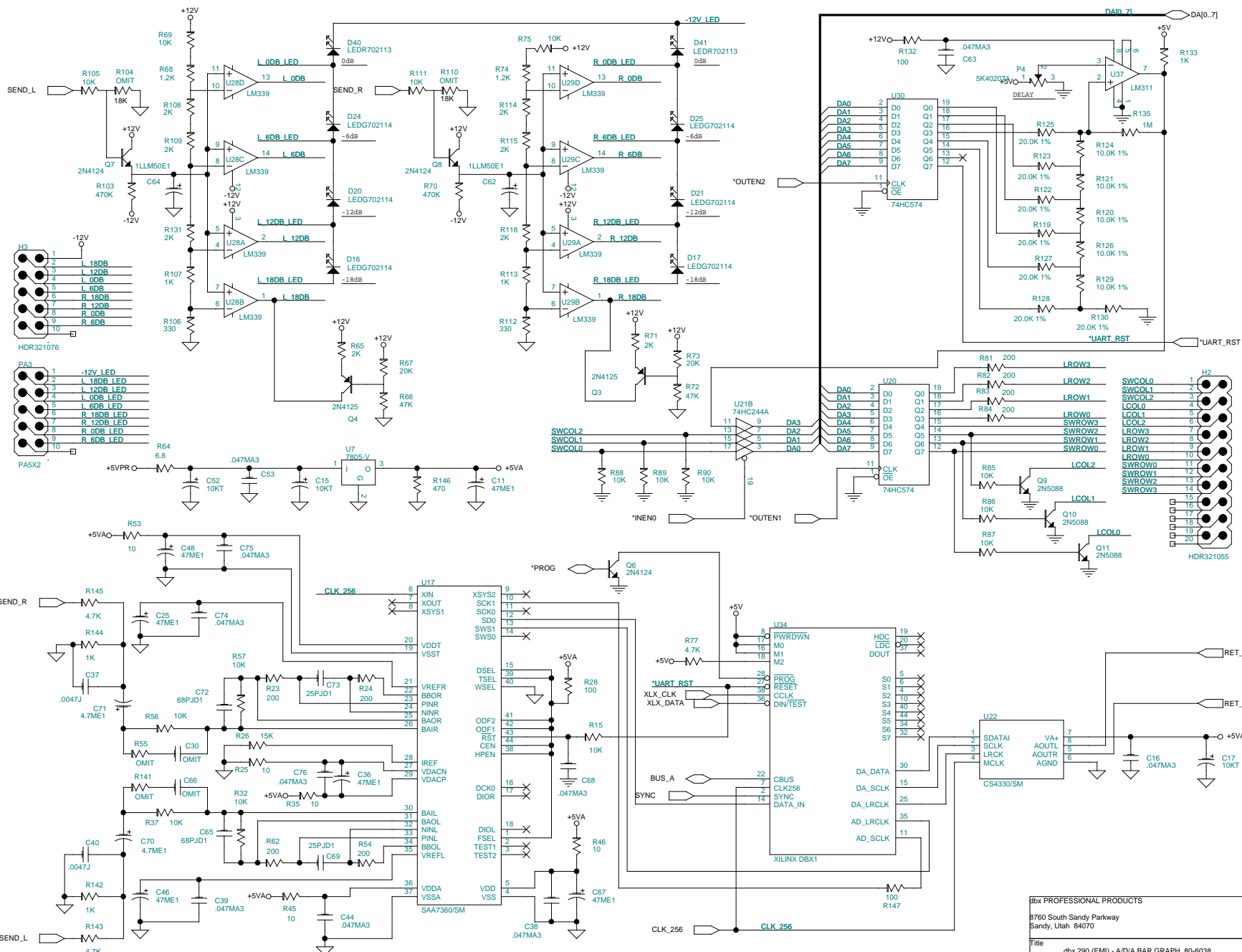


dbx PROFESSIONAL PRODUCTS
 8760 South Sandy Parkway
 Sandy, Utah 84070

Title: dbx 290 (EMI) - INPUT_OUTPUT_MIX 80-6038

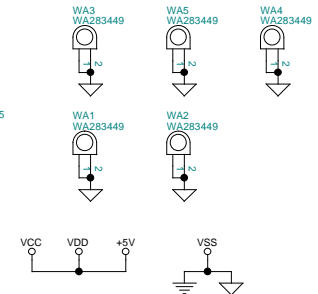
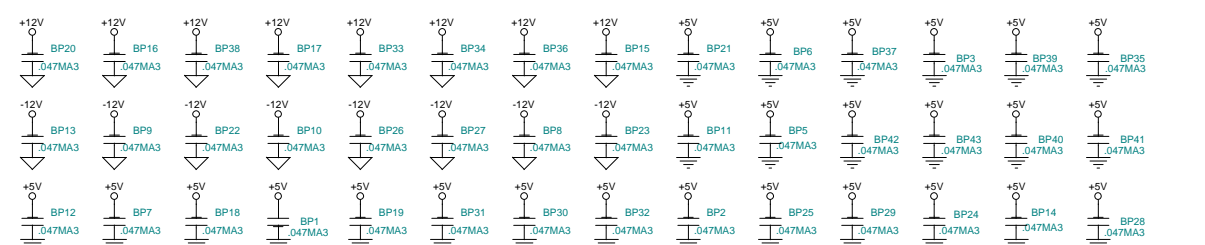
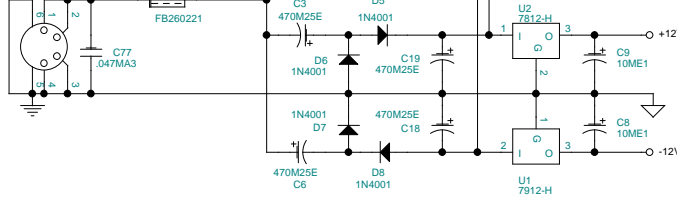
