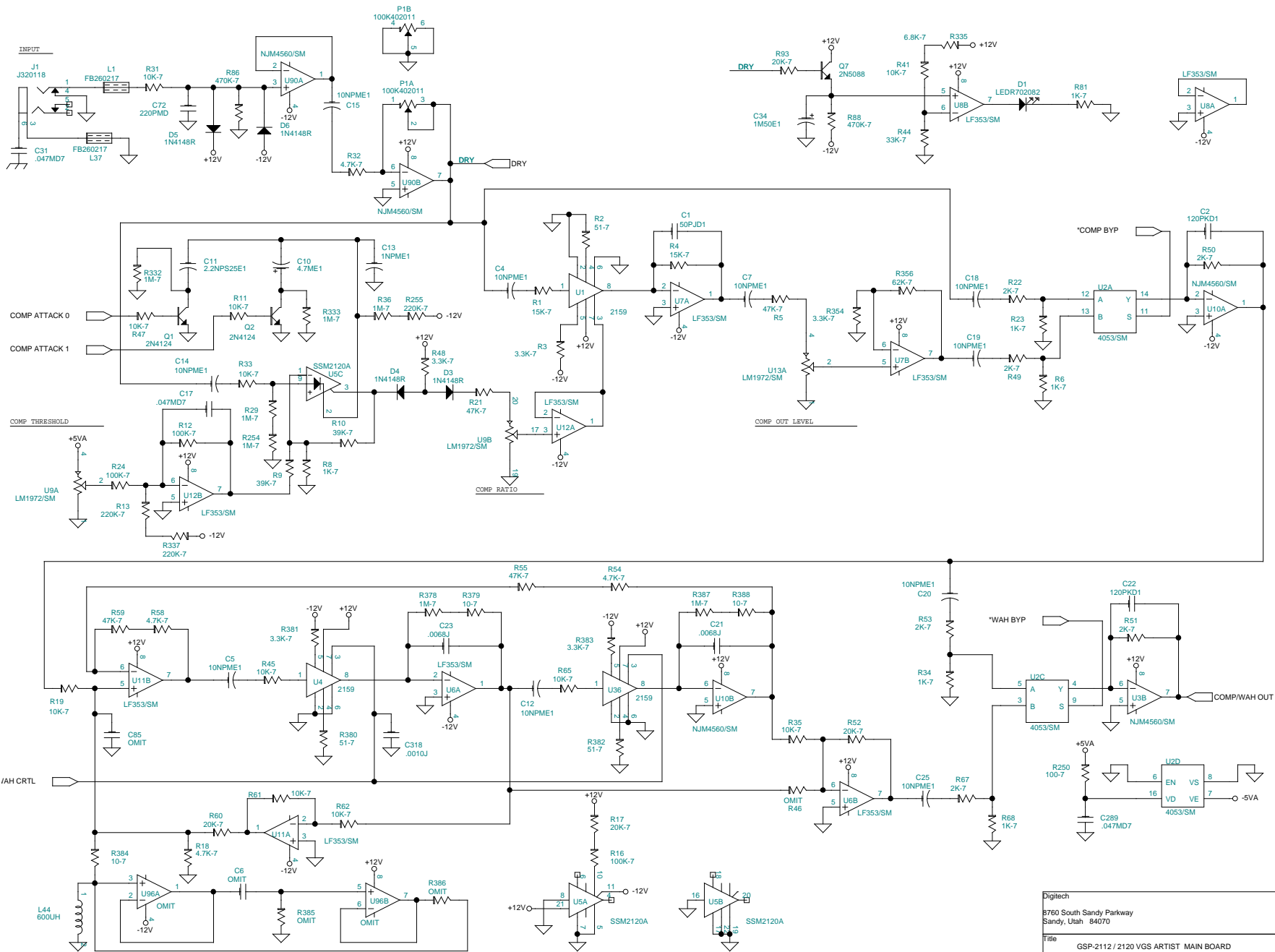


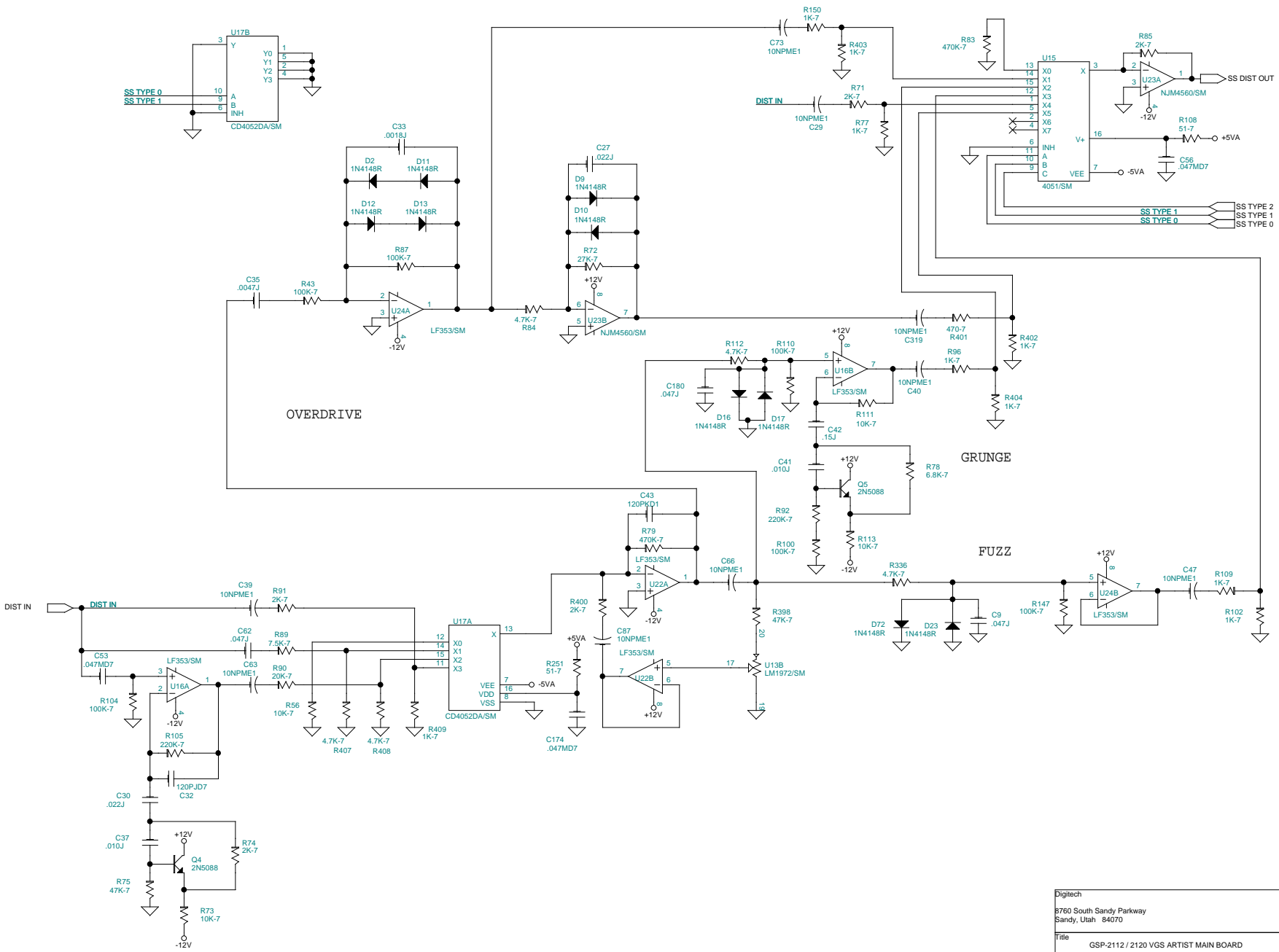
REV	DISCRIPTION	ECN	DATE	REV	ECN	DATE
P0	PROTOTYPE		4-22-96			
P1	PROTOTYPE		6-20-96			
P2	PROTOTYPE		8-7-96			
P3	PROTOTYPE		9-21-96			
P4	PROTOTYPE		10-1-96			
P5	PROTOTYPE		10-17-96			
A0	PRE-PRODUCTION		10-26-96			
A1	PRODUCTION RELEASE		12-2-96			
A2	ADD TWO SHUNT JUMPERS (32-1075) TO SCH AND BOM	1352	1.30.97			
A3	CHANGE U63 TO V1.01 SOFTWARE	1373	2.17.97			
A4	CHANGE SW10-SW16 FROM 44-0083 TO 44-0077	1394	2.17.97			
A5	CHG U63 TO V1.02, R411 TO 10K, R426 TO 7.5K	1410	2-25-97			
A6	CHANGE LIGHT TOUCH SWITCHES FROM 44-0077 TO 44-0083.	1553	4-23-97			
A7	CHANGE U63 FROM VERSION 1.02 TO VERSION 1.03.	1598	5-12-97			
A8	INSTALL 220pF SMT (62-3138) AT C72.	1633	5-22-97			
A9	CHANGE SDISC TO 72-3181.	1815	10-3-97			
AA	OMIT RESISTORS R228 AND R238.	1850	10-30-97			
AB	CHANGE C72 TO 62-0022, TIE TO ANALOG GROUND.	1903	11-19-97			
AC	CHANGES TO REV A BOARDS TO CREATE 2120 VGS ARTIST PRODUCT	2014	2-12-98			

