

Module : TTSH v4 BOMv1.4															Total Parts : ###														
BOM Line		Type	Mfg Part Number	Manufacturer	Short Description			SKU			Value	Unit	Qty	Part Notes	Reference Designator	Package													
Line	1	CAP	FG28C0G1H103JN T06	TDK	MLCC - Leaded RAD 50V 0.01uF C0G 5%			CAPFG28C0G1H103JNT06			0.01	uF	22			5mmLS													
Line	2	CAP	FK24C0G1H153J	TDK	MLCC - Leaded 0.015uF 50volts C0G +/-5% 15nF			CAPFK24C0G1H153J			0.015	uF	3	ALT FG24C0G1H153J NT06	C25, C41, C42	5mmLS													
Line	3	CAP	MKP1F022202C00 MS	WIMA	Film Capacitors 0.022 uF 250 VDC 0.2			CAPMKP1F022202C00MS			0.022	uF	2	For locations marked 20n in Noise and S&H	4015,C8 C90,5.1	7.5mmLS													
Line	4	CAP	FG26C0G1H104JN T06	TDK	MLCC - Leaded 0.1uF 50volts C0G 5% Radial 100nF			CAPFG26C0G1H104JNT06			0.1	uF	6		C1, C24, C85,2, C94, VCF,C8, VCF,C9	5mmLS													
Line	5	CAP	B32529C104K189	EPCOS	Film Capacitors 0.1uF 63V 10% 5mm LS			CAPB32529C104K189			0.1	uF	2		C107L, C107R	5mmLS													
Line	6	CAP	C0805C104J5RACT U	Kemet	MLCC - SMD/SMT 50volts 0.1uF X7R 5% 100nF			CAPC0805C104J5RACTU			0.1	uF	6	6 FOR 4027 PCBS		0805													
Line	7	CAP	UVR1H0R1MDD	Nichicon	Aluminum Electrolytic Cap - Radial Leaded 50volts 0.1uF 5x11 20% 2LS			CAPUVR1H0R1MDD			0.1	uF	1	ALT UVY2D0R1MED	C8	2mmLS													
Line	8	CAP	FG22C0G1H224JN T6	TDK	MLCC - Leaded 0.22uF 50volts C0G 5% Radial			CAPFG22C0G1H224JNT6			0.22	uF	2		C52, C53	5mmLS													
Line	9	CAP	R82DC4100CK60J	Kemet	Film Capacitors 1.0uF 63volts 5%			CAPR82DC4100CK60J			1	uF	4	OPTIONAL FOR AC COUPLING IN VCF IN MIXER		5mmLS													
Line	10	CAP	EKMG500C1R0ME 11D	United Chemi-Con	Alum Electrolytic Cap - Radial Leaded 1uF 50 Volt 5X11			CAPEKMG500C1R0ME11D			1	uF	31			2mmLS													
Line	11	CAP	UPJ1H1R5MDD	Nichicon	Aluminum Electrolytic Cap - Leaded 50volts 1.5uF 5x11 20% 2LS			CAPUPJ1H1R5MDD			1.5	uF	1	ALT ULD2G1R5MED	C115	2mmLS													
Line	12	CAP	FA28C0G1H3R300	TDK	MLCC - Leaded 50V 3.3pF C0G RAD LS:5mm			CAPFA28C0G1H3R300			3.3	pF	2	ALT FG28C0G1H3R3C NT06	C33, C43	5mmLS													
Line	13	CAP	FK28C0G1H050C	TDK	MLCC - Leaded 5.0pF 50volts C0G +/-0.25pF			CAPFK28C0G1H050C			5	pF	4	3 FOR 4027 PCBS ALT FG28C0G1H050C NT06	C16, C55, C64, C76	5mmLS													