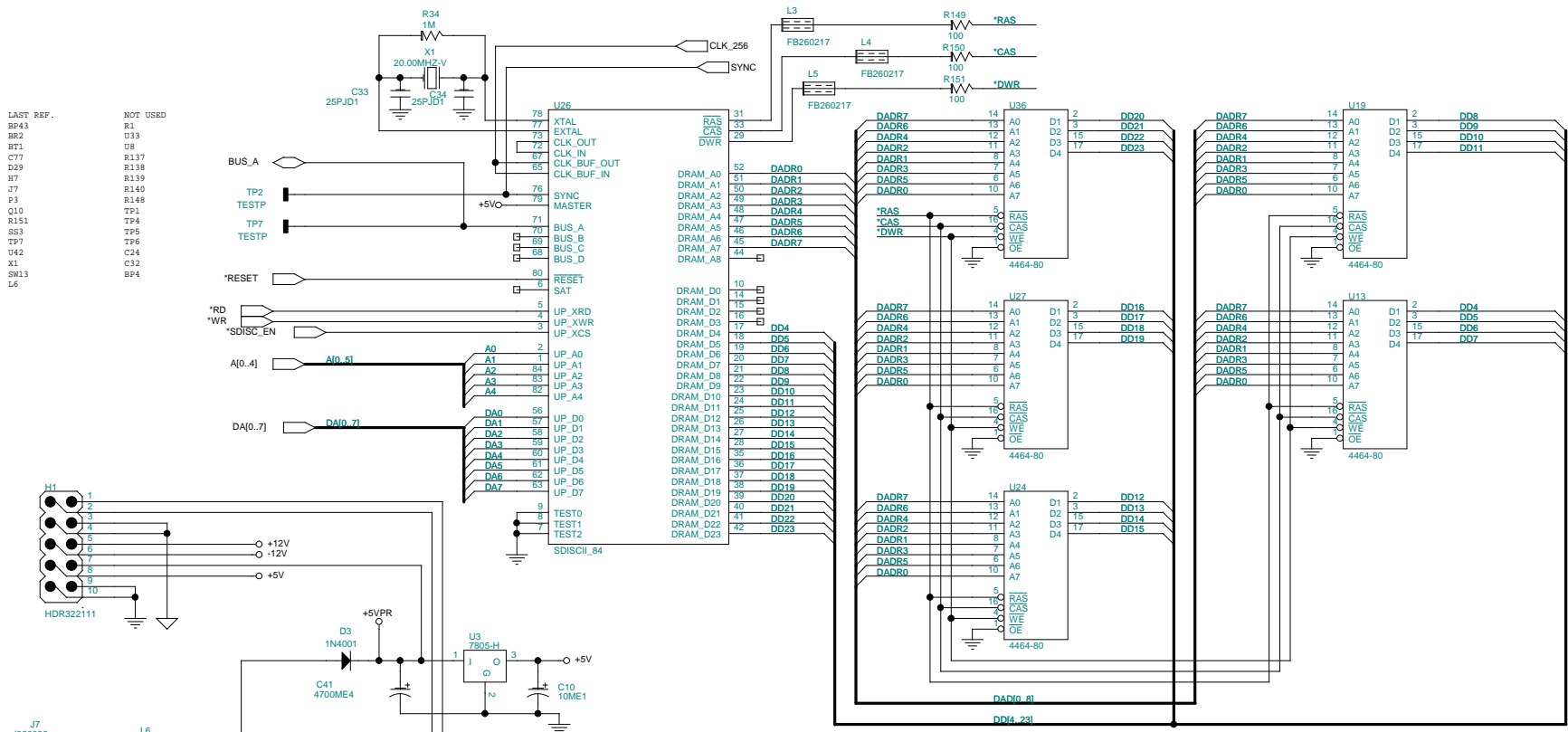
Size B	Document Number 056038A1.001	Rev A1
--------	------------------------------	--------

