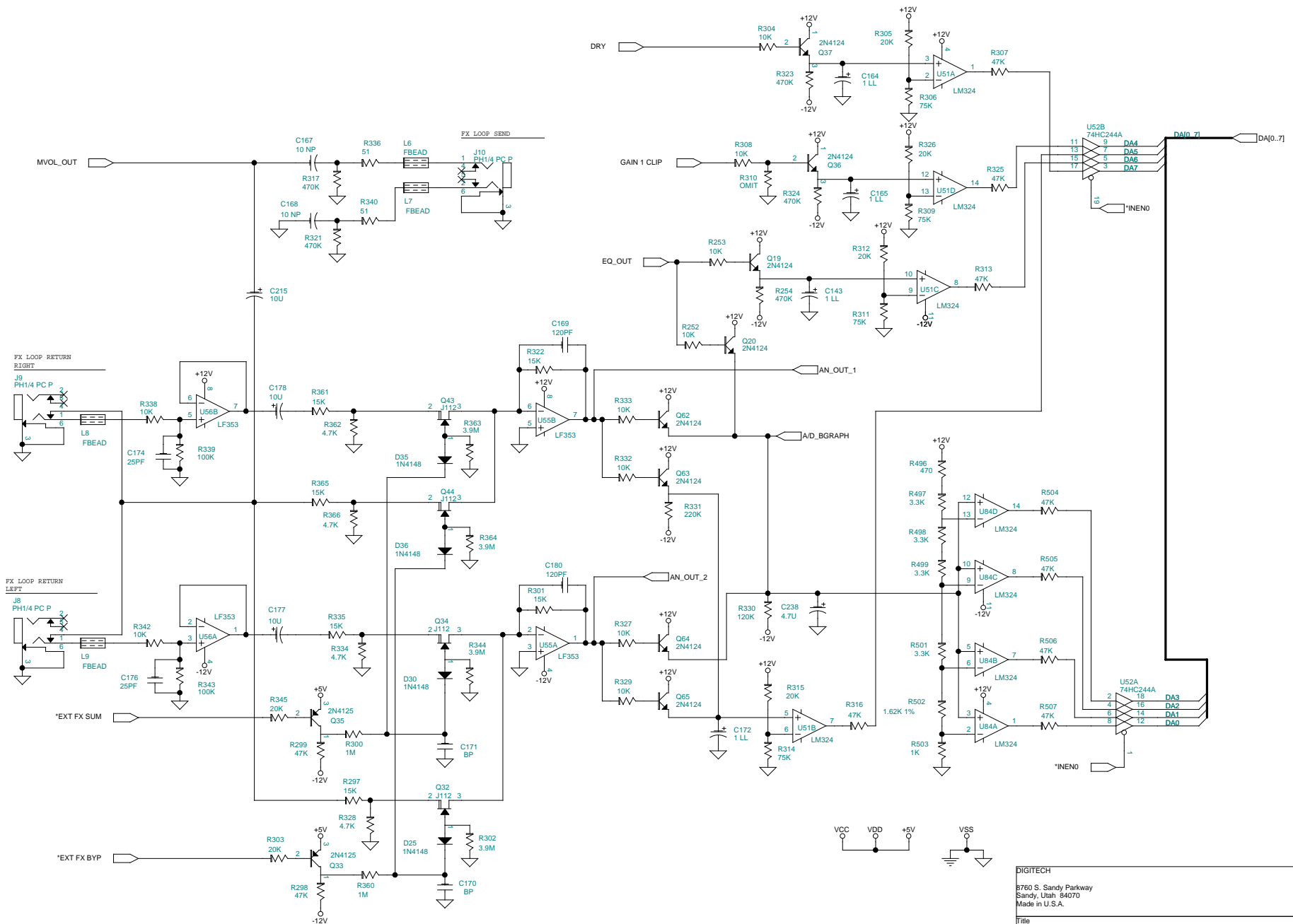
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Size B	Document Number 115029A0.003
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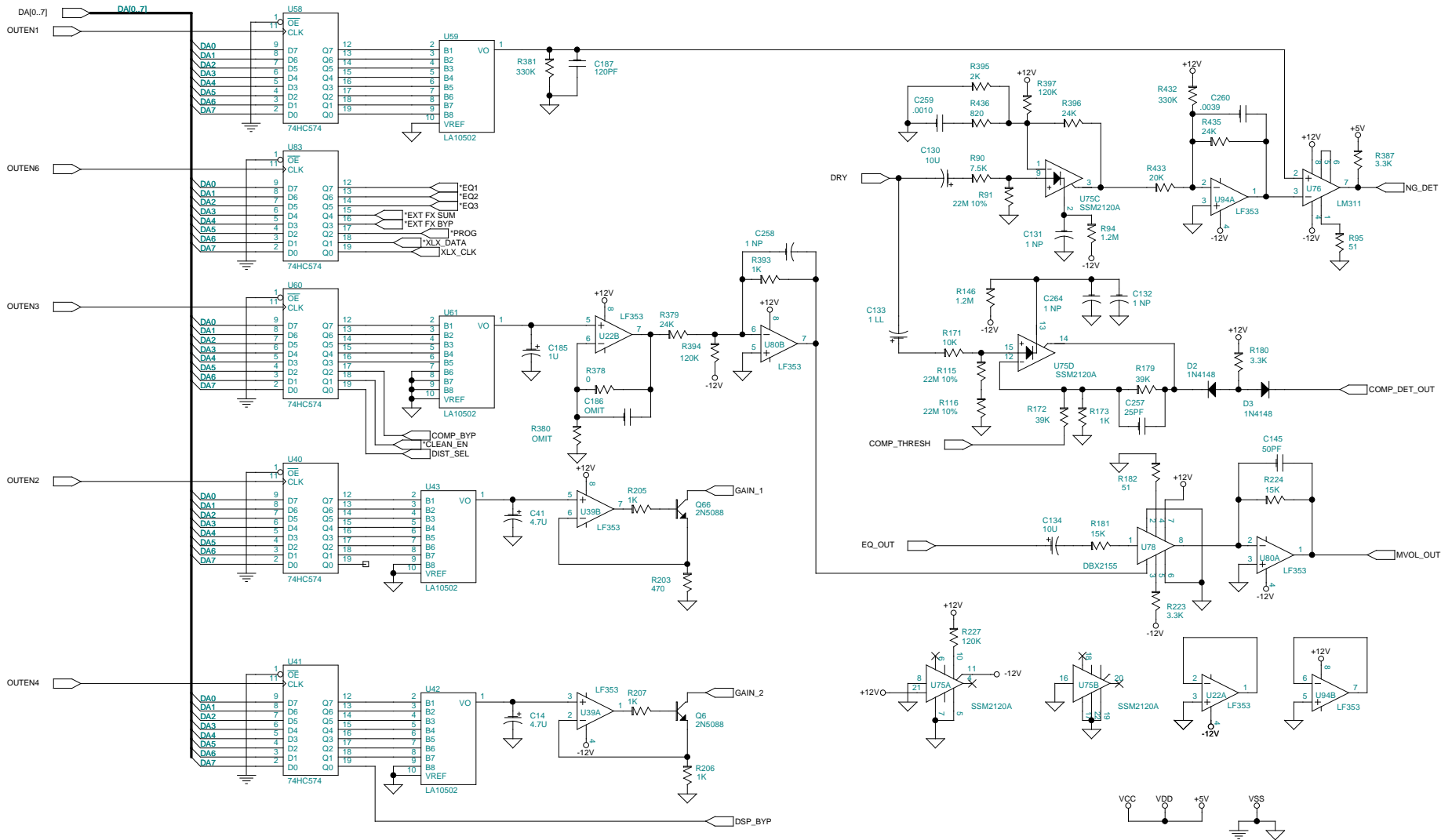
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Size B	Document Number 115029A0.004	Rev A0
Date: Wednesday, April 05, 2000	Sheet 4 of 13	