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 14	CAP	FK28C0G1H100D	TDK	MLCC - Leaded 10pF 50V C0G 5%	CAPFK28C0G1H100D	10	pF	14	ALT FG28C0G1H100D NT00	C83, C84, C86, C87, C95, C96,5.1, C98,5.2, C105R, C106L, C106R, C108, RM,C5, VCA,C4, VCF,C7	5mmLS
Line 15	CAP	EKZE500C100ME07D	United Chemi-Con	Alum Electrolytic Caps - Radial Leaded 10uF 50 Volt 5X7	CAPEKZE500C100ME07D	10	uF	21	6 FOR 4027 PCBS 4 FOR FILTER/PWR BOM		2mmLS
Line 16	CAP	FK28C0G1H120J	TDK	MLCC - Leaded 12pF 50V C0G 5% 5mmLS	CAPFK28C0G1H120J	12	pF	1	ALT FG28C0G1H120J NT00	RM,C1	5mmLS
Line 17	CAP	K220J10C0GF5UH5	Vishay	MLCC - Leaded 22pF 50volts 5% 5.0mm C0G	CAPK220J10C0GF5UH5	22	pF	15	ORIG BOM READS 20pF		5mmLS
Line 18	CAP	FK28C0G1H330J	TDK	MLCC - Leaded 33pF 50V C0G 5% 5mmLS	CAPFK28C0G1H330J	33	pF	17	ORIG BOM READS 30pF ALT FA28C0G1H330J NU00	2,1,C50, 4015,C4, 4015,C7, C3, C6, C40, C46, C66, C81, C91, C93, C96,5.2, C98,2, C98,5.1, C100,2, C102, VCA,C3	5mmLS
Line 19	CAP	FK28C0G1H470J	TDK	MLCC - Leaded 47pF 50V C0G 5% 5mmLS	CAPFK28C0G1H470J	47	pF	16	BOM SAYS 50pF ALT FG28C0G1H470J NT00	C15, C17, C62, C67, C82, C85, C92, C93,5.1, C97, C99, RM,C3, RM,C4, RM,C6, VCF,C5, VCF,C6, VCF,C10	5mmLS
Line 20	CAP	EEU-FC1E470H	Panasonic	Aluminum Electrolytic Capacitors - Leaded 47uF 25volts	CAPEEU-FC1E470H	47	uF	3	ALT EEU- HD1V470	C36, C45, C47	2mmLS
Line 21	CAP	K101J15C0GH5TH5	Vishay	MLCC - Leaded 100pF 100volts 5% C0G 5mm LS	CAPK101J15C0GH5TH5	100	pF	9		2,1,C53, 2,1,C56, C80, C90, C111, C112, RM,C9, VCA,C5, VCA,C6	5mmLS

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 22	CAP	K221J15C0GH5TH5	Vishay	MLCC - Leaded 220pF 100volts 5% COG 5mm LS	CAPK221J15C0GH5TH5	220	pF	2		RM,C2, VCA,C7	5mmLS
Line 23	CAP	K331J15C0GF5TH5	Vishay	MLCC - Leaded 330pF 50volts 5% COG 5mm LS	CAPK331J15C0GF5TH5	330	pF	3		ADSR,C3, C8?, C12	5mmLS
Line 24	CAP	23PS168	Xicon	Film Capacitors STYRENE 50V 680P	CAP23PS168	680	pF	3	4027 ALT FG28C0G1H681J NT06	C54, C63, C75	N/A
Line 25	CAP	K102J15C0GF5TH5	Vishay	MLCC - Leaded 1000pF 50volts 5% COG 5mm LS 1nF	CAPK102J15C0GF5TH5	1000	pf	6	For locations marked 1n	ADSR,C5, C11, C110, C113, C119, C120	5mmLS
Line 26	CAP	RDE5C1H222J0M1H3A	Murata	MLCC - Leaded 2200pF 50Vdc COG 5%	CAPRDE5C1H222J0M1H3A	2200	pF	3			5mmLS
Line 27	CAP	RDE5C1H332J0K1H3B	Murata	MLCC - Leaded 3300pF 50Vdc COG 5%	CAPRDE5C1H332J0K1H3B	3300	pF	1			5mmLS