Date: Monday, October 18, 1999 Sheet 1 of 5

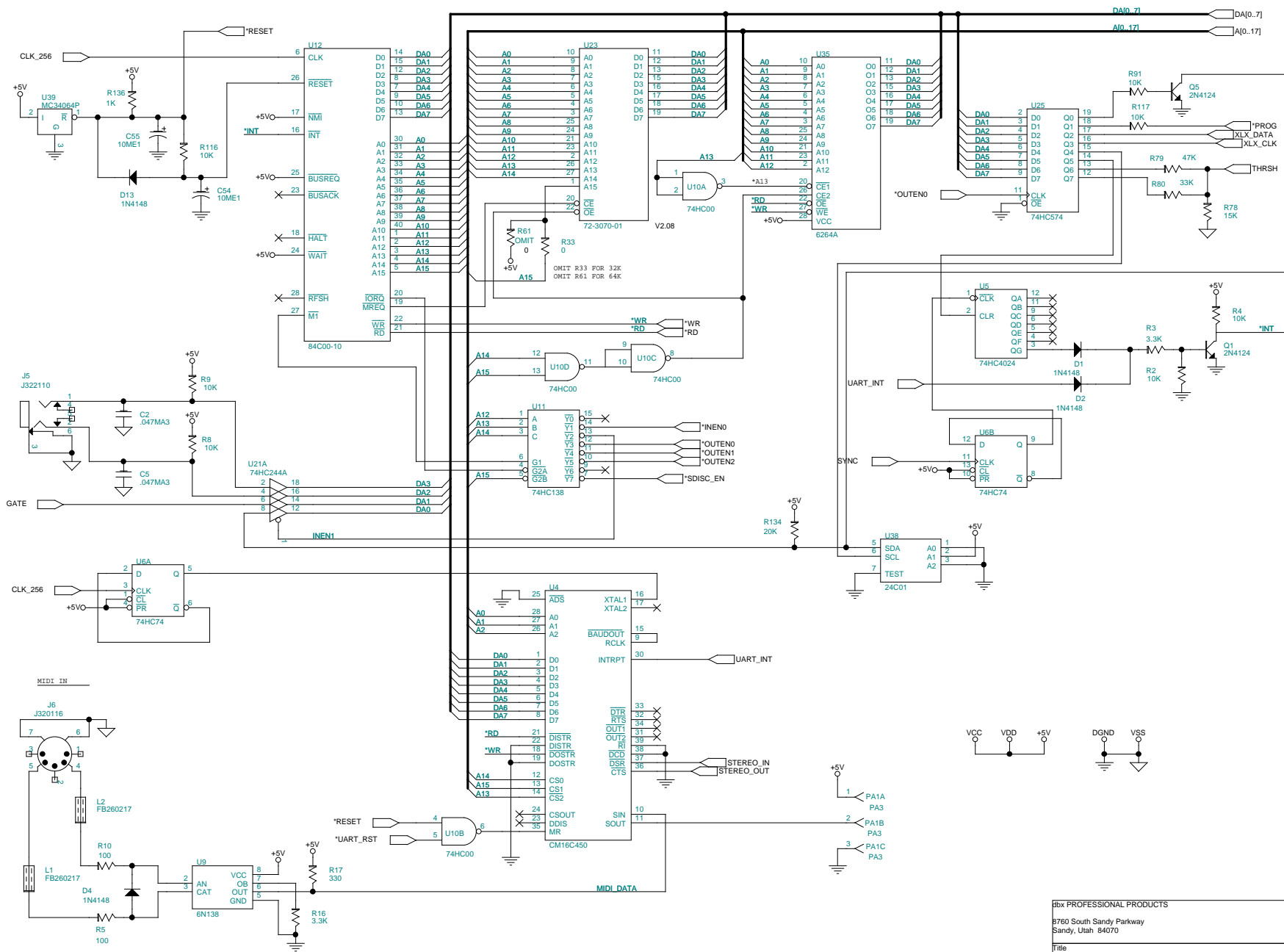


dbx PROFESSIONAL PRODUCTS		
8760 South Sandy Parkway Sandy, Utah 84070		
Title: dbx 290 (EMI) - A/D/A, BAR GRAPH 80-6038		
Size B	Document Number 056038A1.002	Rev A1
Date: Monday, October 18, 1999	Sheet 2 of 5	