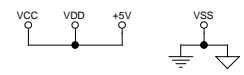
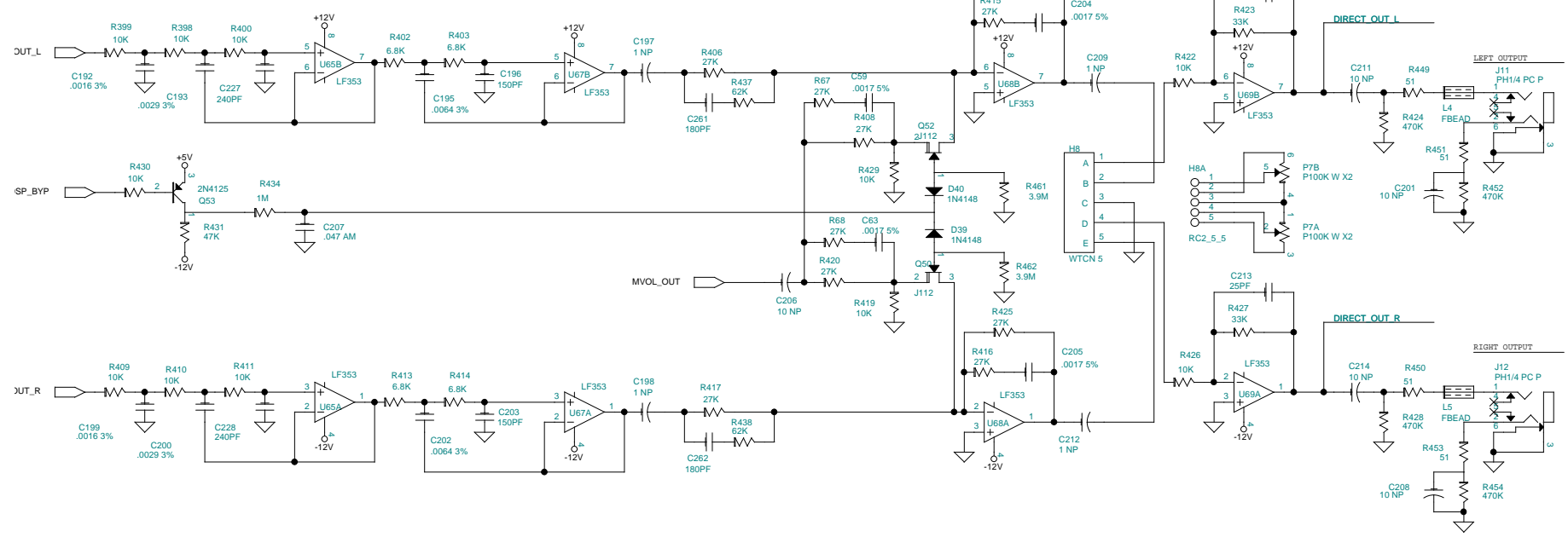
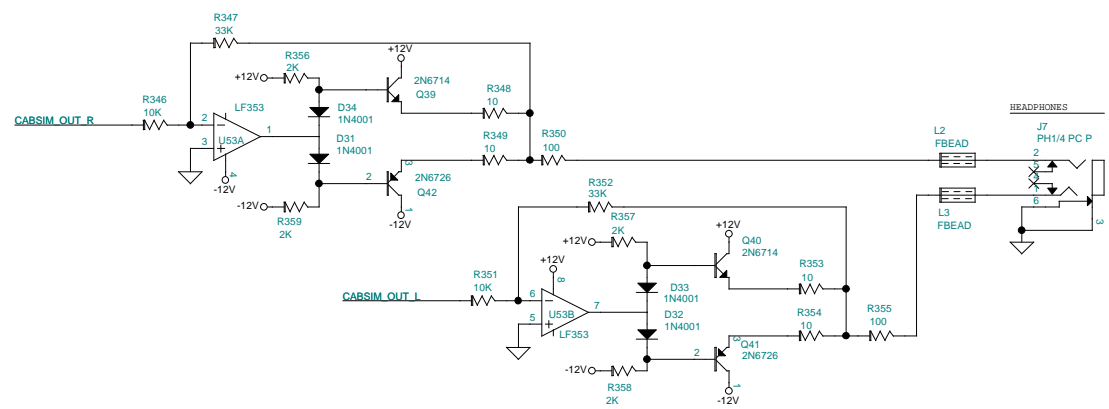
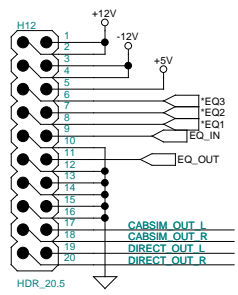
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Size B	Document Number 115029A0.005
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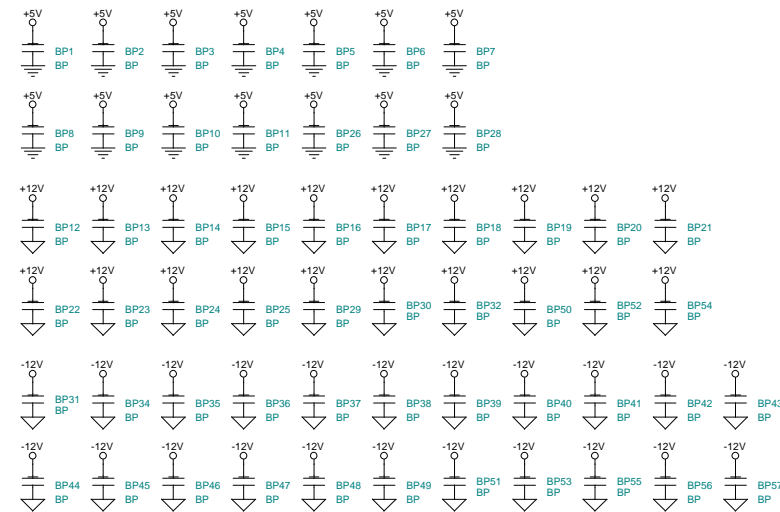
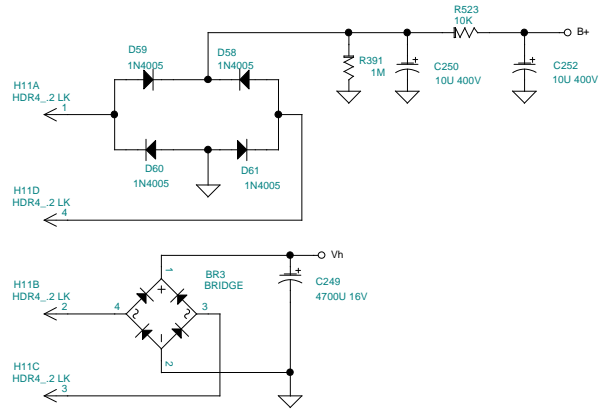
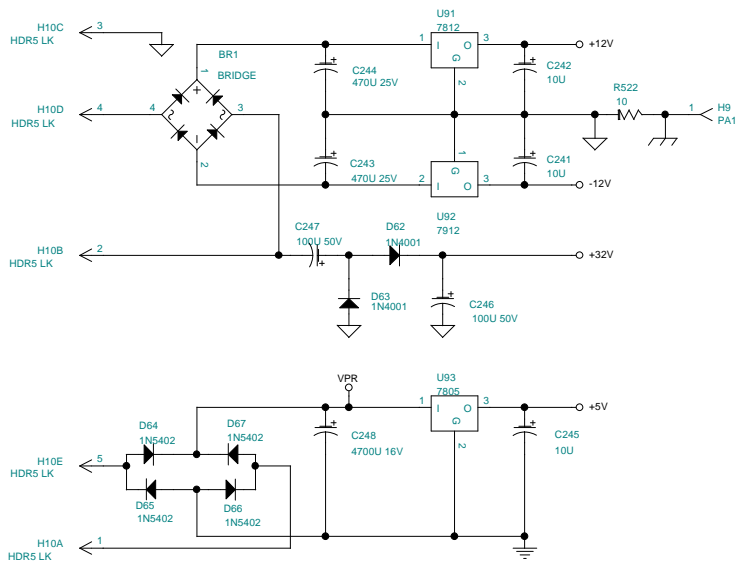
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Size B	Document Number 115039A0.006
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Size B	Document Number 115029A0.007	Rev A0
Date: Wednesday, April 05, 2000	Sheet 7 of 13	