Line 28	CAP	185472J100RAA-F	Cornell Dubier	Film Capacitors .0047uF 100V 5% 4700pF	CAP185472J100RAA-F	4700	pF	4	4072		5mmLS
Line 29	CAP	FG28C0G1H472JNT6	TDK	MLCC - Leaded 4700pF 50volts COG 5% Radial	CAPFG28C0G1H472JNT6	4700	pF	4	4 FOR FILTER/PWR BOM		5mmLS
Line 30	DIO	1N4148TR	Vishay	1N4148 Signal Diode thru hole	DIO1N4148TR	1	each	54	1 FOR FILTER/PWR BOM		DO-35
Line 31	HDR	640456-2	TE Connectivity	0.1 MTA HDR 2P Friction Lock	HDR640456-2	2	pin	5			0.1
Line 32	HDR	A-1057	GTK	02 PIN SINGLE ROW FEMALE PIN HDR	HDRA-1057	2	pin	6			2.54
Line 33	HDR	3-640440-2	TE Connectivity	0.1 MTA HDR Socket 2P Red	HDR3-640440-2	2	pin	5			0.1
Line 34	HDR	640445-2	TE Connectivity	FRCTN LK HDR STR 2P Square post tin	HDR640445-2	2	pin	1			0.156
Line 35	HDR	3-640428-2	TE Connectivity	CLOSED W/O TABS 2P L.R. red 22 AWG MTA .156	HDR3-640428-2	2	pin	1			0.156
Line 36	HDR	A-1609	GTK	03 PIN SINGLE ROW FEMALE PIN HEADER	HDRA-1609	3	pin	3			2.54
Line 37	HDR	640456-3	TE Connectivity	0.1 MTA HDR 3P Friction Lock	HDR640456-3	3	pin	1	To power Gate Booster place in EG section		0.1
Line 38	HDR	3-640440-3	TE Connectivity	0.1 MTA HDR Socket 3P Red	HDR3-640440-3	3	pin	1			0.1

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 39	HDR	571-3-640428-5	TE Connectivity	CLOSED W/O TABS 5P L.R. red 22 AWG 0.156 MTA	HDR571-3-640428-5	5	pin	2	PWR SECTION		0.156
Line 40	HDR	640445-5	TE Connectivity	FRCTN LK HDR STR 5P Square post tin 0.156 MTA	HDR640445-5	5	pin	2	PWR SECTION		0.156
Line 41	HDR	A-1389	GTK	06 PIN SINGLE ROW FEMALE PIN HEADER	HDRA-1389	6	pin	3	FILTER PCB		2.54
Line 42	HDR	A-197	GTK	40 PIN SINGLE ROW PIN HEADER STRIP	HDRA-197	40	pin	2			2.54
Line 43	HDW	258568	Fastener Superstore	M3 X .5 X 6mm Pan Zinc Screws	HDW258568	1	each	12	INTERNAL SCREWS		M3
Line 44	HDW	MMSPHPZ3010-5K3	Fastener Express	M3 x .5 x 10mm Pan Phillips Machine Screws Zinc Plate	HDWMMSPHPZ3010-5K3	1	each	12	4 FOR REVERB MOUNTING		M3
Line 45	HDW	559079	Fastener Superstore	M4-0.7 Nylon Insert Locknuts / Steel / Black Oxide	HDW559079	1	each	4	REVERB MOUNTING		M4
Line 46	HDW	FE-M3-.5-6PAN-BLK	Fastener Express	M3 X .5 X 6mm Pan Black Oxide Panel Screws	HDWFE-M3-.5-6PAN-BLK	1	each	8	3 FOR PWR PCB		M3
Line 47	HDW	MHNZ3-7H4	Fastener Express	M3 x .5mm Hex Nuts Steel Zinc	HDWMHNZ3-7H4	1	each	20			M3
Line 48	HDW	91290A110	McMaster-Carr	M3 x .5 x 5mm Socket Head Cap Screws A2 Stainless Black Oxide	HDW91290A110	1	each	17	EXTERNAL M3 SCREWS		M3