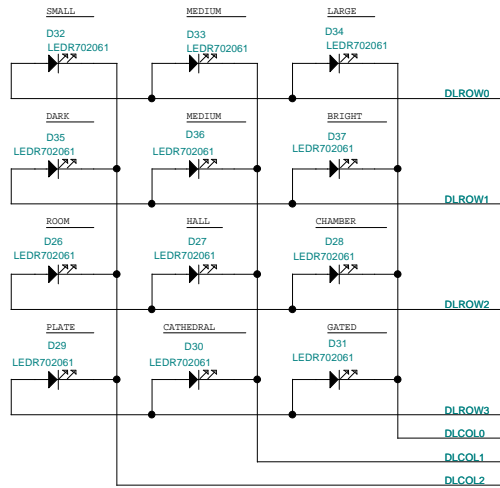
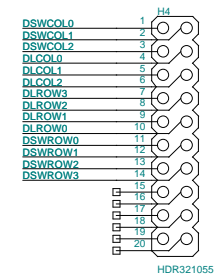
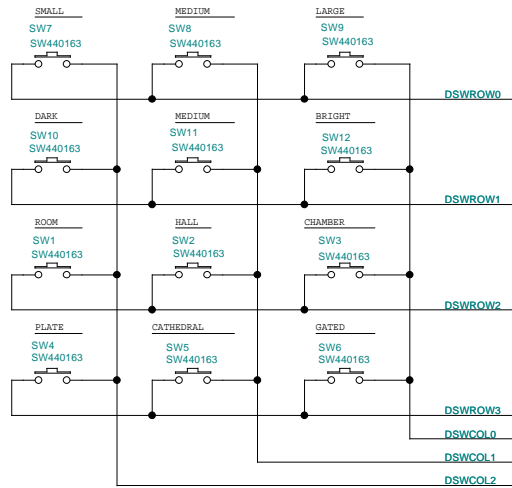
LAST REF. NOT USED
 BP43 R1
 BR2 U13
 BT1 U8
 U8
 R137 R137
 R138 R138
 H7 R139
 J7 R140
 P3 R148
 TP1 TP1
 R151 TP4
 SS3 TP5
 TP7 TP6
 U42 C24
 C32
 SW13 BP4
 L6