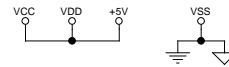
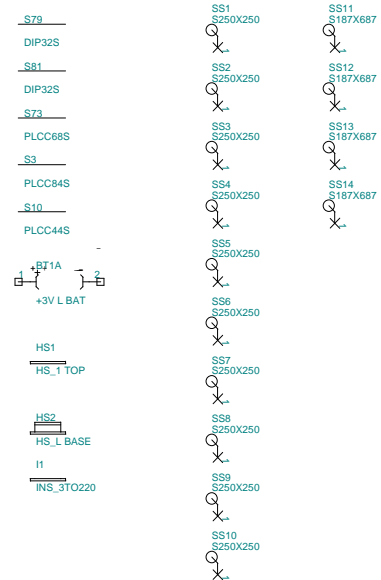


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Size B	Document Number 115029A0.008
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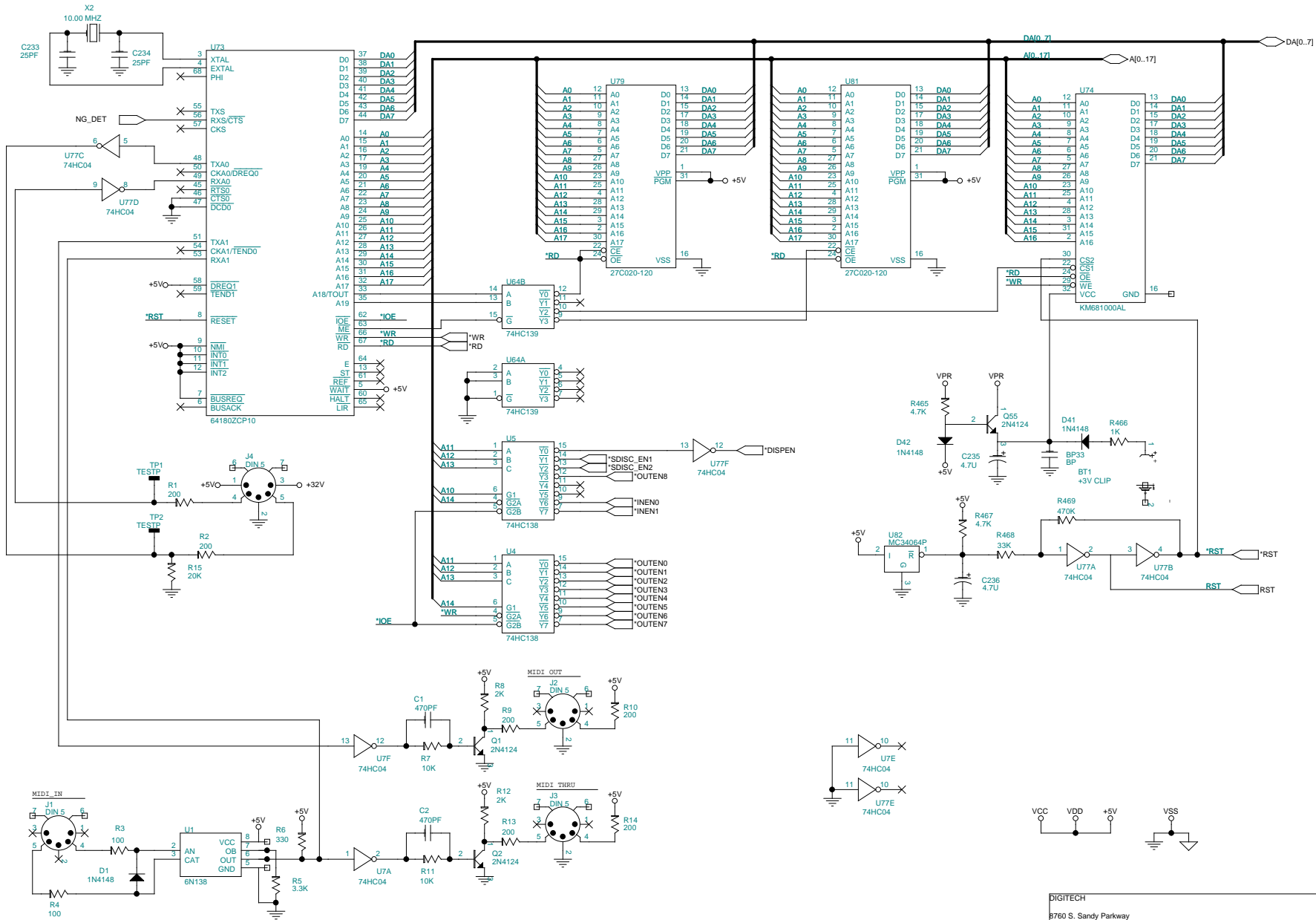


NOT USED
 BR2
 D5-11, 23-24
 D26-29, 37-38
 D55-57
 H13-88
 P5, 6
 Q38, 45-49
 Q51, 54
 R444-448, 455-458
 R463-464, 490-491
 R493-495, 500
 R508-519