Line 49	HDW	505133	Fastener Superstore	M4-0.7 x 20 mm Machine Screws / Phillips / Pan Head / Steel / Black Oxide / DIN7985A	HDW505133	20	mm	4	REVERB MOUNTING		M4
Line 50	IC	LM3900N	Texas Instruments	LM3900N QUAD OP AMP	ICNLM3900N	1	each	1	FOR FILTER/PWR BOM	IC4	DIP14
Line 51	IC	LM301AN	Texas Instruments	LM301AN Operational Amplifiers - Op Amps OP Amp	ICNLM301AN	1	each	33			DIP8
Line 52	IC	CA3046	Intersil	CA3046 Transistor Array	ICNCA3046	1	each	3	OSC BDS	IC8, IC9, IC10	DIP8
Line 53	IC	TL071CN	Texas Instruments	TL071 Op Amp	ICNTL071CN	1	each	1	Replaces A39 LM301 in Volt Proc		DIP8
Line 54	IC	LM1458N/NOPB	National Semiconductor (TI)	LM1458 Dual OpAmp	ICNLM1458N/NOPB	1	each	1	FOR FILTER/PWR BOM	IC5	DIP8
Line 55	IC	A-857	GTK	8 PIN MACHINE TOOLED IC SOCKET	ICNA-857	8	pin	36			DIP8

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 56	IC	A-1317	GTK	14 PIN MACHINE TOOLED IC SOCKET	ICNA-1317	14	pin	4			DIP14
Line 57	JCK	114BX	Switchcraft	Phone Connectors 3C ENCLOSED 1/4"	JCK114BX	0.25	inch	1			n/a
Line 58	JCK	3501MX	Switchcraft	RCA Phono Connectors BASIC PLUG	JCK3501MX	1	each	4	REVERB CABLE ENDS		n/a
Line 59	JCK	RCJ-023	CUI	RCA Phono Connectors RCA Connectors WHITE	JCKRCJ-023	1	each	1			n/a
Line 60	JCK	RCJ-022	CUI	RCA Phono Connectors RCA Connectors RED	JCKRCJ-022	1	each	1			n/a
Line 61	JCK	PJ301BM	QingPu	3.5mm Jack PJ301BM	JCKPJ301BM	3.5	mm	81			n/a
Line 62	LED	WP483IDT	Kingbright	Standard LEDs - Through Hole RED DIFFUSED CYLINDRICAL	LEDWP483IDT	1	each	1	FLAT TOP		3mm
Line 63	MISC	HEATSINK	synthCube	thermal heatsink compound small pak	MISCHEATSINK	1	each	1			n/a
Line 64	MISC	1AB2A1B	Belton Accutronics	Belton Accutronics Reverb Tank 1AB2A1B	MISC1AB2A1B	1	each	1			n/a
Line 65	MISC	FEB30045	Arndt	45Ω Square Alnico Speaker 90 dB	MISCFEB30045	1	each	2	OPTIONAL LO FI SPEAKERS		n/a
Line 66	MISC	830986	Peerless	PEERLESS 830986 3" FULL RANGE WOOFER	PEERLESS 830986 3" FULL RANGE WOOFER	1	each	2	OPTIONAL HI FI SPKRS		n/a
Line 67	POT	RK09D113AF25A15	ALPS	Potentiometers V/ADJ 100KA 25mmSHFT	POTRK09D113AF25A15	100	kOhm	1			RK09D
Line 68	PWR	WSU120-1500	Triad	Wall-wart Plug-In Adapter Single-OUT 12V 1.5A Pos Ctr	PWRWSU120-1500	1	each	1			n/a
Line 69	PWR	SPM15-150-Q12P-C	Murata	Isolated DC/DC Converters 15W 9-36Vin 15Vout 1.1A Positive Logic	PWRSPM15-150-Q12P-C	1	each	2			n/a