dbx PROFESSIONAL PRODUCTS	
8760 South Sandy Parkway Sandy, Utah 84070	
Title: dbx 290 (EMI) - S-DISC, POWER 80-6038	
Size B	Document Number 056038A1.004
Date: Monday, October 18, 1999	Sheet 4 of 5



dbx PROFESSIONAL PRODUCTS	
8760 South Sandy Parkway Sandy, Utah 84070	
Title dbx 290 (EMI)-CPU, DECODE, EPROM, SRAM 80-6038	
Size B	Document Number 056038A1.003
Date: Monday, October 18, 1999	Sheet 3 of 5
	Rev A1



dbx PROFESSIONAL PRODUCTS		
8760 South Sandy Parkway Sandy, Utah 84070		
Title: dbx 290(EMI)-SWITCH & LED FRNT BOARD 80-6038		
Size: B	Document Number: 056038A1.005	Rev: A1
Date: Monday, October 18, 1999	Sheet: 5	of 5

Quan	Reference	Part	SYMAN	Description
56	BP1, BP2, C2, BP3, BP5, C5, BP6, BP7, C7, BP8, BP9, BP10, BP11, BP12, BP13, BP14, BP15, BP16, C16, BP17, BP18, BP19, BP20, BP21, BP22, BP23, BP24, BP25, BP26, BP27, BP28, BP29, BP30, BP31, BP32, BP33, BP34, BP35, BP36, BP37, BP38, C38, BP39, C39, BP40, BP41, BP42, BP43, C44, C53, C63, C68, C74, C75, C76, C77	.047MA3	62-0067	0.047 uF Cap 50V 20% Axial Monolithic
8	C1, C4, C12, C13, C14, C20, C21, C22	470PMD1	62-0003	470 pF Cap 50V 20% Ceramic Disc T&R
4	C3, C6, C18, C19	470M25E	60-0058	470 uF Cap 25V -20/+20% Elect
5	C8, C9, C10, C54, C55	10ME1	60-0049-01	10 uF Cap 16V -20/+20% Elect., -D T&R
6	C11, C25, C36, C46, C48, C67	47ME1	60-0054-01	47 uF Cap 16V -20/+20% Elect., T&R, 5X8mm body
3	C15, C17, C52	10KT	62-0163	10 uF Cap 16V 10% Tantalum T&R
6	C23, C33, C34, C47, C69, C73	25PJJD1	62-0001	25 pF Cap 50V 5% Ceramic Disc T&R
2	C26, C51	.22LLME1	60-0039-01	.22 uF Cap 16V -20/+20% Elect, LL-D T&R
2	C27, C28	.0033J	56-0003	.0033 uF Cap 50V 5% Poly Film 332J ammo
1	C29	240PMD1	62-0010	240 pF Cap 50V 20% Ceramic Disc T&R
12	C30, R55, R58, R61, C66, R93, R95, R100, R101, R104, R110, R141	OMIT	00-0000	This part has been omitted
9	C31, C35, C42, C56, C57, C58, C59, C60, C61	1NPME1	60-0046-01	1.0 uF Cap 16V -20/+20% Elect., N.P. T&R
2	C37, C40	.0047J	56-0004	.0047 uF Cap 50V 5% Poly Film 472J ammo
1	C41	4700ME4	60-0062	4700 uF Cap 16V -20/+20% Elect-L
1	C43	200PMD1	62-0009	200 pF Cap 50V 20% Ceramic Disc T&R
1	C45	.022J	56-0008	.022 uF Cap 50V 5% Poly Film 223J ammo
2	C49, C50	10NPME1	60-0051-01	10 uF Cap 16V -20/+20% Elect., NP T&R
2	C62, C64	1LLM50E1	60-0045-01	1.0 uF Cap 50V 20% Elect., LL T&R
2	C65, C72	68PJJD1	62-0018	68 pF Cap 50V 5% Ceramic Disc T&R
2	C70, C71	4.7ME1	60-0048-01	4.7 uF Cap 16V -20/+20% Elect., T&R
8	D1, D2, D4, D9, D10, D11, D12, D13	1N4148	70-0002	1N4148 Diode Silicon Switching, 75 Volts PIV
5	D3, D5, D6, D7, D8	1N4001	70-0001	1N4001 Silicon Rectifier, 1 Amp, 50 Volts PIV
6	D16, D17, D20, D21, D24, D25	LEDG702114	70-2114	Green Light Emitting Diode, T1 (AUTO INSERT)
12	D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37	LEDR702061	70-2061	LED Red, T1 Case (HAND STUFF ONLY)
2	D40, D41	LEDR702113	70-2113	Red Light Emitting Diode, T1 (AUTO INSERT)
1	H1	HDR322111	32-2111	10 Pin Hdr, 5X2, Straight, .23", 0.1" spacing
2	H2, H4	HDR321055	32-1055	20 Pin Hdr, 10X2, 0.1" spacing, 0.025 pins
1	H3	HDR321076	32-1076	10 Pin Hdr, 5X2, 0.1" spacing, 0.0? pins Right Angle
1	HS2	HS704205	70-4205	Heatsink, L-Shape Base
1	HS3	HS704204	70-4204	Heatsink, 3 Regulator, Top
1	I1	INS704209	70-4209	Insulator, 3 Regulator Heatsink
5	J1, J2, J3, J4, J5	J322110	32-2110	Jack, 1/4" Phone, PC Mount, Hor., Cliff S2
1	J6	J320116	32-0116	JACK, Shielded 5 pin DIN, PCB mount
1	J7	J320099	32-0099	4 Pin Din JACK, Female PCB Mount, R/A Shielded U/M
5	L1, L2, L3, L4, L5	FB260217	26-0217	Ferrite Bead, 2.5Kohms @70Mhz, SMT 0805
1	L6	FB260221	26-0221	Ferrite Bead w/axial lead