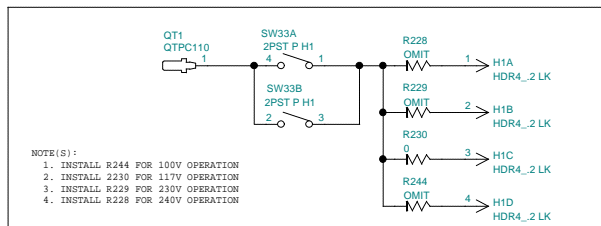
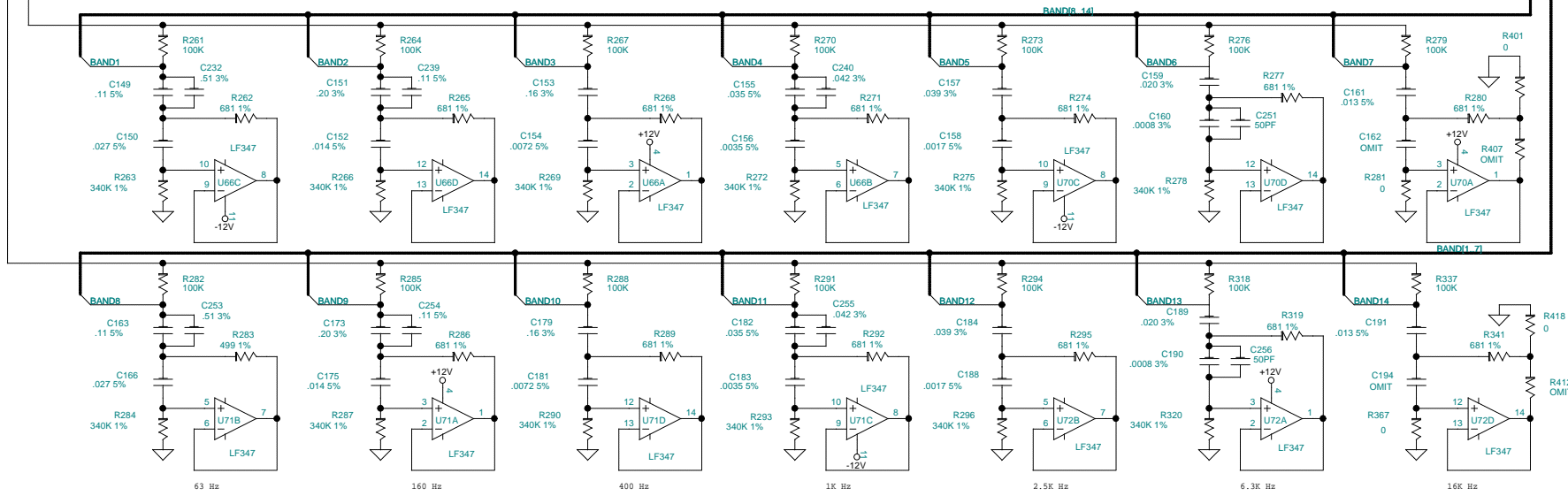
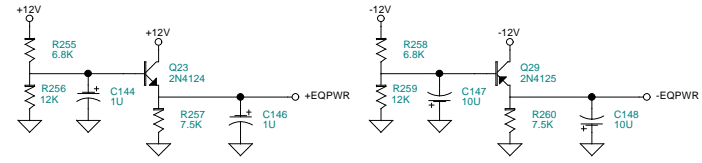
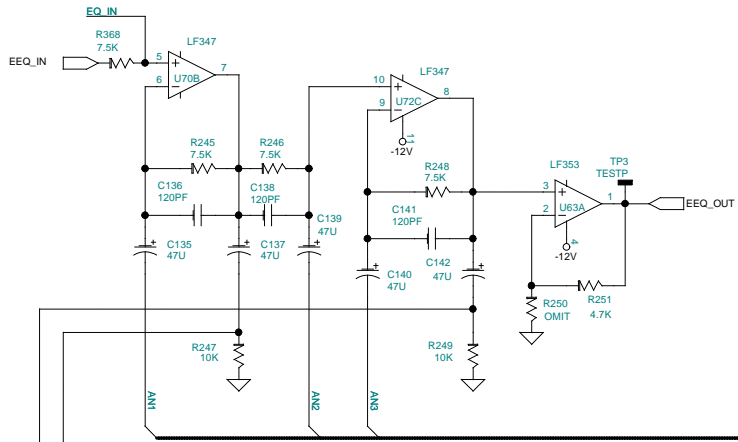
LAST REF.
 BP61
 BR3
 BT1
 C264
 D67
 H89
 J15
 P7
 Q66
 R523
 SW34
 TP3
 U94
 V2
 X2



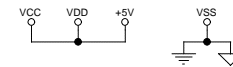
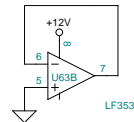
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Size B	Document Number 115029A0.009
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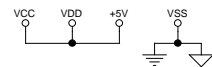
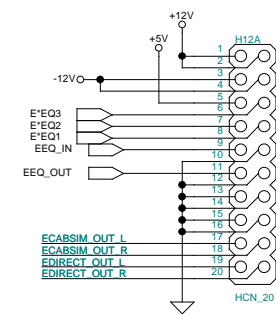
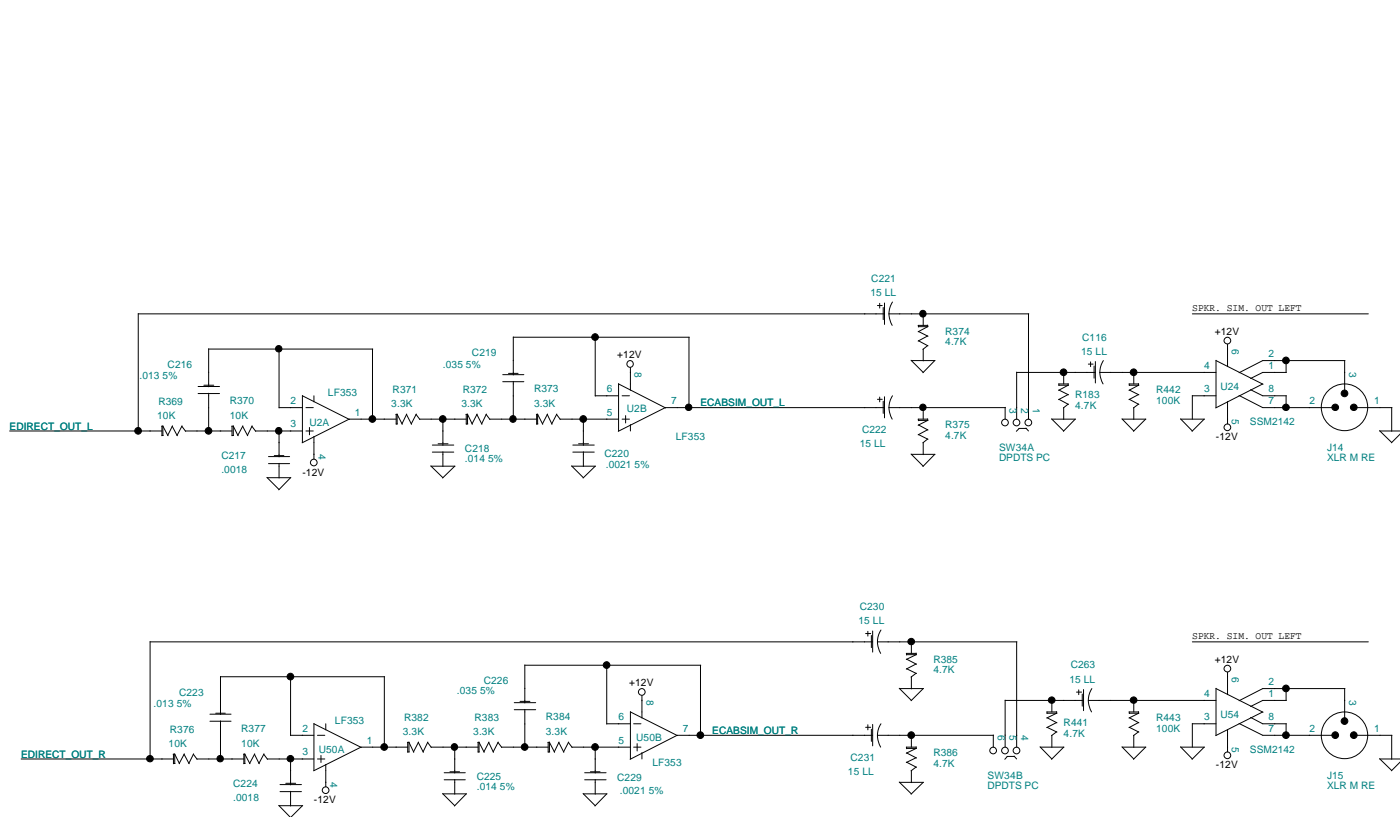
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Title GSP2101 MICROPROCESSOR, MEMORY 80-5039	
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NOTE(S):
 1. INSTALL R244 FOR 100V OPERATION
 2. INSTALL R230 FOR 117V OPERATION
 3. INSTALL R229 FOR 230V OPERATION
 4. INSTALL R228 FOR 240V OPERATION