- |LINK
- |056280AC.001
- |056280AC.002
- |056280AC.003
- |056280AC.004
- |056280AC.005
- |056280AC.006
- |056280AC.007
- |056280AC.008
- |056280AC.009
- |056280AC.010
- |056280AC.011

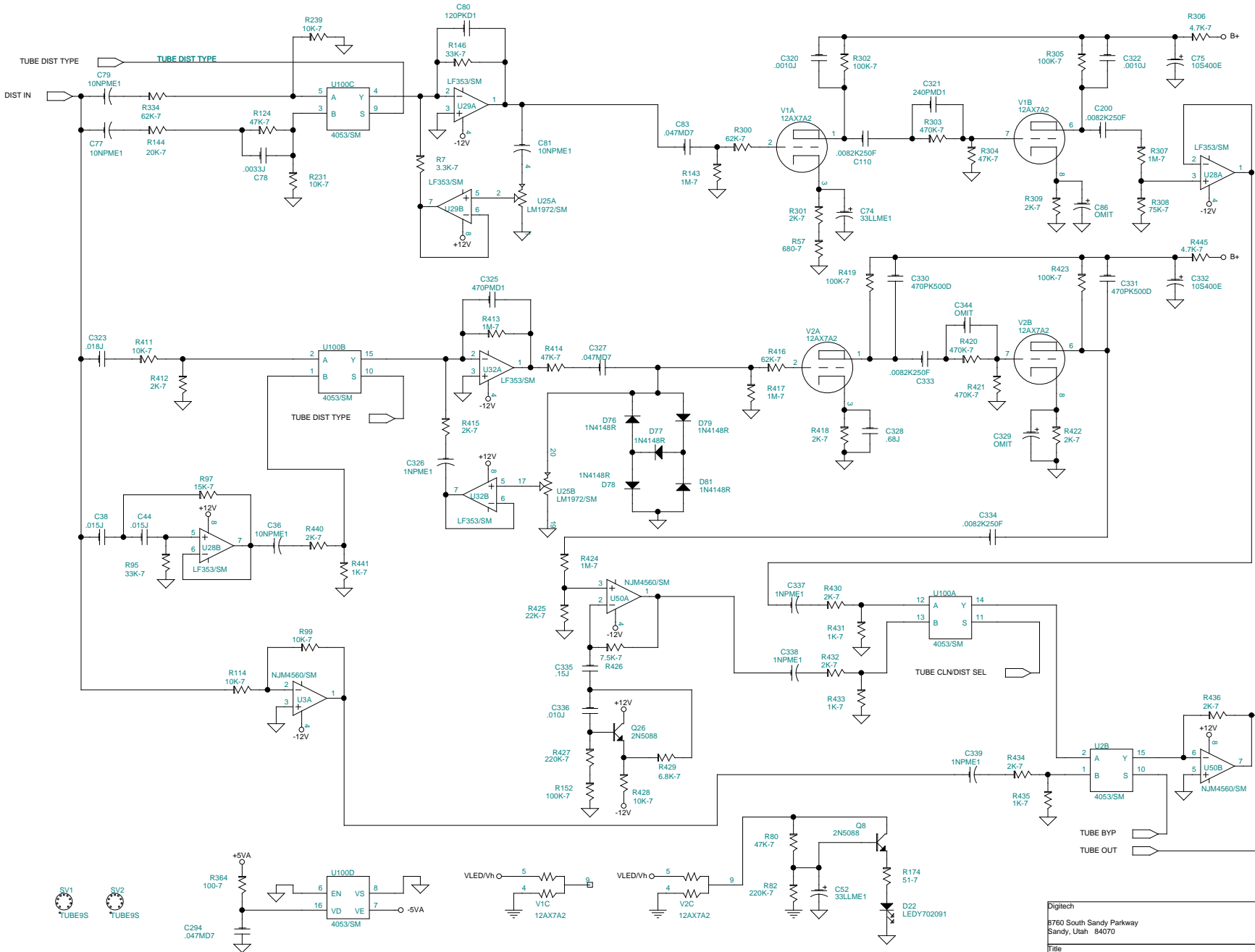
Digitech		
8760 South Sandy Parkway Sandy, Utah 84070		
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD		
Size B	Document Number 056280AC.000	Rev AC
Date:	Wednesday, August 02, 2000	Sheet 0 of 11



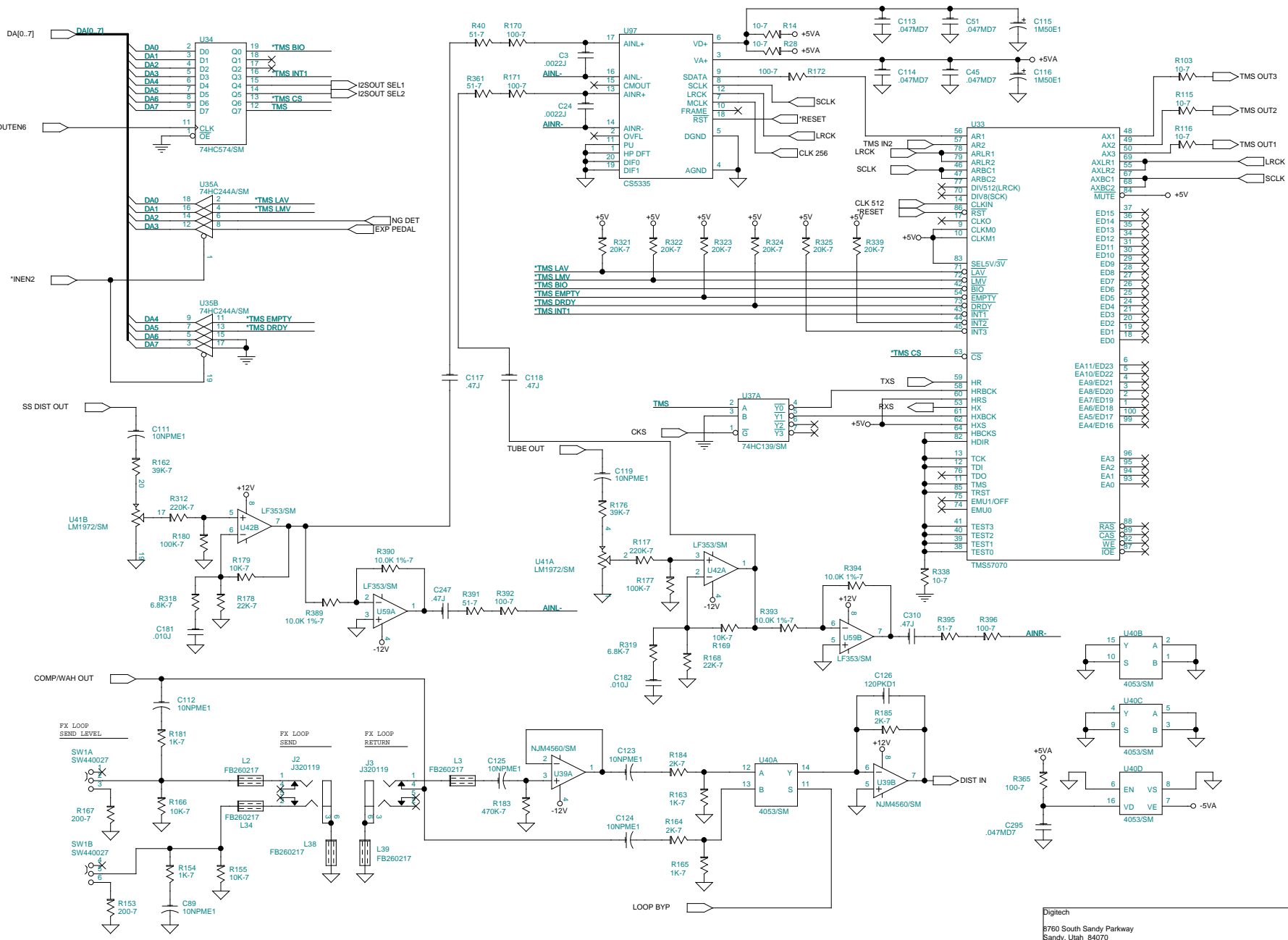
Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.001
Date: Wednesday, August 02, 2000	Sheet 1 of 11
	Rev AC