Line 70	PWR	722A	Switchcraft	DC Power Connectors 2.0MM round w/ nut	PWR722A	2	mm	1			n/a
Line 71	RES	271-1K-RC	Xicon	Metal Film Resistor 1Kohm 1%	RES271-1K-RC	1	kOhm	39	1 FOR FILTER/PWR BOM 9 FOR OSC BDS		n/a
Line 72	RES	271-1.0M-RC	Xicon	Metal Film Resistor 1.0Mohm 1%	RES271-1.0M-RC	1	mOhm	6			n/a
Line 73	RES	271-1.2M-RC	Xicon	Metal Film Resistor 1.2Mohm 1%	RES271-1.2M-RC	1.2	mOhm	1		ADSR,R3	n/a

BOM Line		Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line	74	RES	271-1.2K-RC	Xicon	Metal Film Resistor 1.2Kohm 1%	RES271-1.2K-RC	1.2	kOhm	2		R204, R206	n/a
Line	75	RES	271-1.3K-RC	Xicon	Metal Film Resistors - Through Hole 1.3Kohms	RES271-1.3K-RC	1.3	Kohm	1	FOR FILTER/PWR BOM	R169	n/a
Line	76	RES	271-1.37K-RC	Xicon	Metal Film Resistor 1.37Kohm 1%	RES271-1.37K-RC	1.37	kOhm	3	FOR OSC BDS	R247, R299, R355	n/a
Line	77	RES	271-1.5K-RC	Xicon	Metal Film Resistor 1.5Kohm 1%	RES271-1.5K-RC	1.5	kOhm	6	3 FOR OSC BDS	R382, ADSR,R24, NOISE,R5, R240, R282, R346	n/a
Line	78	RES	271-1.5M-RC	Xicon	Metal Film Resistor 1.5Mohm 1%	RES271-1.5M-RC	1.5	mOhm	4		R16, RM,R5, RM,R6, VCA,R6	n/a
Line	79	RES	271-1.65K-RC	Xicon	Metal Film Resistor 1.65Kohm 1%	RES271-1.65K-RC	1.65	kOhm	3	FOR OSC BDS	R244, R296, R352	n/a
Line	80	RES	271-1.8K-RC	Xicon	Metal Film Resistor 1.8Kohm 1%	RES271-1.8K-RC	1.8	kOhm	3		R21, R96, VCF,R4	n/a
Line	81	RES	ANK187KTEMPCO	Ankeohm	1.87k 3300ppm 1/8w tempco resistor	RESANK187KTEMPCO	1.87	kOhm	5		R165, R235, R270, R341, VCF,R30	n/a
Line	82	RES	MFS1/2DCT52R2204	Vishay	Metal Film Resistors - Through Hole 2.2M ohm 1% 1/2W	RESMFS1/2DCT52R2204	2.2	Mohm	2	REVERB MUST BE 1/2W		N/A
Line	83	RES	271-2.2K-RC	Xicon	Metal Film Resistor 2.2Kohm 1%	RES271-2.2K-RC	2.2	kOhm	10	5 FOR FILTER/PWR BOM	R5, R75, R114, R125, 2,1,R113, 2,1,R132, 2,1,R133, R138, R170, VCF,R12	n/a
Line	84	RES	291-2.4K-RC	Xicon	Carbon Film Resistor 2.4Kohm 5%	RES291-2.4K-RC	2.4	Kohm	2		R228, R231	n/a
Line	85	RES	271-2.7K-RC	Xicon	Metal Film Resistor 2.7Kohm 1%	RES271-2.7K-RC	2.7	kOhm	1		R12	n/a
Line	86	RES	271-3.3K-RC	Xicon	Metal Film Resistor 3.3Kohm 1%	RES271-3.3K-RC	3.3	kOhm	2		LED,R1, VCA,R4	n/a
Line	87	RES	291-3.3M-RC	Xicon	Carbon Film Resistors - Through Hole 3.3Mohms	RES291-3.3M-RC	3.3	mOhm	9	3 FOR OSC BDS	R44, R67, R86, R157, R257, R335, R358, R365, R396	n/a