DIGITECH	
8760 S. Sandy Parkway Sandy, Utah 84070	
Title GSP2101 GRAPHIC EQ 80-5039	
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DIGITECH		
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Title GSP2101 SPEAKER SIM. 80-5039		
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&l0 (s0P (s15H (s8V (s0S &l6D &l66P &l3E &a7L &a120M &l61FDOD Software

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115029A0.001

Revision: A0

Bill Of Materials

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Quan Reference

Part

SYMAN

Description

73	BP1, BP2, BP3, BP4, BP5, BP6, BP7, BP8, BP9, BP10, BP11, BP12, BP13, BP14, BP15, BP16, BP17, BP18, BP19, BP20, BP21, BP22, BP23, BP24, BP25, BP26, BP27, BP28, BP29, BP30, BP31, BP32, BP33, BP34, BP35, BP36, BP37, BP38, BP39, BP40, BP41, BP42, C42, BP43, C43, BP44, BP45, C45, BP46, C46, BP47, BP48, BP49, BP50, BP51, BP52, BP53, BP54, BP55, BP56, BP57, C61, C62, C93, C94, C95, C96, C121, C122, C123, C129, C170, C171	BP	62-0067	0.047 uF Cap	50V 20%	Axial Monolithic
2	BR1, BR3	BRIDGE	70-0129	Bridge Rectifer		
1	BT1	+3V CLIP	24-1014	Holder For 3V Battery		
1	BT1A	+3V L BAT	24-1016	3V Battery, Lithium, Eveready Part #CR2032		
4	C1, C2, C83, C128	470PF	62-0003	470 pF Cap	50V 20%	Ceramic Disc
14	C3, C4, C5, C16, C29, C65, C92, C174, C176, C210, C213, C233, C234, C257	25PF	62-0001	25 pF Cap	50V 5%	Ceramic Disc
13	C6, C8, C15, C18, C20, C44, C47, C48, C135, C137, C139, C140, C142	47U	60-0054	47 uF Cap	16V -20/+20%	Elect.
13	C7, C9, C17, C19, C21, C24, C40, C49, C54, C88, C113, C125, C207	.047 AM	62-0067	0.047 uF Cap	50V 20%	Axial Monolithic
7	C10, C11, C12, C13, C30, C31, C80	10 T	62-0163	10 uF Cap	16V 10%	Tantalum T&R
10	C14, C25, C26, C41, C90, C91, C103, C235, C236, C238	4.7U	60-0048-01	4.7 uF Cap	16V -20/+20%	Elect.
4	C22, C23, C227, C228	240PF	62-0010	240 pF Cap	50V 20%	Ceramic Disc
2	C27, C39	.0013 5%	56-1148	.0013 uF Cap	100V 5%	Poly Film
2	C28, C33	68PF	62-0018	68 pF Cap	50V 5%	Ceramic Disc
2	C32, C38	680PF	62-0004	680 pF Cap	50V 20%	Ceramic Disc
4	C34, C35, C36, C37	.0045 5%	56-1115	.0045 uF Cap	100V 5%	Poly Film
8	C50, C56, C58, C79, C105, C145, C251, C256	50PF	62-0008	50 pF Cap	50V 5%	Ceramic Disc T&R
1	C51	.33 T	62-0160	.33 uF Cap	35V 10%	Tantalum
9	C52, C53, C126, C136, C138, C141, C169, C180, C187	120PF	62-0002	120 pF Cap	50V 10%	Ceramic Disc
15	C55, C57, C60, C64, C78, C97, C104, C167, C168, C201, C206, C208, C211, C214, C237	10 NP	60-0051-01	10 uF Cap	16V -20/+20%	Elect., NP
6	C59, C63, C158, C188, C204, C205	.0017 5%	56-1211	.0017 uF Cap	100V 5%	Poly Film
1	C66	.0082	56-2019	.0082 uF Cap	100V 10%	Poly Film
1	C67	.10	56-2035	.10 uF Cap	100V 10%	Poly Film
4	C68, C144, C146, C185	1U	60-0044-01	1.0 uF Cap	50V -20/+20%	Elect.
3	C69, C217, C224	.0018	56-2011	.0018 uF Cap	100V 10%	Poly Film
1	C70	.22 LL	60-0039	.22 uF Cap	50V 20%	Elect, LL-S