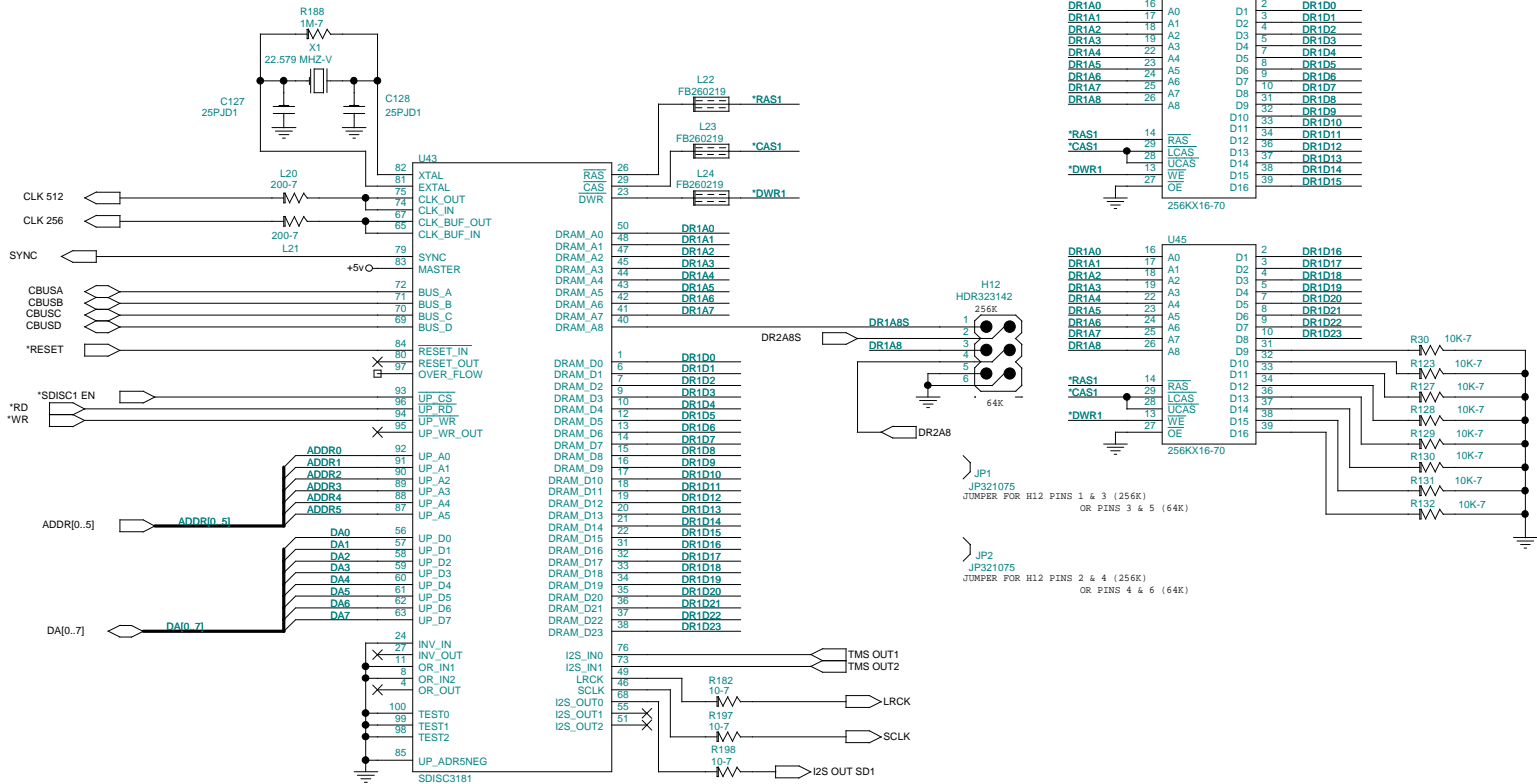
Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.002
Date: Wednesday, August 02, 2000	Sheet 2 of 11
	Rev AC



Digitech
 8760 South Sandy Parkway
 Sandy, Utah 84070
 Title
 GSP-2112 / 2120 VGS ARTIST MAIN BOARD
 Size B Document Number 056280AC.003 Rev AC
 Date: Wednesday, August 02, 2000 Sheet 3 of 11

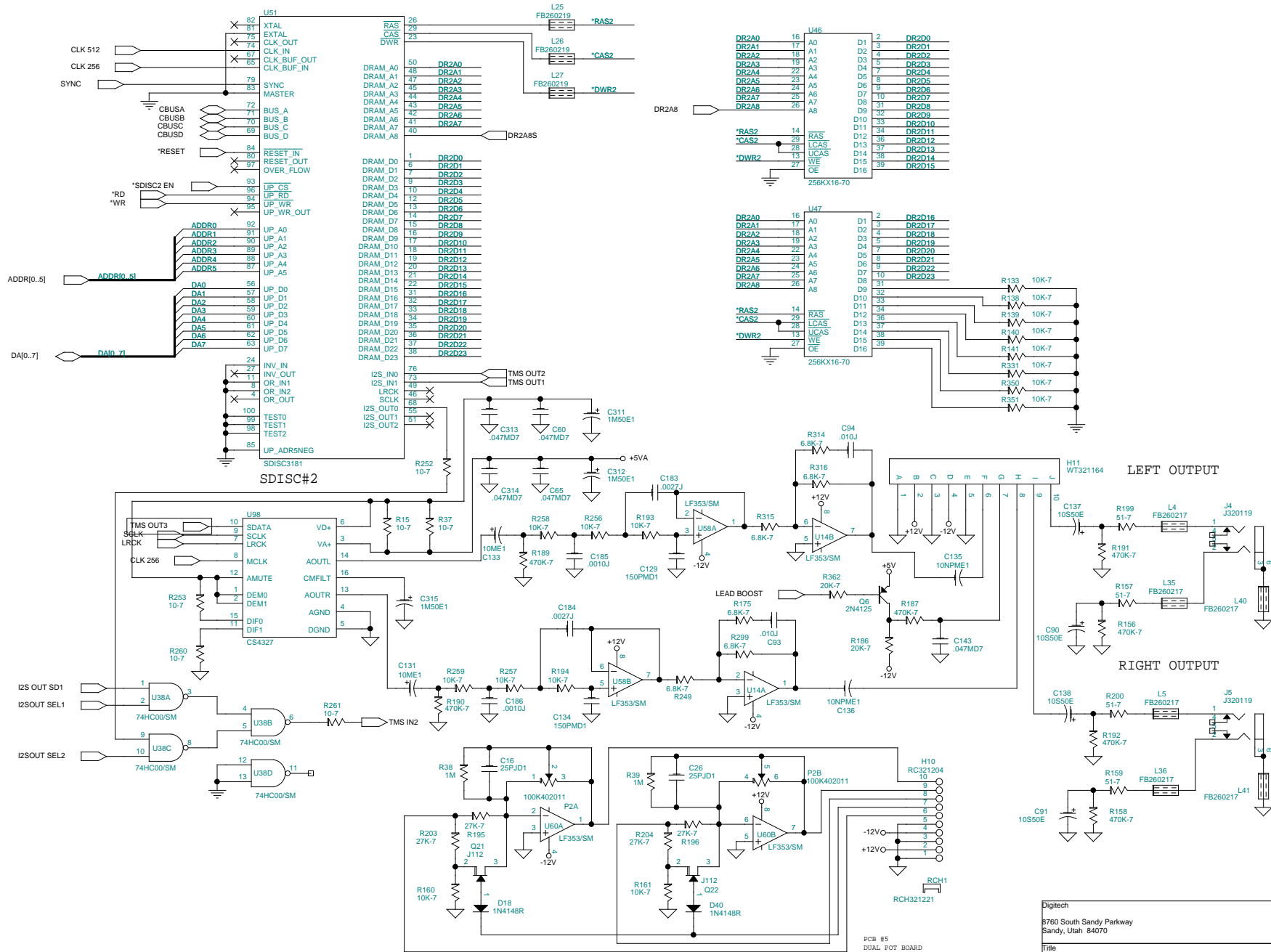


Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.004
Date: Wednesday, August 02, 2000	Sheet 4 of 11
	Rev AC