BOM Line		Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line	88	RES	271-3.32K-RC	Xicon	Metal Film Resistor 3.32Kohm 1%	RES271-3.32K-RC	3.32	kOhm	4		VCF,R6, VCF,R7, VCF,R8, VCF,R9	n/a
Line	89	RES	271-3.9K-RC	Xicon	Metal Film Resistor 3.9Kohm 1%	RES271-3.9K-RC	3.9	kOhm	9	3 FOR OSC BDS	2,1,R118, NOISE,R6, R51, R89, R173, R242, R286, R350, R388	n/a
Line	90	RES	291-4.7M-RC	Xicon	Carbon Film Resistors - Through Hole 4.7Mohms	RES291-4.7M-RC	4.7	mOhm	2		NOISE,R3, NOISE,R4	n/a
Line	91	RES	271-4.7K-RC	Xicon	Metal Film Resistor 4.7Kohm 1%	RES271-4.7K-RC	4.7	kOhm	10	1 FOR FILTER/PWR BOM	4015,R15, ADSR,R15, R217, R379, R387, RM,R1, RM,R2, VCA,R15, VCA,R19, VCA,R23	n/a
Line	92	RES	271-5.36K-RC	Xicon	Metal Film Resistor 5.36Kohm 1%	RES271-5.36K-RC	5.36	kOhm	2		R317, R319	n/a
Line	93	RES	291-5.6M-RC	Xicon	Carbon Film Resistors - Through Hole 5.6Mohms	RES291-5.6M-RC	5.6	mOhm	2		R327, R328	n/a
Line	94	RES	271-6.8K-RC	Xicon	Metal Film Resistor 6.8Kohm 1%	RES271-6.8K-RC	6.8	kOhm	2		R45, R172	n/a
Line	95	RES	271-8.2K-RC	Xicon	Metal Film Resistor 8.2Kohm 1%	RES271-8.2K-RC	8.2	kOhm	1		R48	n/a
Line	96	RES	271-8.87K-RC	Xicon	Metal Film Resistor 8.87Kohm 1%	RES271-8.87K-RC	8.87	kOhm	3	FOR OSC BDS	R246, R298, R354	n/a
Line	97	RES	271-9.1K-RC	Xicon	Metal Film Resistor 9.1Kohm 1%	RES271-9.1K-RC	9.1	kOhm	1		R183	n/a
Line	98	RES	271-10-RC	Xicon	Metal Film Resistor 10 ohm 1%	RES271-10-RC	10	Ohm	6		R72, R345L, R345R, R346L, R346R, R828	n/a
Line	99	RES	291-10M-RC	Xicon	Carbon Film Resistors - Through Hole 10Mohms .25W	RES291-10M-RC	10	mOhm	1		R17	n/a
Line	100	RES	271-10K-RC	Xicon	Metal Film Resistor 10Kohm 1%	RES271-10K-RC	10	kOhm	18	3 FOR FILTER/PWR BOM		n/a

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 101	RES	271-12K-RC	Xicon	Metal Film Resistor 12Kohm 1%	RES271-12K-RC	12	kOhm	8		ADSR,R23, LED,R2, R239, R248, R280, R322, R345, R356	n/a
Line 102	RES	271-12.1K-RC	Xicon	Metal Film Resistor 12.1Kohm 1%	RES271-12.1K-RC	12.1	kOhm	8			n/a
Line 103	RES	271-13K-RC	Xicon	Metal Film Resistors - Through Hole 13Kohms 1% 50PPM	RES271-13K-RC	13	kOhm	3	FOR FILTER/PWR BOM	R215, R221, R224	n/a
Line 104	RES	271-15K-RC	Xicon	Metal Film Resistor 15Kohm 1%	RES271-15K-RC	15	kOhm	14	3 FOR OSC BDS		n/a
Line 105	RES	271-18K-RC	Xicon	Metal Film Resistor 18Kohm 1%	RES271-18K-RC	18	kOhm	5		R32, RM,R8, RM,R11, RM,R12, VCA,R13	n/a