DOD Software

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Quan	Reference	Part	SYMAN	Description
1	C71	.022	56-2025	.022 uF Cap 100V 10% Poly Film
5	C72,C73,C74,C76,C77	.56 LL	60-0041-01	.56 uF Cap 50V -20/+20% Elect, LL T&R
5	C75,C100,C102,C110,C111	.0082 250V	56-2219	.0082 uF Cap 250V 10% Poly Film
3	C81,C82,C118	.33 LL	60-0061-01	.33 uF Cap 50V 20% Elect, LL
2	C84,C89	.033	56-2027	.033 uF Cap 100V 10% Poly Film
1	C85	100PF	62-0020	100 pF Cap 50V 20% Ceramic Disc
1	C86	.027	56-2026	.027 uF Cap 100V 10% Poly Film
2	C87,C98	.010	56-2022	.010 uF Cap 100V 10% Poly Film
1	C99	.015	56-2023	.015 uF Cap 100V 10% Poly Film
4	C101,C109,C250,C252	10U 400V	60-0310	10 uF Cap 400V -20/+80% Elect
1	C106	820PF	62-0005	820 pF Cap 50V 20% Ceramic Disc
4	C107,C108,C114,C115	33 LL	60-0059-01	33 uF Cap 16V 20% Elect., LL
1	C112	.0033	56-2014	.0033 uF Cap 100V 10% Poly Film
6	C116,C221,C222,C230,C231,C263	15 LL	60-0052-01	15 uF Cap 16V 20% Elect., LL
9	C117,C131,C132,C197,C198,C209,C212,C258,C264	1 NP	60-0046-01	1.0 uF Cap 16V -20/+20% Elect., N.P.
1	C119	.072	56-2031	.072 uF Cap 100V 10% Poly Film
1	C120	.011 5%	56-1119	.011 uF Cap 100V 5% Poly Film
11	C124,C130,C134,C147,C148,C177,C178,C215,C241,C242,C245	10U	60-0049	10 uF Cap 16V -20/+20% Elect.,-S
1	C127	1.5 T	62-0164	1.5 uF Cap 25V 20% Tantalum T&R
5	C133,C143,C164,C165,C172	1 LL	60-0045-01	1.0 uF Cap 50V 20% Elect., LL
4	C149,C163,C239,C254	.11 5%	56-1129	.11 uF Cap 100V 5% Poly Film
2	C150,C166	.027 5%	56-1219	.027 uF Cap 100V 5% Poly Film
2	C151,C173	.20 3%	56-0094	.20 uF Cap 100V 3% Poly Film
4	C152,C175,C218,C225	.014 5%	56-1120	.014 uF Cap 100V 5% Poly Film
2	C153,C179	.16 3%	56-0093	.16 uF Cap 100V 3% Poly Film
2	C154,C181	.0072 5%	56-1117	.0072 uF Cap 100V 5% Poly Film
4	C155,C182,C219,C226	.035 5%	56-1124	.035 uF Cap 100V 5% Poly Film
2	C156,C183	.0035 5%	56-1114	.0035 uF Cap 100V 5% Poly Film
2	C157,C184	.039 3%	56-0107	.039 uF Cap 100V 3% Poly Film
2	C159,C189	.020 3%	56-0084	.020 uF Cap 100V 3% Poly Film
2	C160,C190	.0008 3%	56-0070	.0008 uF Cap 100V 3% Poly Film
4	C161,C191,C216,C223	.013 5%	56-1143	.013 uF Cap 100V 5% Poly Film
2	C192,C199	.0016 3%	56-0073	.0016 uF Cap 100V 3% PET Film
2	C193,C200	.0029 3%	56-0104	.0029 uF Cap 100V 3% Poly Film
2	C195,C202	.0064 3%	56-0079	.0064 uF Cap 100V 3% Poly Film
2	C196,C203	150PF	62-0031	150 pF Cap 50V 20% Ceramic Disc
2	C220,C229	.0021 5%	56-1147	.0021 uF Cap 100V 5% Poly Film
2	C232,C253	.51 3%	56-0189	.51 uF Cap 100V 3% Poly Film
2	C240,C255	.042 3%	56-0178	.042 uF Cap 100V 3% Poly Film
2	C243,C244	470U 25V	60-0058	470 uF Cap 25V -20/+20% Elect
2	C246,C247	100U 50V	60-0068	100 uF Cap 50V -20/+80% Elect
2	C248,C249	4700U 16V	60-0062	4700 uF Cap 16V -20/+20% Elect
1	C259	.0010	56-2008	.0010 uF Cap 100V 10% Poly Film PET
1	C260	.0039	56-2015	.0039 uF Cap 100V 10% Poly Film
2	C261,C262	180PF	62-0021	180 pF Cap 50V 20% Ceramic Disc
23	D1,D2,D3,D4,D12,D13,D14,D15,D16,D17,D18,D19,D20,D21,D22,D25,D30,D35,D36,	1N4148	70-0002	1N4148 Diode Silicon Switching, 75 Volts PIV

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D39,D40,D41,D42
6 D31,D32,D33,D34,D62,D63 1N4001 70-0001 1N4001 Silicon Rectifier, 1 Amp, 50 Volts PIV

5	D43,D44,D52,D53,D54	LDSG	70-2062	LED Green, T1 Case
7	D45,D46,D47,D48,D49,D50, D51	LDSR	70-2061	LED Red, T1 Case
4	D58,D59,D60,D61	1N4005	70-0008	1N4005 Silicon Rectifier
4	D64,D65,D66,D67	1N5402	70-0100	1N5402 Silicon Rectifier, 3Amp, 200 PIV
2	H1,H11	HDR4_.2 LK	32-1047	4 Pin Header, 0.2" spacing, Locking
3	H2,H5,H7	HDR5	32-1069	5 Pin Header, 0.1" spacing, 0.025" sq pins
5	H2A,H5A,H6,H6A,H7A	PA5	00-0000	5 Pin Pad Pattern, Not a part
2	H3,H3A	HDR_20	32-1055	20 Pin Hdr, 10X2, 0.1" spacing, 0.025 pins
1	H4	HDR_30	32-1058	30 Pin Hdr, 15x2, 0.1" spacing, 0.025 pins
1	H6B	RCSF5_2	32-1185	5 Pin Ribbon Cable Flex, 0.1" spacing, 2.00" Length, Open end
1	H8	WTCN 5	32-1163	5 Circuit Wire Trap Connector, 2mm Pitch
1	H8A	RC2_5_5	32-1201	5 Pin Ribbon Cable, 2mm spacing, 5.00" Length
1	H10	HDR5 LK	32-1071	5 Pin Header, 0.1" spacing, 0.025" sq pins Lockin
1	H12	HDR_20.5	32-1082	20 Pin Hdr, 10x2, 0.1" spacing, 0.500 pins
1	H12A	HCN_20	32-1169	20 Pin Header Conn, 10x2
1	H89	HDR14+	32-1068	14 Pin Header, 0.1" spacing, 0.025" sq pins, Right Angle
1	HS1	HS_1 TOP	70-4204	Heatsink, 3 Regulator, Top
1	HS2	HS_L BASE	70-4205	Heatsink, L-Shape Base
1	I1	INS_3TO220	70-4209	Insulator, 3 Regulator Heatsink
4	J1,J2,J3,J4	DIN 5	32-0092	5 Pin DIN Jack
8	J5,J6,J7,J8,J9,J10,J11, J12	PH1/4 PC P		
1	J13	COAX 8.5	36-0035	8.5" Coax Cable
2	J14,J15	XLR M RE	32-0198	XLR Male, Jack Hor, Chas/PCB Mount
9	L1,L2,L3,L4,L5,L6,L7,L8, L9	FBEAD	26-0221	Ferrite Bead w/axial lead
1	P1	TP100K HC	42-0235	100 K Trim Pot, Horizontal Cermet
1	P2	TP10K H	42-0211	10 K Trim Pot, Horizontal Mount, 3/4 turn
1	P3	TP50K H	42-0222	50 K Trim Pot, Vertical Mount, 3/4 turn
1	P4	TP5K H	42-0219	5 K Trim Pot, Horizontal Mount, 10mm
1	P7	P100K W X2	40-2011	100 K "W" 16mm, Rot Pot x2, Rack Leads
6	PA1,PA2,PA4,PA5,PA6,H9	PA1	00-0000	1 Pin Pad Pattern, Not a part
26	Q1,Q2,Q3,Q4,Q5,Q9,Q10, Q11,Q18,Q19,Q20,Q23,Q31, Q36,Q37,Q55,Q56,Q57,Q58, Q59,Q60,Q61,Q62,Q63,Q64, Q65	2N4124	70-1009	2N4124 NPN, Gen. Purp. Amplifier/Switching Xstr T&R
3	Q6,Q30,Q66	2N5088	70-1007	2N5088 NPN, Transistor, T&R
10	Q7,Q8,Q12,Q13,Q14,Q15, Q16,Q17,Q25,Q26	J174	70-1013	J174 JFET, P-Channel
10	Q21,Q22,Q24,Q28,Q32,Q34, Q43,Q44,Q50,Q52	J112	70-1012	J112A JFET, National Only
5	Q27,Q29,Q33,Q35,Q53	2N4125	70-1008	2N4125 PNP, Gen. Purp. Amplifier/Switching Xstr
2	Q39,Q40	2N6714	70-1155	2N6714 NPN, Transistor
2	Q41,Q42	2N6726	70-1156	2N6726 PNP, Transistor
1	QT1	QTPC110	32-2088	Quick-tab, .110 x .032, PC Mount
20	R1,R2,R9,R10,R13,R14,R22, R23,R32,R33,R57,R58,R476, R477,R478,R479,R480,R481,	200	50-0004	200 Ohm Resistor 5% 1/4 Watt Carbon Film