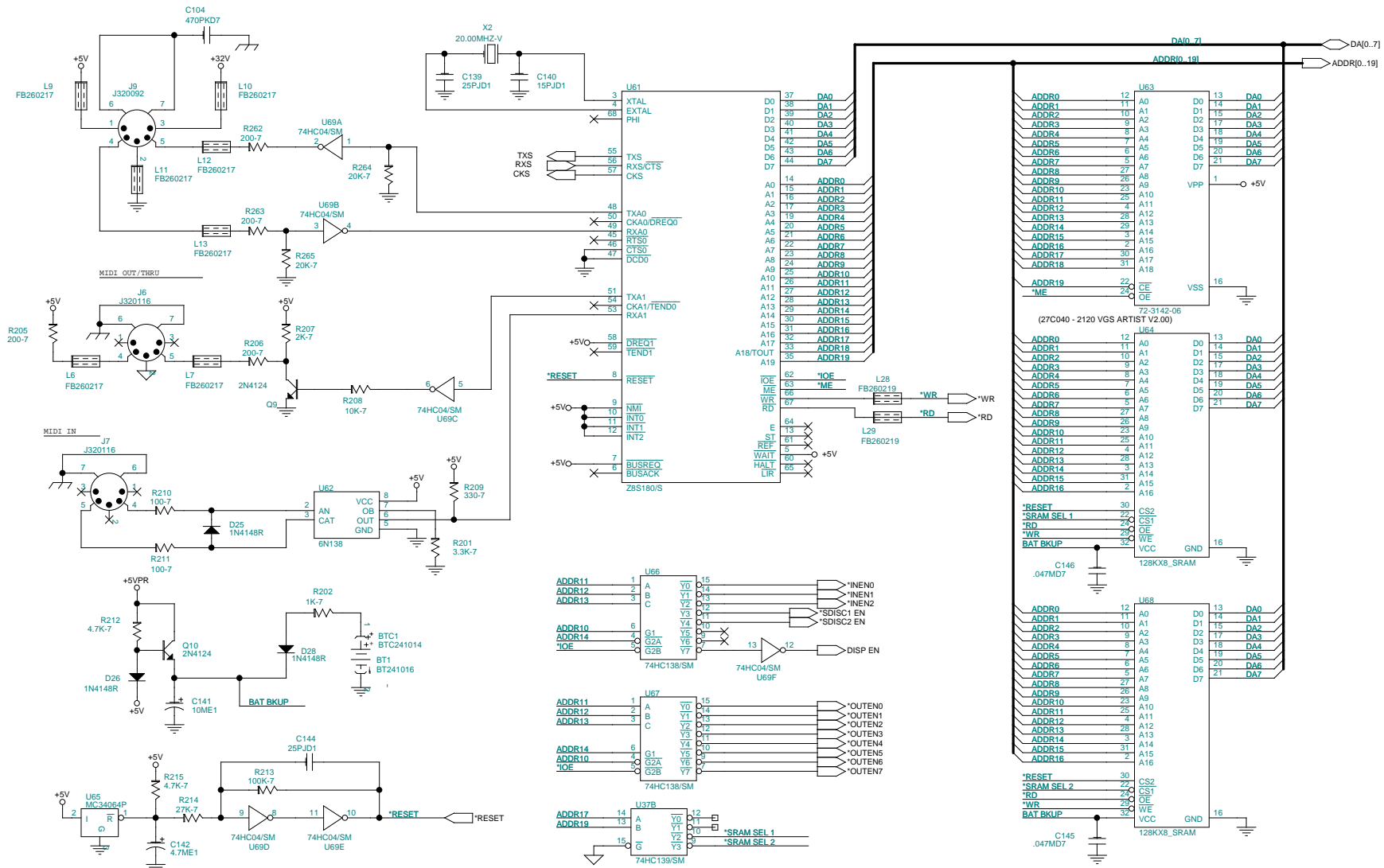


SDISC#1

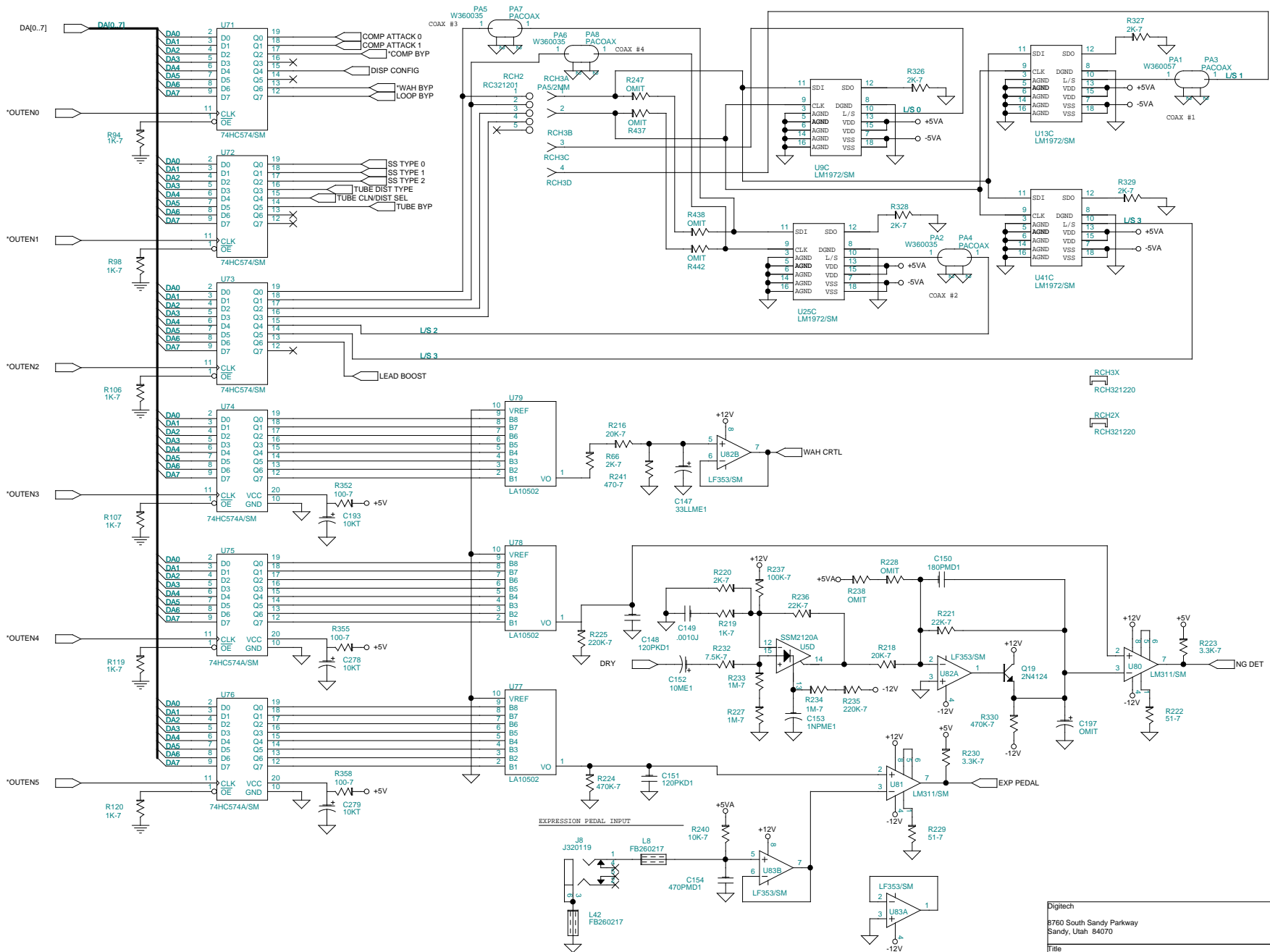
Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.005
Date: Wednesday, August 02, 2000	Sheet 5 of 11
	Rev AC



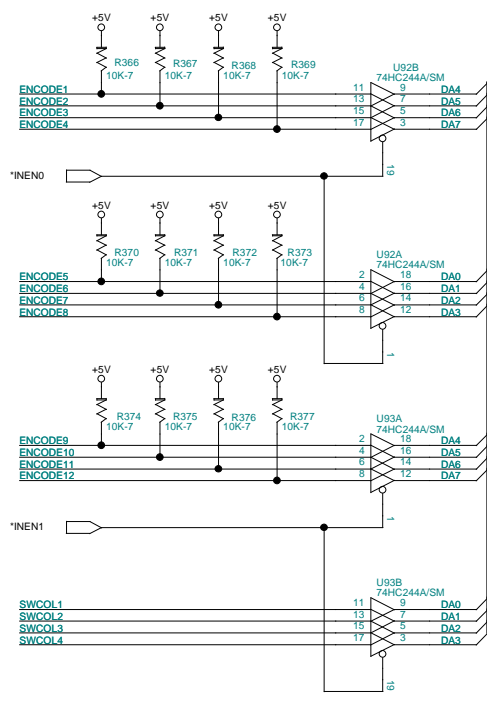
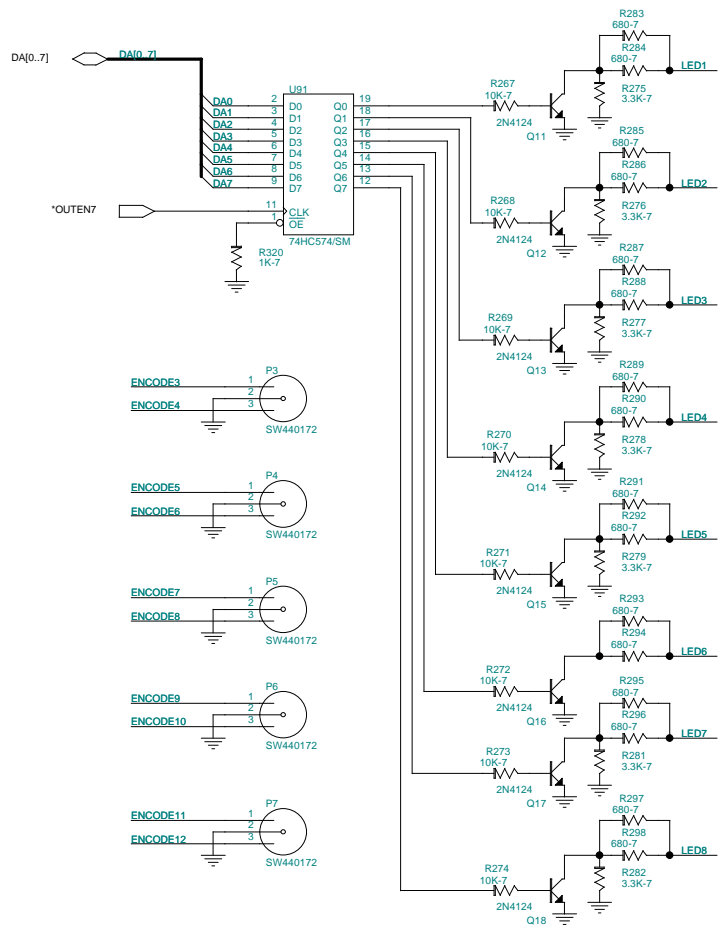
Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.006
Date: Wednesday, August 02, 2000	Sheet 6 of 11
	Rev AC