Quan	Reference	Part	SYMAN	Description
2	P1,P3	100K402011	40-2011	100 K "W" 16mm, Rot Pot x2, Rack Leads
1	P2	100K402005	40-2005	100 K "C" 16mm, Rot Pot X2, 15mm Knurled Shaft
1	P4	5K402071	40-2071	5 K "B" 16mm, Rot Pot, 15mm K Shaft, H. Mount
1	PA1	PA3	00-0000	3 Pin Pad Pattern, Not a part
1	PA3	PA5X2	00-0000	5X2 Pin Pad Pattern, Not a part
1	PCB1	80-6038-A	80-6038-A	dbx 290 EMI MAIN BOARD RAW
6	Q1,Q2,Q5,Q6,Q7,Q8	2N4124	70-1009	2N4124 NPN, Gen. Purp. Amplifier/Switching Xstr T&R
2	Q3,Q4	2N4125	70-1008	2N4125 PNP, Gen. Purp. Amplifier/Switching Xstr
3	Q9,Q10,Q11	2N5088	70-1007	2N5088 NPN, Transistor, T&R
24	R2,R4,R8,R9,R15,R32,R37, R44,R56,R57,R63,R69,R75, R85,R86,R87,R88,R89,R90, R91,R105,R111,R116,R117	10K	50-0020	10 KOhm Resistor 5% 1/4 Watt Carbon Film
3	R3,R16,R27	3.3K	50-0014	3.3 KOhm Resistor 5% 1/4 Watt Carbon Film
8	R5,R10,R28,R132,R147, R149,R150,R151	100	50-0003	100 Ohm Resistor 5% 1/4 Watt Carbon Film
7	R6,R7,R76,R77,R102,R143, R145	4.7K	50-0015	4.7 KOhm Resistor 5% 1/4 Watt Carbon Film
5	R11,R12,R13,R14,R146	470	50-0006	470 Ohm Resistor 5% 1/4 Watt Carbon Film
3	R17,R106,R112	330	50-0005	330 Ohm Resistor 5% 1/4 Watt Carbon Film
11	R18,R19,R20,R21,R92,R94, R120,R121,R124,R126,R129	10.0K 1%	52-0107	10.0 KOhm Resistor 1% 1/4 Watt Metal Film
3	R22,R47,R50	100K	50-0036	100 KOhm Resistor 5% 1/4 Watt Carbon Film
8	R23,R24,R54,R62,R81,R82, R83,R84	200	50-0004	200 Ohm Resistor 5% 1/4 Watt Carbon Film
5	R25,R35,R45,R46,R53	10	50-0001	10 Ohm Resistor 5% 1/4 Watt Carbon Film
3	R26,R59,R78	15K	50-0019	15 KOhm Resistor 5% 1/4 Watt Carbon Film
1	R29	220K	50-0040	220 KOhm Resistor 5% 1/4 Watt Carbon Film
4	R30,R67,R73,R134	20K	50-0023	20 KOhm Resistor 5% 1/4 Watt Carbon Film
11	R31,R48,R51,R65,R71,R108, R109,R114,R115,R118,R131	2K	50-0013	2 KOhm Resistor 5% 1/4 Watt Carbon Film
1	R33	0	50-0050	0 Ohm Resistor 5% 1/4 Watt Carbon Film
2	R34,R135	1M	50-0045	1 MOhm Resistor 5% 1/4 Watt Carbon Film
4	R36,R66,R72,R79	47K	50-0030	47 KOhm Resistor 5% 1/4 Watt Carbon Film
11	R38,R39,R40,R41,R119, R122,R123,R125,R127,R128, R130	20.0K 1%	52-0091	20.0 KOhm Resistor 1% 1/4 Watt Metal Film
1	R42	12K	50-0021	12 KOhm Resistor 5% 1/4 Watt Carbon Film
1	R43	150K	50-0038	150 KOhm Resistor 5% 1/4 Watt Carbon Film
2	R49,R52	18K	50-0022	18 KOhm Resistor 5% 1/4 Watt Carbon Film
3	R60,R70,R103	470K	50-0042	470 KOhm Resistor 5% 1/4 Watt Carbon Film
1	R64	6.8	50-0145	6.8 Ohm Resistor 5% 1/4 Watt Carbon Film
2	R68,R74	1.2K	50-0202	1.2 KOhm Resistor 5% 1/4 Watt Carbon Film
1	R80	33K	50-0028	33 KOhm Resistor 5% 1/4 Watt Carbon Film
2	R96,R97	2.00K 1%	52-0186	2.00 KOhm Resistor 1% 1/4 Watt Metal Film
2	R98,R99	51.1K 1%	52-0019	51.1 KOhm Resistor 1% 1/4 Watt Metal Film
6	R107,R113,R133,R136,R142, R144	1K	50-0012	1 KOhm Resistor 5% 1/4 Watt Carbon Film
5	S13,S19,S24,S27,S36	DIP18S	70-3160	18 Pin Dip Socket
1	S23	DIP28S	70-3161	28 Pin Dip Socket, .600 wide
2	SR1,SR4	SR280059	28-0059	Screw, 6-32 x 1/4", Pozi, Pan, Black
2	SR2,SR3	SR280058	28-0058	Screw, 6-32 x 3/8", Pozi, Pan, Black