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7	R482,R483 R3,R4,R16,R60,R145,R350, R355	100	50-0003	100 Ohm Resistor 5% 1/4 Watt Carbon Film
24	R5,R65,R80,R98,R102,R113, R167,R169,R180,R185,R188, R221,R223,R371,R372,R373, R382,R383,R384,R387,R497,	3.3K	50-0014	3.3 KOhm Resistor 5% 1/4 Watt Carbon Film

	R498,R499,R501								
5	R6,R64,R117,R165,R170	330	50-0005	330	Ohm Resistor	5%	1/4	Watt Carbon Film	
96	R7,R11,R29,R35,R36,R37, R44,R45,R47,R48,R49,R52, R53,R63,R69,R70,R71,R72, R75,R77,R78,R81,R82,R83, R85,R87,R106,R107,R127, R129,R132,R133,R135,R136, R137,R139,R141,R144,R148, R152,R157,R162,R163,R171, R174,R175,R184,R189,R200, R215,R236,R240,R247,R249, R252,R253,R304,R308,R327, R329,R332,R333,R338,R342, R346,R351,R369,R370,R376, R377,R398,R399,R400,R409, R410,R411,R419,R422,R426, R429,R430,R459,R460,R470, R471,R472,R473,R474,R475, R485,R486,R487,R488,R492, R521,R523	10K	50-0020	10	KOhm Resistor	5%	1/4	Watt Carbon Film	
17	R8,R12,R40,R42,R114,R118, R142,R149,R153,R154,R161, R190,R356,R357,R358,R359, R395	2K	50-0013	2	KOhm Resistor	5%	1/4	Watt Carbon Film	
25	R15,R17,R18,R19,R73,R74, R76,R84,R86,R93,R147, R150,R187,R222,R232,R235, R239,R242,R303,R305,R312, R315,R326,R345,R433	20K	50-0023	20	KOhm Resistor	5%	1/4	Watt Carbon Film	
24	R20,R38,R39,R55,R56,R183, R191,R194,R238,R241,R243, R251,R328,R334,R362,R366, R374,R375,R385,R386,R441, R465,R467,R489	4.7K	50-0015	4.7	KOhm Resistor	5%	1/4	Watt Carbon Film	
16	R21,R88,R89,R105,R123, R177,R178,R201,R204,R231, R234,R237,R300,R360,R391, R434	1M	50-0045	1	MOhm Resistor	5%	1/4	Watt Carbon Film	
15	R24,R30,R31,R34,R46,R54, R59,R348,R349,R353,R354, R390,R484,R520,R522	10	50-0001	10	Ohm Resistor	5%	1/4	Watt Carbon Film	
18	R25,R26,R27,R28,R50,R51, R96,R140,R173,R195,R205, R206,R207,R209,R211,R393,	1K	50-0012	1	KOhm Resistor	5%	1/4	Watt Carbon Film	

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	R466,R503								
9	R41,R43,R151,R255,R258, R402,R403,R413,R414	6.8K	50-0016	6.8	KOhm Resistor	5%	1/4	Watt Carbon Film	
12	R61,R100,R101,R111,R181, R224,R297,R301,R322,R335, R361,R365	15K	50-0019	15	KOhm Resistor	5%	1/4	Watt Carbon Film	
34	R62,R121,R122,R125,R158, R164,R166,R176,R192,R193, R196,R199,R208,R210,R212, R213,R261,R264,R267,R270, R273,R276,R279,R282,R285, R288,R291,R294,R318,R337,	100K	50-0036	100	KOhm Resistor	5%	1/4	Watt Carbon Film	

17	R339,R343,R442,R443 R66,R79,R120,R168,R197, R216,R254,R317,R321,R323, R324,R388,R424,R428,R452, R454,R469	470K	50-0042	470	KOhm Resistor	5%	1/4	Watt Carbon Film
10	R67,R68,R406,R408,R415, R416,R417,R420,R421,R425	27K	50-0027	27	KOhm Resistor	5%	1/4	Watt Carbon Film
9	R90,R103,R104,R245,R246, R248,R257,R260,R368	7.5K	50-0017	7.5	KOhm Resistor	5%	1/4	Watt Carbon Film
3	R91,R115,R116	22M 10%	50-0308	22M	MOhm Resistor	10%	1/4	Watt Carbon Film
5	R92,R130,R131,R203,R496	470	50-0006	470	Ohm Resistor	5%	1/4	Watt Carbon Film
2	R94,R146	1.2M	50-0277	1.2	MOhm Resistor	5%	1/4	Watt Carbon Film
10	R95,R112,R138,R182,R336, R340,R449,R450,R451,R453	51	50-0002	51	Ohm Resistor	5%	1/4	Watt Carbon Film
1	R97	22K	50-0025	22	KOhm Resistor	5%	1/4	Watt Carbon Film
13	R99,C162,C186,C194,R226, R228,R229,R244,R250,R310, R380,R407,R412	OMIT	00-0000	This part has been omitted				
5	R108,R227,R330,R394,R397	120K	50-0037	120	KOhm Resistor	5%	1/4	Watt Carbon Film
3	R109,R437,R438	62K	50-0032	62	KOhm Resistor	5%	1/4	Watt Carbon Film
7	R110,R347,R352,R392,R423, R427,R468	33K	50-0028	33	KOhm Resistor	5%	1/4	Watt Carbon Film
18	R119,R126,R128,R155,R160, R220,R233,R298,R299,R307, R313,R316,R325,R431,R504, R505,R506,R507	47K	50-0030	47	KOhm Resistor	5%	1/4	Watt Carbon Film
4	R124,R143,R256,R259	12K	50-0021	12	KOhm Resistor	5%	1/4	Watt Carbon Film
4	R134,R379,R396,R435	24K	50-0026	24	KOhm Resistor	5%	1/4	Watt Carbon Film
6	R156,R159,R331,R389,R439, R440	220K	50-0040	220	KOhm Resistor	5%	1/4	Watt Carbon Film
2	R172,R179	39K	50-0029	39	KOhm Resistor	5%	1/4	Watt Carbon Film
1	R186	10KRX9	54-0355	10	KOhm 10-Pin SIP BX-103			
1	R198	180K	50-0039	180	KOhm Resistor	5%	1/4	Watt Carbon Film
6	R202,R217,R306,R309,R311, R314	75K	50-0033	75	KOhm Resistor	5%	1/4	Watt Carbon Film
1	R214	680	50-0007	680	Ohm Resistor	5%	1/4	Watt Carbon Film
8	R218,R219,R302,R344,R363, R364,R461,R462	3.9M	50-0048	3.9	MOhm Resistor	5%	1/4	Watt Carbon Film
9	R225,R230,R281,R367,R378, R401,R404,R405,R418	0	50-0050	0	Ohm Resistor	5%	1/4	Watt Carbon Film