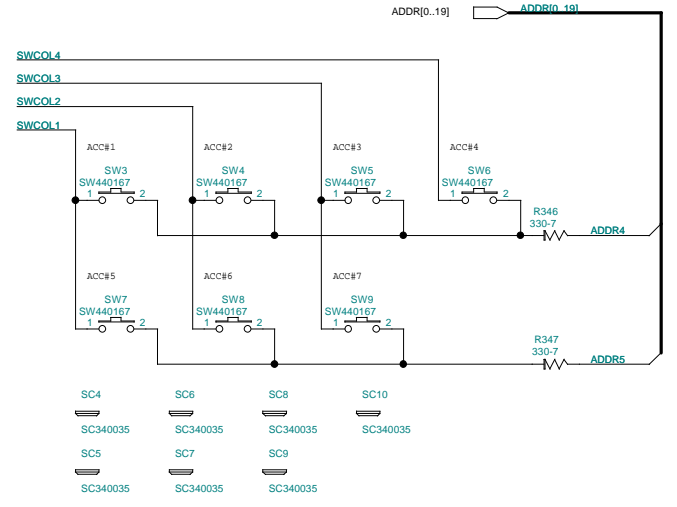
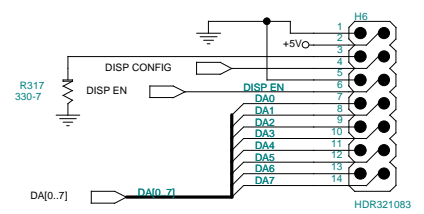
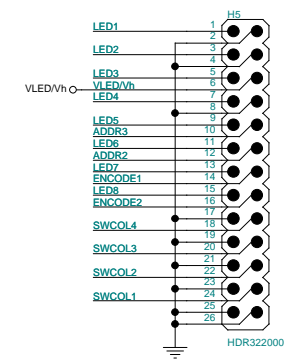
Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.007
Date: Wednesday, August 02, 2000	Sheet 7 of 11
	Rev AC



Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.008
Date: Wednesday, August 02, 2000	Sheet 8 of 11
	Rev AC

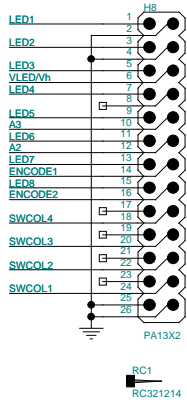
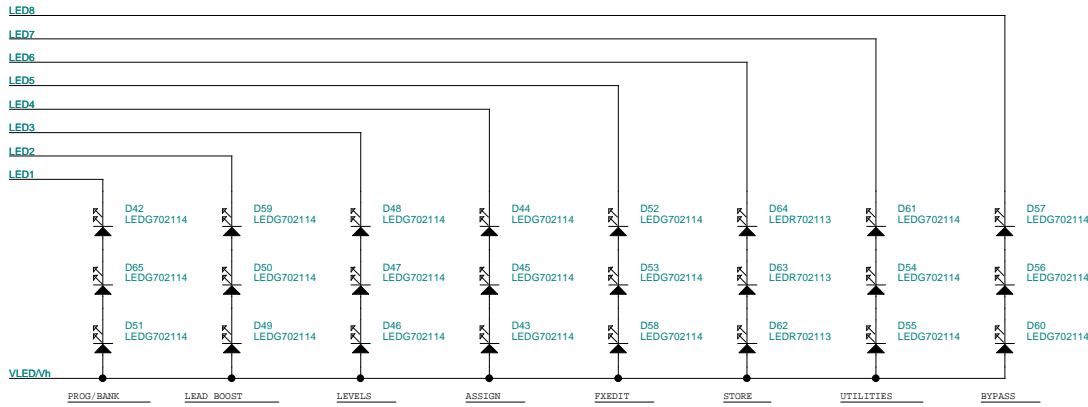


Note:
On the component side, cut the two traces that go from the "U72" designator to the "U290" designator. Solder a wire from U71 pin 15 to the via in the middle of the "U72" reference designator. Solder another wire from the via above the "2" in the "U72" designator to ground.

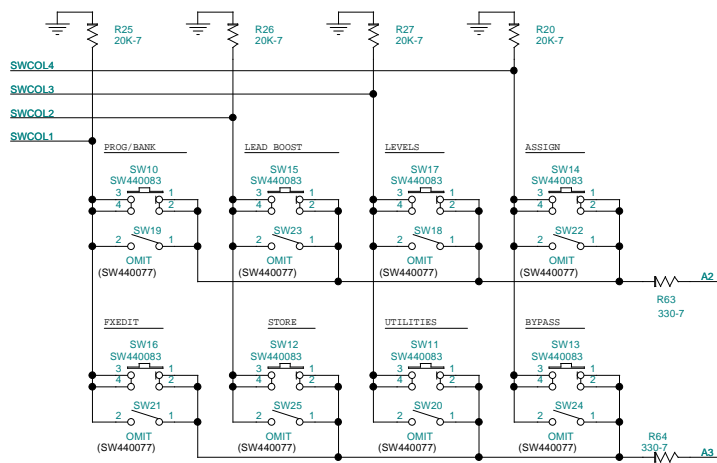


- SC4 SC6 SC8 SC10
- SC340035 SC340035 SC340035 SC340035
- SC5 SC7 SC9
- SC340035 SC340035 SC340035

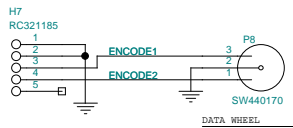
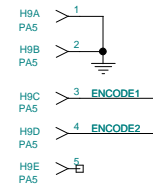
Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.009
Date: Wednesday, August 02, 2000	Sheet 9 of 11
	Rev AC



PCB #3
FRONT SWITCH/LED BOARD

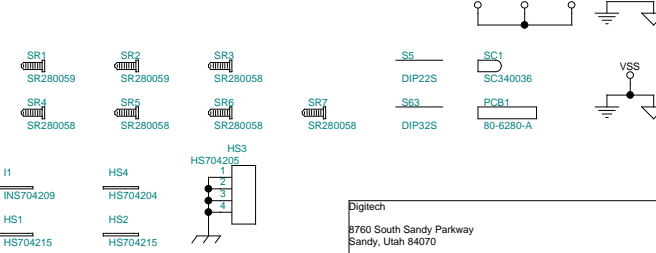
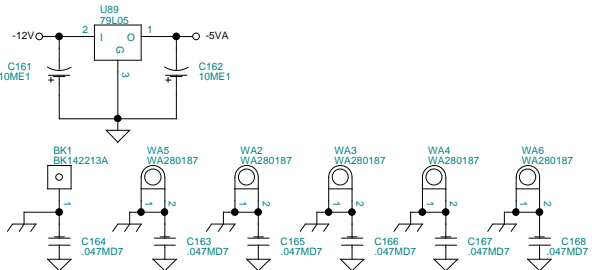
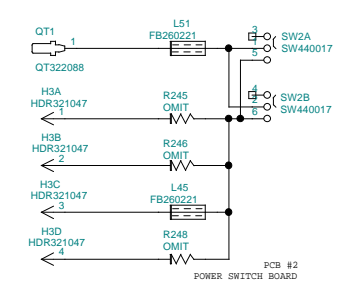
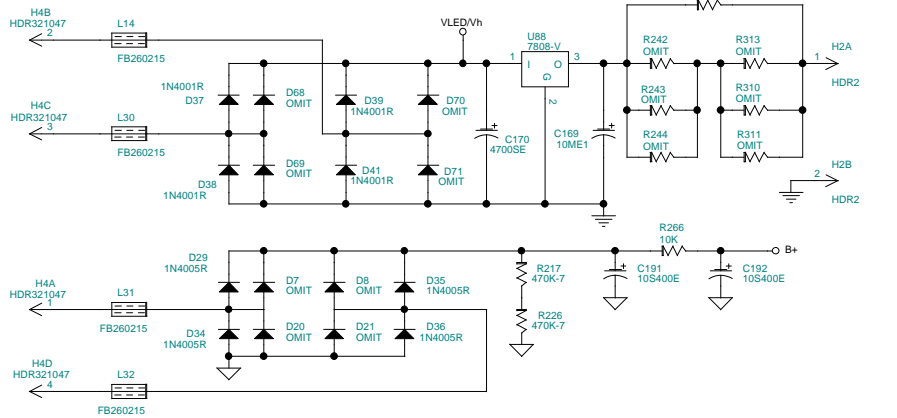
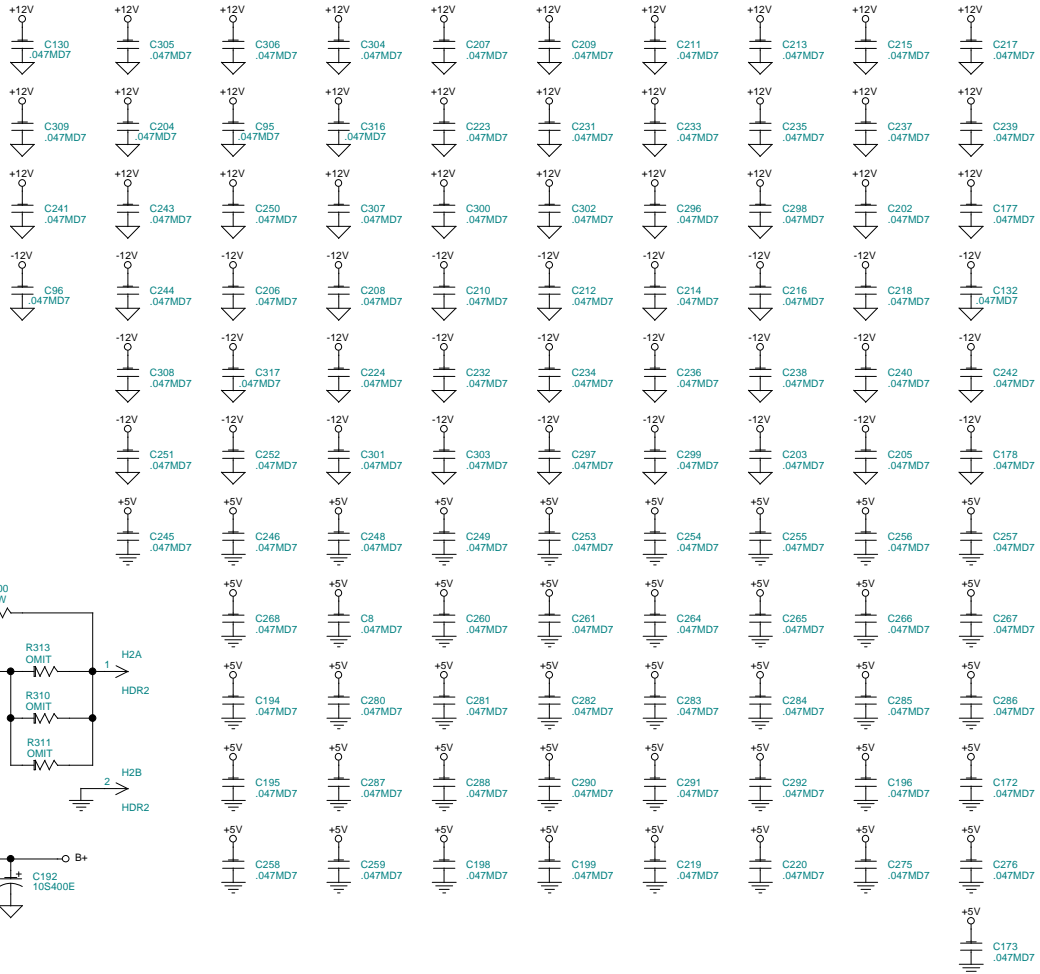
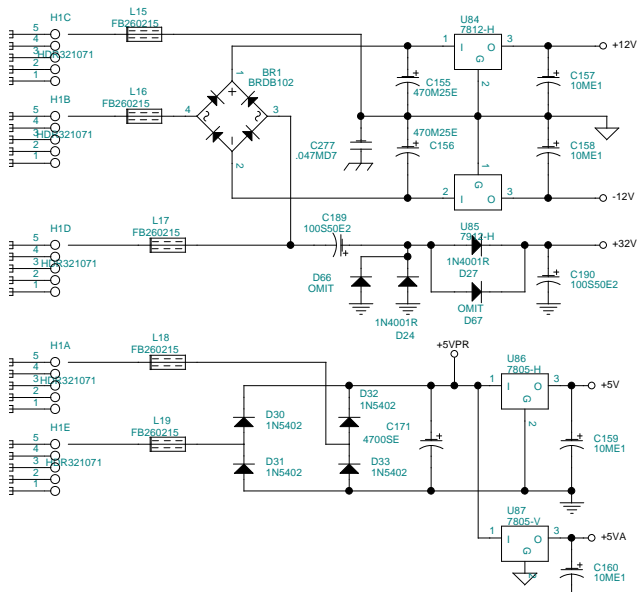