Line 106	RES	291-22M-RC	Xicon	Carbon Film Resistors - Through Hole 22Mohms	RES291-22M-RC	22	mOhm	8	4 FILTER/PWR BOM	R73, R112, R118, R130, R357, R363, R370, R371	n/a
Line 107	RES	271-22K-RC	Xicon	Metal Film Resistor 22Kohm 1%	RES271-22K-RC	22	kOhm	10			N/A
Line 108	RES	271-23.2K-RC	Xicon	Metal Film Resistor 23.2Kohm 1%	RES271-23.2K-RC	23.2	kOhm	1		VCF,R13	n/a
Line 109	RES	271-27K-RC	Xicon	Metal Film Resistor 27Kohm 1%	RES271-27K-RC	27	kOhm	4		R13, R226, R227, RM,R15	n/a
Line 110	RES	271-30.1K-RC	Xicon	Metal Film Resistor 30.1Kohm 1%	RES271-30.1K-RC	30.1	kOhm	13	3 FOR OSC BDS		n/a
Line 111	RES	271-33K-RC	Xicon	Metal Film Resistor 33Kohm 1%	RES271-33K-RC	33	kOhm	9		2,1,R109, 2,1,R112, 4015,R11, ADSR,R7, R46, R47, R209, R211, VCA,R8	n/a
Line 112	RES	271-33.2K-RC	Xicon	Metal Film Resistor 33.2Kohm 1%	RES271-33.2K-RC	33.2	kOhm	3	FOR OSC BDS	R251, R329, R380	n/a
Line 113	RES	271-39K-RC	Xicon	Metal Film Resistor 39Kohm 1%	RES271-39K-RC	39	kOhm	4	1 FOR FILTER/PWR BOM	2,1,R114, ADSR,R16, R37, R168	n/a
Line 114	RES	271-40.2K-RC	Xicon	Metal Film Resistor 40.2Kohm 1%	RES271-40.2K-RC	40.2	kOhm	1		ADSR,R11	n/a
Line 115	RES	271-45.3K-RC	Xicon	Metal Film Resistor 45.3Kohm 1%	RES271-45.3K-RC	45.3	kOhm	4	3 FOR OSC BDS	R91, R253, R332, R393	n/a

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 116	RES	271-47K-RC	Xicon	Metal Film Resistor 47Kohm 1%	RES271-47K-RC	47	kOhm	19	3 FOR OSC BDS		n/a
Line 117	RES	271-54.9K-RC	Xicon	Metal Film Resistor 54.9Kohm 1%	RES271-54.9K-RC	54.9	kOhm	1		R192	n/a
Line 118	RES	271-56-RC	Xicon	Metal Film Resistors - Through Hole 56ohms 1% 50PP	RES271-56-RC	56	Ohm	2		4015,R6, 4015,R7	n/a
Line 119	RES	271-56K-RC	Xicon	Metal Film Resistor 56Kohm 1%	RES271-56K-RC	56	kOhm	4	1 FOR FILTER/PWR BOM	R136, VCA,R24, VCA,R26, VCF,R10	n/a
Line 120	RES	271-61.9K-RC	Xicon	Metal Film Resistor 61.9Kohm 1%	RES271-61.9K-RC	61.9	kOhm	8	6 FOR OSC BDS	4015,R1, 4015,R18, R237, R238, R277, R278, R343, R344	n/a
Line 121	RES	271-68K-RC	Xicon	Metal Film Resistor 68Kohm 1%	RES271-68K-RC	68	kOhm	9	3 FOR OSC BDS	ADSR,R17, ADSR,R19, R124, R128, R250, R261, R266, R324, R378	n/a
Line 122	RES	271-68.1K-RC	Xicon	Metal Film Resistor 68.1Kohm 1%	RES271-68.1K-RC	68.1	kOhm	1		ADSR,R13	n/a
Line 123	RES	271-82K-RC	Xicon	Metal Film Resistor 82Kohm 1%	RES271-82K-RC	82	kOhm	4		R1, R360, R364, RM,R18	n/a