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13	R262,R265,R268,R271,R274, R277,R280,R286,R289,R292, R295,R319,R341	681 1%	52-0325	681	Ohm Resistor	1%	1/4	Watt Metal Film
12	R263,R266,R269,R272,R275, R278,R284,R287,R290,R293, R296,R320	340K 1%	52-0254	340	KOhm Resistor	1%	1/4	Watt Metal Film
1	R283	499 1%	52-0338	499	Ohm Resistor	1%	1/4	Watt Metal Film
2	R381,R432	330K	50-0041	330	KOhm Resistor	5%	1/4	Watt Carbon Film
1	R436	820	50-0009	820	Ohm Resistor	5%	1/4	Watt Carbon Film
1	R502	1.62K 1%	52-0131	1.62	KOhm Resistor	1%	1/4	Watt Metal Film
1	S3	PLCC84S	70-3163	84	PLCC Socket			
1	S10	PLCC44S	70-3024	44	PLCC Socket			
1	S73	PLCC68S	70-3164	68	PLCC Socket			
2	S79,S81	DIP32S	70-3017	32	Pin Dip Socket			
10	SS1,SS2,SS3,SS4,SS5,SS6, SS7,SS8,SS9,SS10	S250X250	28-1092	Swage Standoff, 0.250" Round x 0.250" H, 6-32				
4	SS11,SS12,SS13,SS14	S187X687	28-0900	Swage Standoff, 0.187" Round x 0.687"H, 4-40				

2	SV1,SV2	TUBE9S	32-0250	9 Pin Tube Socket
31	SW1,SW2,SW3,SW4,SW5,SW6, SW7,SW8,SW9,SW10,SW11, SW12,SW13,SW14,SW15,SW16, SW17,SW18,SW19,SW20,SW21, SW22,SW23,SW24,SW25,SW26, SW27,SW28,SW29,SW30,SW31	MTOUCH P1	44-0083	Lite Touch Switch, Mini
1	SW32	BINSW	44-0092	16 Bit Grey Code Rotary Switch
1	SW33	2PST P H1	44-0120	2PST Switch, Horizontal, snap in, NE18 version
1	SW34	DPDTS PC	44-0027	DPDT I/O Switch (mini), PC Mount
3	TP1,TP2,TP3	TESTP	00-0000	Test point, Standard
1	U1	6N138	70-2139	6N138 Opto-Isolator
23	U2,U9,U15,U16,U18,U22, U25,U33,U34,U35,U39,U50, U53,U55,U56,U62,U63,U65, U67,U68,U69,U80,U94	LF353	72-4030	LF353 Wide Bandwidth Dual JFET Input Op-Amp
1	U3	S_DISC_EE	72-3172	ASIC, Digitech Custom DSP, SMT
2	U4,U5	74HC138	72-1108	3 Line to 8 Line Decoder/Demultiplexer
4	U6,U20,U21,U36	MC33078	72-4248	Dual OP-AMP
2	U7,U77	74HC04	72-1098	Hex Inverter 74HC04
1	U8	74C906	72-1087	MM74C906 HEX OD N-CHAN BUFF
1	U10	XILINX DIG	72-3131	FPGA,AD-DA Interface
1	U11	4053A	72-0086	Triple 2 Pole Analog Mux
1	U12	SAA7360	72-3086	A/D Sigma, Delta, 18 bit, SMT
1	U13	79L05	70-4127	79L05 -5 Volt 100 mA Voltage Regulator TO-92
1	U14	78L05	70-4012	78L05 +5 Volt 100 mA Voltage Regulator TO-92
2	U17,U93	7805	70-4014	7805 +5 Volt 1 Amp Voltage Regulator TO-220
1	U19	AD1861	72-3088	18 Bit DAC, 1 Channel low grade
9	U23,U32,U40,U41,U58,U60, U83,U85,U90	74HC574	72-1112	Octal D-Type Pos. Edge Triggered Flip-Flops
2	U24,U54	SSM2142	72-4252	Balanced Line Driver
2	U26,U52	74HC244A	72-1107	Octal Buffer-Line Driver W/3-State Outputs
3	U27,U29,U78	DBX2155	72-4055	dbx 2155 Voltage Controlled Amplifier
1	U28	LM833	72-4246	Low Noise Dual Audio Operational Amp
1	U30	4051	72-0081	8 to 1 Analog Multiplexer, SMT

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5	U31,U42,U43,U59,U61	LA10502 54-0351 8 Bit R-2R Ladder, 5.00 kOhm 1% Thick Film
2	U37,U38	VTL5C3 70-2142 VTL5C3 Vactrol Led axial
6	U44,U45,U46,U47,U48,U49	TMS44C256 72-3053 256x4 DRAM, 80NS
2	U51,U84	LM324 72-4028 Low Power Quad Operational Amplifier
1	U57	NJU7305 72-4244 Stereo 7 Band
1	U64	74HC139 72-1100 Dual 2 Line to 4 Line Decoder/Demultiplexer
4	U66,U70,U71,U72	LF347 72-4040 LF347 Wide Bandwidth
1	U73	64180ZCP10 72-3154 CPU Z180 Microprocessor, SMT
1	U74	KM681000AL 72-3059 128K X 8 RAM Static
1	U75	SSM2120A 72-4250 Dual VCA/ Dual Detector
1	U76	LM311 72-4027 LM311 Analog Voltage Comparator
2	U79,U81	27C020-120 72-3076 27C020-120 EPROM Blank w/window
1	U82	MC34064P 70-5004 MC34064 Undervoltage Sensing Circuit
3	U86,U87,U88	1 DIG LED 70-2168 1-DIG 7-SEG Light Emitting Diode
1	U89	G2040AL 70-2171 4 X 20 Character Display, Stanley
1	U91	7812 70-4013 7812 +12 Volt 1 Amp Voltage Regulator TO-220
1	U92	7912 70-4017 7912 -12 Volt 1 Amp Voltage Regulator TO-220
2	V1,V2	12AX7A2 76-0002 12AX7A2 Tube
1	X1	24.576 MHZ 76-0039 24.576 MHZ Crystal
1	X2	10.00 MHZ 76-0324 10.00 MHZ Crystal