DOD Software
dbx 290 (EMI) 80-6038

Revised: August 16, 1996

Revision: A1

056038A1.000

Bill Of Materials August 16, 1996 10:51:08

Quan Reference Part SYMAN Description

Page

1	SS1	SS281092	28-1092	Swage Standoff, 0.250" Round x 0.250" H, 6-32
12	SW1,SW2,SW3,SW4,SW5,SW6,	SW440163	44-0163	SPST Pushbutton Switch

SW7,SW8,SW9,SW10,SW11, SW12				
2 TP2,TP7	TESTP	00-0000	Test point, Standard	
1 U1	7912-H	70-4017	7912 -12 Volt	1 Amp Voltage Regulator TO-220 HORIZ
1 U2	7812-H	70-4013	7812 +12 Volt	1 Amp Voltage Regulator TO-220 HORIZ
1 U3	7805-H	70-4014	7805 +5 Volt	1 Amp Voltage Regulator TO-220 HORIZ
1 U4	CM16C450	72-5408	UART	
1 U5	74HC4024	72-1097	Asynchronous 7 Bit Binary Counter	
1 U6	74HC74	72-1092	74HC74 Dual D-Type Pos Edge Trig Flip-Flop	
1 U7	7805-V	70-4014	7805 +5 Volt	1 Amp Voltage Regulator TO-220 VERT
1 U9	6N138	70-2139	6N138 Opto-Isolator	
1 U10	74HC00	72-1090	Quadruple 2-Input Positive-Nand Gate	
1 U11	74HC138	72-1108	3 Line to 8 Line Decoder/Demultiplexer	
1 U12	84C00-10	72-5410	CPU Z84C00 Microprocessor 10MHz CMOS	
5 U13,U19,U24,U27,U36	4464-80	72-3149-08	4464, 64K X 4 Dynamic RAM -80ns LH2464	
5 U14,U15,U16,U18,U32	4558	72-4024	4558 Wide Bandwidth Dual Op-Amp	
1 U17	SAA7360/SM	72-3086	A/D Sigma, Delta, 18 bit	44-QFP
3 U20,U25,U30	74HC574	72-1112	Octal D-Type Pos. Edge Triggered Flip-Flops	
1 U21	74HC244A	72-1107	Octal Buffer-Line Driver W/3-State Outputs	
1 U22	CS4330/SM	72-5412	CS4330, Stereo D/A Converter	
1 U23	72-3070-01	72-3070-01	27C512 (dbx290) V2.08	
1 U26	SDISCI1_84	72-3177	SDISCI1,ASIC, Digitech Custom DSP, 84 PIN PLCC	
2 U28,U29	LM339	72-4053	Quad Comparator	
1 U31	NE5532	72-4316	5532 Low Noise Dual Op-Amp	
1 U34	XILINX DBX	72-3131	FPGA,AD-DA Interface	44-PLCC
1 U35	6264A	72-3147-10	6264, 8K X 8 CMOS Static RAM	
1 U37	LM311	72-4027	LM311 Analog Voltage Comparator	
1 U38	24C01	72-3075	256 X 8 Serial EEPROM	
1 U39	MC34064P	70-5004	MC34064 Undervoltage Sensing Circuit	
5 WA1,WA2,WA3,WA4,WA5	WA283449	28-3449	Washer, Ground, Int tooth, for Cliff S2 Jack	
1 X1	20.00MHZ-V	76-0321	20.00 MHZ Crystal, Horiz	