TO BREAKAWAY ENCODER BOARD



PCB #4
BREAKAWAY ENCODER BOARD

Digttech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.010
Date: Wednesday, August 02, 2000	Rev AC
Sheet 10 of 11	



Digitech	
8760 South Sandy Parkway Sandy, Utah 84070	
Title GSP-2112 / 2120 VGS ARTIST MAIN BOARD	
Size B	Document Number 056280AC.011
Date: Wednesday, August 02, 2000	Sheet 11 of 11
	Rev AC

GSP-2112 / 2120 VGS ARTIST MAIN BOARD Revised: February 12, 1998
 056280AC.001 Revision: AC
 Bill Of Materials February 16, 1998 10:39:08
 Quan Reference Part SYMAN Description

1	BK1	BK142213A	14-2213-A	Bracket, R/A, EMI Grounding, 2H Tapped 6-32
1	BR1	BRDB102	70-0129	Bridge Rectifier
1	BT1	BT241016	24-1016	3V Battery, Lithium, Eveready Part #CR2032
1	BTC1	BTC241014	24-1014	Holder For 3V Battery
1	C1	50PJD1	62-0008	50 pF Cap 50V 5% Ceramic Disc T&R
7	C2,C22,C43,C80,C126,C148,C151	120PKD1	62-0002	120 pF Cap 50V 10% Ceramic Disc T&R
2	C3,C24	.0022J	56-0002	.0022 uF Cap 50V 5% Poly Film 222J ammo
32	C4,C5,C7,C12,C14,C15,C18,C19,C20,C25,C29,C36,C39,C40,C47,C63,C66,C73,C77,C79,C81,C87,C89,C111,C112,C119,C123,C124,C125,C135,C136,C319	10NPM1	60-0051-01	10 uF Cap 16V -20/+20% Elect., NP T&R
43	C6,D7,D8,SW18,SW19,D20,SW20,D21,SW21,SW22,SW23,SW24,SW25,R46,D66,D67,D68,D69,D70,D71,C85,C86,U96,C197,R228,R238,R242,R243,R244,R245,R246,R247,R248,R310,R311,R313,C329,C344,R385,R386,R437,R438,R442	OMIT	00-0000	This part has been omitted
128	C8,C17,C31,C45,C51,C53,C56,C60,C65,C83,C95,C96,C113,C114,C130,C132,C143,C145,C146,C163,C164,C165,C166,C167,C168,C172,C173,C174,C177,C178,C194,C195,C196,C198,C199,C202,C203,C204,C205,C206,C207,C208,C209,C210,C211,C212,C213,C214,C215,C216,C217,C218,C219,C220,C223,C224,C231,C232,C233,C234,C235,C236,C237,C238,C239,C240,C241,C242,C243,C244,C245,C246,C248,C249,C250,C251,C252,C253,C254,C255,C256,C257,C258,C259,C260,C261,C264,C265,C266,C267,C268,C275,C276,C277,C280,C281,C282,C283,C284,C285,C286,C287,C288,C289,C290,C291,C292,C294,C295,C296,C297,C298,C299,C300,C301,C302,C303,C304,C305,C306,C307,C308,C309,C313,C314,C316,C317,C327	.047MD7	62-3129	.047 uF Cap 50V 20% Cerm, SMT 0805
3	C9,C62,C180	.047J	56-0010	.047 uF Cap 50V 5% Stacked Metal Pet 473J ammo
2	C10,C142	4.7ME1	60-0048-01	4.7 uF Cap 16V -20/+20% Elect., T&R
1	C11	2.2NPS25E1	60-0043	2.2 uF Cap 25V -20/+80% Elect., NP T&R

DOD Software

Page

GSP-2112 / 2120 VGS ARTIST MAIN BOARD Revised: February 12, 1998
 056280AC.001 Revision: AC
 Bill Of Materials February 16, 1998 10:39:08
 Quan Reference Part SYMAN Description

6	C13,C153,C326,C337,C338, C339	1NPM1	60-0046-01	1.0	uF Cap	16V -20/+20%	Elect., N.P. T&R
6	C16,C26,C127,C128,C139, C144	25PJD1	62-0001	25	pF Cap	50V 5%	Ceramic Disc T&R
2	C21,C23	.0068J	56-0005	.0068	uF Cap	50V 5% Poly Film	682J ammo
2	C27,C30	.022J	56-0008	.022	uF Cap	50V 5% Poly Film	223J ammo
1	C32	120PJD7	62-3135	120	pF Cap	50V 5%	Cerm, SMT 0805
1	C33	.0018J	56-0026	.0018	uF Cap	50V 5% Poly Film	182J ammo
6	C34,C115,C116,C311,C312, C315	1M50E1	60-0044-01	1.0	uF Cap	50V -20/+20%	Elect., T&R C&F
1	C35	.0047J	56-0004	.0047	uF Cap	50V 5% Poly Film	472J ammo
7	C37,C41,C93,C94,C181, C182,C336	.010J	56-0006	.010	uF Cap	50V 5% Poly Film	103J ammo
2	C38,C44	.015J	56-0007	.015	uF Cap	50V 5% Poly Film	153J ammo
2	C42,C335	.15J	56-0013	.15	uF Cap	50V 5% Stacked Metal Pet	154J ammo
3	C52,C74,C147	33LLME1	60-0059-01	33	uF Cap	16V 20%	Elect., LL T&R
1	C72	220PMD	62-0022	220	pF Cap	50V 20%	Ceramic Disc T&R
4	C75,C191,C192,C332	10S400E	60-0310	10	uF Cap	400V -20/+80%	Elect
1	C78	.0033J	56-0003	.0033	uF Cap	50V 5% Poly Film	332J ammo
4	C90,C91,C137,C138	10S50E	60-0090	10	uF Cap	50V -20/+80%	Elect
1	C104	470PKD7	62-3133	470	pF Cap	50V 10%	Cerm, SMT 0805
4	C110,C200,C333,C334	.0082K250F	56-2219	.0082	uF Cap	250V 10%	Poly Film
4	C117,C118,C247,C310	.47J	56-0016	.47	uF Cap	50V 5% Stacked Metal Pet	474J ammo
2	C129,C134	150PMD1	62-0031	150	pF Cap	50V 20%	Ceramic Disc T&R
11	C131,C133,C141,C152,C157, C158,C159,C160,C161,C162, C169	10ME1	60-0049-01	10	uF Cap	16V -20/+20%	Elect.,-D Ammo
1	C140	15PJD1	62-0007	15	pF Cap	50V 5%	Ceramic Disc T&R
6	C149,C185,C186,C318,C320, C322	.0010J	56-0000	.0010	uF Cap	50V 5% Poly Film	102J ammo
1	C150	180PMD1	62-0021	180	pF Cap	50V 20%	Ceramic Disc T&R
2	C154,C325	470PMD1	62-0003	470	pF Cap	50V 20%	Ceramic Disc T&R
2	C155,C156	470M25E	60-0058	470	uF Cap	25V -20/+20%	Elect
2	C170,C171	4700SE	60-0062	4700	uF Cap	16V -20/+20%	Elect
2	C183,C184	.0027J	56-0027	.0027	uF Cap	50V 5% Poly Film	272J ammo
2	C189,C190	100S50E2	60-1013	100	uF Cap	50V -20/+80%	Elect-AMMO
3	C193,C278,C279	10KT	62-0163	10	uF Cap	16V 10%	Tantalum T&R
1	C321	240PMD1	62-0010	240	pF Cap	50V 20%	Ceramic Disc T&R
1	C323	.018J	56-0032	.018	uF Cap	50V 5% Poly Film	183J ammo
1	C328	.68J	56-0017	.68	uF Cap	50V 5% Stacked Metal Pet	684J ammo
2	C330,C331	470PK500D	62-0071	470	pF Cap	500V 10%	Ceramic Disc
1	D1	LEDR702082	70-2082	Red	Light Emitting Diode, T1 Encap, w/housing		
24	D2,D3,D4,D5,D6,D9,D10, D11,D12,D13,D16,D17,D18, D23,D25,D26,D28,D40,D72, D76,D77,D78,D79,D81	1N4148R	70-0004	1N4148	Diode Silicon Switching, 75 Volts PIV, RADIAL		
1	D22	LEDY702091	70-2091	LED Yel,	T1.75 Case		
6	D24,D27,D37,D38,D39,D41	1N4001R	70-0000	1N4001	Silicon Rectifier, 1 Amp, 50 Volts PIV, RADIAL		
4	D29,D34,D35,D36	1N4005R	70-0017	1N4005	1N4005,Silicon Rectifier, RADIAL		
4	D30,D31,D32,D33	1N5402	70-0100	1N5402	Silicon Rectifier, 3Amp, 200 PIV		
21	D42,D43,D44,D45,D46,D47, D48,D49,D50,D51,D52,D53,	LEDG702114	70-2114	Green	Light Emitting Diode, T1 (AUTO INSERT)		

DOD Software

Page

GSP-2112 / 2120 VGS ARTIST MAIN BOARD Revised: February 12, 1998
056280AC.001 Revision: AC
Bill Of Materials February 16, 1998 10:39:08
Quan Reference Part SYMAN Description

D54,D55,D56,D57,D58,D59,
D60,D61,D65
3 D62,D63,D64 LEDR702113 70-2113 Red Light Emitting Diode, T1 (AUTO INSERT)

1	H1	HDR321071	32-1071	5	Pin Header, 0.1" spacing, 0.025" sq pins Lockin
1	H2	HDR2	32-1069	2	Pin Header, 0.1" spacing, Cut fron 5 Pin Hdr
2	H3,H4	HDR321047	32-1047	4	Pin Header, 0.2" spacing, Locking
1	H5	HDR322000	32-2000	26	Pin Hdr, 13x2, 0.1" spacing, 0.025 pins
1	H6	HDR321083	32-1083	14	Pin Hdr, 7x2, 0.1" spacing, 0.025 pins, .375
1	H7	RC321185	32-1185	5	Pin Ribbon Cable Flex, 0.1" spacing, 2.00" Length, Open end
1	H8	PA13X2	00-0000	13X2	Pin Pad Pattern, Not a part
1	H9	PA5	00-0000	5	Pin Pad Pattern, Not a part
1	H10	RC321204	32-1204	10	Pin Ribbon Cable, 2mm spacing, 5.00" Length
1	H11	WT321164	32-1164	10	Circuit Wire Trap Connector, 2mm Pitch
1	H12	HDR323142	32-3142	6	Pin Hdr, 3X2, 0.025sq pin, 0.23" Long, 0.100" spacing
2	HS1,HS2	HS704215	70-4215		Heatsink, PCB Mount, Vert., for TO-220
1	HS3	HS704205	70-4205		Heatsink, L-Shape Base
1	HS4	HS704204	70-4204		Heatsink, 3 Regulator, Top
1	I1	INS704209	70-4209		Insulator, 3 Regulator Heatsink
1	J1	J320118	32-0118		1/4 Phone Jack, Hor. Mount, 1/2 Nose Thread Slimline
5	J2,J3,J4,J5,J8	J320119	32-0119		1/4 Phone Jack, Hor. Mount, Full Nose Thread Slimline
2	J6,J7	J320116	32-0116		JACK, Shielded 5 pin DIN, PCB mount
1	J9	J320092	32-0092		5 Pin DIN Jack
2	JP1,JP2	JP321075	32-1075		2 Pin Shunt Jumper for Header
22	L1,L2,L3,L4,L5,L6,L7,L8, L9,L10,L11,L12,L13,L34, L35,L36,L37,L38,L39,L40, L41,L42	FB260217	26-0217		Ferrite Bead, 2.5Kohms @70Mhz, SMT 0805
9	L14,L15,L16,L17,L18,L19, L30,L31,L32	FB260215	26-0215		OBSOLETE, USE RADIAL
8	L20,L21,R153,R167,R205, R206,R262,R263	200-7	50-1510	200	Ohm Resistor 5% 1/10 Watt TF, SMT 0805
8	L22,L23,L24,L25,L26,L27, L28,L29	FB260219	26-0219		Ferrite Bead, 600 ohms @100Mhz, SMT 0805
1	L44	600UH	26-0196		600 uH Inductor
2	L45,L51	FB260221	26-0221		Ferrite Bead w/axial lead
2	P1,P2	100K402011	40-2011		100 K "W" 16mm, Rot Pot x2, Rack Leads
5	P3,P4,P5,P6,P7	SW440172	44-0172		Encoder Switch,24 Pos/Dtnt,2-bit,R/A,16mm body,15mm D-shaft
1	P8	SW440170	44-0170		Encoder Switch, 32 Position, Vert, 17mm shaft
1	PA1	W360057	36-0057		3" Coax Cable
3	PA2,PA5,PA6	W360035	36-0035		8.5" Coax Cable
4	PA3,PA4,PA7,PA8	PAC0AX	00-0000		NOT A PART, holes for other side of Coax Cable
1	PCB1	80-6280-A	80-6280-A		GSP2112 MAIN PCB, RAW (132.44 sq.in.)
13	Q1,Q2,Q9,Q10,Q11,Q12,Q13, Q14,Q15,Q16,Q17,Q18,Q19	2N4124	70-1009	2N4124	NPN, Gen. Purp. Amplifier/Switching Xstr T&R
5	Q4,Q5,Q7,Q8,Q26	2N5088	70-1007	2N5088	NPN, Transistor, T&R
1	Q6	2N4125	70-1008	2N4125	PNP, Gen. Purp. Amplifier/Switching Xstr
2	Q21,Q22	J112	70-1012	J112A	JFET, National Only
1	QT1	QT322088	32-2088		Quick-tab, .110 x .032, PC Mount
3	R1,R4,R97	15K-7	50-1516	15	KOhm Resistor 5% 1/10 Watt TF, SMT 0805
16	R2,R40,R108,R157,R159, R174,R199,R200,R222,R229, R251,R361,R380,R382,R391,	51-7	50-1524	51	Ohm Resistor 5% 1/10 Watt TF, SMT 0805

DOD Software

GSP-2112 / 2120 VGS ARTIST MAIN BOARD
056280AC.001

Revised: February 12, 1998

Revision: AC

Bill Of Materials

February 16, 1998

10:39:08

Quan Reference

Part

SYMAN

Description

Page

16	R395 R3,R7,R48,R201,R223,R230, R275,R276,R277,R278,R279, R281,R282,R354,R381,R383	3.3K-7	50-1525	3.3	KOhm Resistor 5% 1/10 Watt TF, SMT 0805
10	R5,R21,R55,R59,R75,R80, R124,R304,R398,R414	47K-7	50-1502	47	KOhm Resistor 5% 1/10 Watt TF, SMT 0805
32	R6,R8,R23,R34,R68,R77, R81,R94,R96,R98,R102,	1K-7	50-1505	1	KOhm Resistor 5% 1/10 Watt TF, SMT 0805

	R106,R107,R109,R119,R120, R150,R154,R163,R165,R181, R202,R219,R320,R402,R403, R404,R409,R431,R433,R435, R441								
4	R9,R10,R162,R176	39K-7	50-1528	39	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
71	R11,R19,R30,R31,R33,R35, R41,R45,R47,R56,R61,R62, R65,R73,R99,R111,R113, R114,R123,R127,R128,R129, R130,R131,R132,R133,R138, R139,R140,R141,R155,R160, R161,R166,R169,R179,R193, R194,R208,R231,R239,R240, R256,R257,R258,R259,R267, R268,R269,R270,R271,R272, R273,R274,R331,R350,R351, R366,R367,R368,R369,R370, R371,R372,R373,R374,R375, R376,R377,R411,R428	10K-7	50-1503	10	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
18	R12,R16,R24,R43,R87,R100, R104,R110,R147,R152,R177, R180,R213,R237,R302,R305, R419,R423	100K-7	50-1504	100	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
11	R13,R82,R92,R105,R117, R225,R235,R255,R312,R337, R427	220K-7	50-1514	220	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
18	R14,R15,R28,R37,R103, R115,R116,R182,R197,R198, R252,R253,R260,R261,R338, R379,R384,R388	10-7	50-1500	10	Ohm Resistor	5%	1/10 Watt TF, SMT 0805		
22	R17,R20,R25,R26,R27,R52, R60,R90,R93,R144,R186, R216,R218,R264,R265,R321, R322,R323,R324,R325,R339, R362	20K-7	50-1507	20	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
13	R18,R32,R54,R58,R84,R112, R212,R215,R306,R336,R407, R408,R445	4.7K-7	50-1509	4.7	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
32	R22,R49,R50,R51,R53,R66, R67,R71,R74,R85,R91,R164, R184,R185,R207,R220,R301, R309,R326,R327,R328,R329, R400,R412,R415,R418,R422,	2K-7	50-1508	2	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		

DOD Software

GSP-2112 / 2120 VGS ARTIST MAIN BOARD

Revised: February 12, 1998

056280AC.001

Revision: AC

Bill Of Materials

February 16, 1998

10:39:08

Quan Reference

Part

SYMAN

Description

Page

16	R430,R432,R434,R436,R440 R29,R36,R143,R188,R227, R233,R234,R254,R307,R332, R333,R378,R387,R413,R417, R424	1M-7	50-1506	1	MOhm Resistor	5%	1/10 Watt TF, SMT 0805		
2	R38,R39	1M	50-0045	1	MOhm Resistor	5%	1/4 Watt Carbon Film		
3	R44,R95,R146	33K-7	50-1512	33	KOhm Resistor	5%	1/10 Watt TF, SMT 0805		
17	R57,R283,R284,R285,R286, R287,R288,R289,R290,R291, R292,R293,R294,R295,R296, R297,R298	680-7	50-1511	680	Ohm Resistor	5%	1/10 Watt TF, SMT 0805		
6	R63,R64,R209,R317,R346, R347	330-7	50-1517	330	Ohm Resistor	5%	1/10 Watt TF, SMT 0805		

6	R72,R195,R196,R203,R204, R214	27K-7	50-1527	27	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
11	R78,R175,R249,R299,R314, R315,R316,R318,R319,R335, R429	6.8K-7	50-1513	6.8	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
19	R79,R83,R86,R88,R156, R158,R183,R187,R189,R190, R191,R192,R217,R224,R226, R303,R330,R420,R421	470K-7	50-1523	470	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
3	R89,R232,R426	7.5K-7	50-1521	7.5	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
5	R168,R178,R221,R236,R425	22K-7	50-1522	22	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
13	R170,R171,R172,R210,R211, R250,R352,R355,R358,R364, R365,R392,R396	100-7	50-1515	100	Ohm Resistor	5%	1/10 Watt TF, SMT	0805
2	R241,R401	470-7	50-1518	470	Ohm Resistor	5%	1/10 Watt TF, SMT	0805
1	R266	10K	50-0020	10	KOhm Resistor	5%	1/4 Watt Carbon Film	
4	R300,R334,R356,R416	62K-7	50-1501	62	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
1	R308	75K-7	50-1520	75	KOhm Resistor	5%	1/10 Watt TF, SMT	0805
4	R389,R390,R393,R394	10.0K 1%-7	52-4500	10.0	KOhm Resistor	1%	1/10 Watt TF, SMT	0805
1	R700	12 3W	50-2250	12	Ohm Resistor	5%	3 Watt Carbon Film	
1	RC1	RC321214	32-1214	26	Pin Ribbon Cable Conn,	.1	spacing, 13X2	
1	RCH1	RCH321221	32-1221	10	Pin Ribbon Cable, Holder,	2mm	spacing	
1	RCH2	RC321201	32-1201	5	Pin Ribbon Cable, 2mm	spacing,	5.00" Length	
2	RCH2X,RCH3X	RCH321220	32-1220	5	Pin Ribbon Cable, Holder,	2mm	spacing	
1	RCH3	PA5/2MM	00-0000	5	Pin Pad Pattern, Not a part,	2MM	spacing	
1	S5	DIP22S	70-3025	22	Pin Dip Socket, Skinny			
1	S63	DIP32S	70-3017	32	Pin Dip Socket			
1	SC1	SC340036	34-0036		Switch Cap, Black, Cylindrical,	PHA Series		
7	SC4,SC5,SC6,SC7,SC8,SC9, SC10	SC340035	34-0035		Switch Cap, Black, Round plastic,	12mm		
2	SR1,SR2	SR280059	28-0059		Screw, 6-32 x 1/4", Pozi, Pan,	Black		
5	SR3,SR4,SR5,SR6,SR7	SR280058	28-0058		Screw, 6-32 x 3/8", Pozi, Pan,	Black		
2	SV1,SV2	TUBE9S	32-0250	9	Pin Tube Socket			
1	SW1	SW440027	44-0027		DPDT I/O Switch (mini), PC Mount			
1	SW2	SW440017	44-0017		DPDT Power Switch, 125Volt, 7 Amp			
7	SW3,SW4,SW5,SW6,SW7,SW8, SW9	SW440167	44-0167		Lite Touch Switch, Right Angle			
8	SW10,SW11,SW12,SW13,SW14, SW15,SW16,SW17	SW440083	44-0083		Lite Touch Switch, Mini			

DOD Software

GSP-2112 / 2120 VGS ARTIST MAIN BOARD
056280AC.001

Bill Of Materials

February 16, 1998

Revised: February 12, 1998

Revision: AC

10:39:08

Quan Reference

Part

SYMAN

Description

Page

3	U1,U4,U36	2159	72-4262		VCA,THAT 2159 (DOD & Digitech)			
3	U2,U40,U100	4053/SM	72-0087		74HC4053 Triple 2 to 1 Analog Multiplexer, SMT			
6	U3,U10,U23,U39,U50,U90	NJM4560/SM	72-4233		NJM4560 Dual Op-Amp, SMT SOIC			
1	U5	SSM2120A	72-4250		Dual VCA/ Dual Detector			
18	U6,U7,U8,U11,U12,U14,U16, U22,U24,U28,U29,U32,U42, U58,U59,U60,U82,U83	LF353/SM	72-4032		LF353M Dual Op-Amp, SMT			
4	U9,U13,U25,U41	LM1972/SM	72-4038		LM1972 2-Channel Audio Attenuator w/Mute, SMT			
1	U15	4051/SM	72-0085		8 to 1 Analog Multiplexer, SMT			
1	U17	CD4052DA/S	72-0079		Dual 4-CH MUX, SOIC, SMT			
1	U33	TMS57070	72-3042		TMS57070 in QFP100 SPECIAL FOOTPRINT, SMT			
5	U34,U71,U72,U73,U91	74HC574/SM	72-1263		Octal D-Type Edge Triggered Flip-Flops, SMT			
3	U35,U92,U93	74HC244A/S	72-1111		Octal Buffer-Line Driver W/3-State Outputs, SMT			
1	U37	74HC139/SM	72-5420		Dual 2 Line to 4 Line Decoder/Demultiplexer, SMT			
1	U38	74HC00/SM	72-5418		Quadruple 2-Input Positive-Nand Gate, SMT			
2	U43,U51	SDISC3181	72-3181		SDISCII W/I's Interface in QFP100 SPECIAL FOOTPRINT (AMI), SMT			
4	U44,U45,U46,U47	256KX16-70	72-1419		DRAM, 256K x 16 70ns, SOJ, SMT			
1	U61	Z8S180/S	72-4161		CPU Z8S180 Microprocessor, 20MHz, SMT			

056280ac.pls

1	U62	6N138	70-2139	6N138 Opto-Isolator	
1	U63	72-3142-06	72-3142-06	27C040-150, 512K X 8 CMOS Eprom V2.00 (2120 VGS ARTIST)	
2	U64,U68	128KX8_SRA	72-5417	128K X 8 RAM Static, SMT	
1	U65	MC34064P	70-5004	MC34064 Undervoltage Sensing Circuit	
2	U66,U67	74HC138/SM	72-5419	3 Line to 8 Line Decoder/Demultiplexer, SMT	
1	U69	74HC04/SM	72-1086	Hex Inverter 74HC04, SMT	
3	U74,U75,U76	74HC574A/S	72-1263	Octal D-Type Edge Triggered Flip-Flops, SMT	
3	U77,U78,U79	LA10502	54-0351	8 Bit R-2R Ladder, 5.00 kOhm 1% Thick Film	
2	U80,U81	LM311/SM	72-5415	LM311 Analog Voltage Comparator, SMT	
1	U84	7812-H	70-4013	7812 +12 Volt 1 Amp Voltage Regulator	TO-220 HORIZ
1	U85	7912-H	70-4017	7912 -12 Volt 1 Amp Voltage Regulator	TO-220 HORIZ
1	U86	7805-H	70-4014	7805 +5 Volt 1 Amp Voltage Regulator	TO-220 HORIZ
1	U87	7805-V	70-4014	7805 +5 Volt 1 Amp Voltage Regulator	TO-220 VERT
1	U88	7808-V	70-4020	7808 +8 Volt 1 Amp Voltage Regulator	TO-220 VERT
1	U89	79L05	70-4127	79L05 -5 Volt 100 mA Voltage Regulator	TO-92
1	U97	CS5335	72-3021	CS5335, 20 Bit Stereo, 105dB ADC, SMT	
1	U98	CS4327	72-3020	CS4327, 20 Bit Stereo, 101dB DAC, SMT	
2	V1,V2	12AX7A2	76-0002	12AX7A2 Tube	
5	WA2,WA3,WA4,WA5,WA6	WA280187	28-0187-A	Washer, for grounding J320119	
1	X1	22.579 MHZ	76-0320	22.579 MHZ Crystal, Vert	
1	X2	20.00MHZ-V	76-0321	20.00 MHZ Crystal, Vert	