Line 124	RES	271-84.5K-RC	Xicon	Metal Film Resistor 84.5Kohm 1%	RES271-84.5K-RC	84.5	kOhm	3		R39, R56, R95	n/a
Line 125	RES	271-100-RC	Xicon	Metal Film Resistor 100ohm 1%	RES271-100-RC	100	Ohm	4	1 FOR FILTER/PWR BOM	R28, R216, R281, R383	n/a
Line 126	RES	271-100K-RC	Xicon	Metal Film Resistor 100Kohm 1%	RES271-100K-RC	100	kOhm	60	4 FOR FILTER/PWR BOM 3 FOR OSC BDS		n/a
Line 127	RES	271-120-RC	Xicon	Metal Film Resistor 120ohm 1%	RES271-120-RC	120	Ohm	1		ADSR,R10	n/a
Line 128	RES	271-120K-RC	Xicon	Metal Film Resistor 120Kohm 1%	RES271-120K-RC	120	kOhm	3		ADSR,R20, R38, R77	n/a
Line 129	RES	271-121K-RC	Xicon	Metal Film Resistor 121Kohm 1%	RES271-121K-RC	121	kOhm	4	3 FOR OSC BDS	2,1,R111, R233, R263, R338	n/a

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 130	RES	271-150K-RC	Xicon	Metal Film Resistor 150Kohm 1%	RES271-150K-RC	150	kOhm	9		R22, R43, R65, R84, R159, R161, R197, R366, R368	n/a
Line 131	RES	271-180K-RC	Xicon	Metal Film Resistor 180Kohm 1%	RES271-180K-RC	180	kOhm	7		2,1,R134, ADSR,R4, ADSR,R22, R262, R269, RM,R16, VCA,R12	n/a
Line 132	RES	271-182K-RC	Xicon	Metal Film Resistor 182Kohm 1%	RES271-180-RC	182	kOhm	1		VCA,R3	n/a
Line 133	RES	271-196K-RC	Xicon	Metal Film Resistor 196Kohm 1%	RES271-196K-RC	196	kOhm	3	1 FOR FILTER/PWR BOM	2,1,R110, R166, VCF,R17	n/a
Line 134	RES	271-220K-RC	Xicon	Metal Film Resistor 220Kohm 1%	RES271-220K-RC	220	kOhm	19	1 FOR FILTER/PWR BOM		n/a
Line 135	RES	271-220-RC	Xicon	Metal Film Resistor 220ohm 1%	RES271-220-RC	220	Ohm	25	9 FOR FILTER/PWR BOM. 3 FOR OSC BDS		n/a
Line 136	RES	271-240-RC	Xicon	Metal Film Resistor 240ohm 1%	RES271-240-RC	240	Ohm	2		R229, R230	n/a
Line 137	RES	271-270K-RC	Xicon	Metal Film Resistor 270Kohm 1%	RES271-270K-RC	270	kOhm	4	1 FOR FILTER/PWR BOM	ADSR,R1, R14, R137, R326	n/a
Line 138	RES	271-330-RC	Xicon	Metal Film Resistor 330ohm 1%	RES271-330-RC	330	Ohm	1		4015,R10	n/a
Line 139	RES	271-470-RC	Xicon	Metal Film Resistor 470ohm 1%	RES271-470-RC	470	Ohm	9		R279, VCA,R7, VCF,R1, VCF,R2, VCF,R3, VCF,R20, VCF,R21, VCF,R31, RM,R14	n/a
Line 140	RES	271-470K-RC	Xicon	Metal Film Resistor 470Kohm 1%	RES271-470K-RC	470	kOhm	9		ADSR,R18, R55, R59, R101, R283, R291, R293, R361, R362	n/a

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 141	RES	271-475K-RC	Xicon	Metal Film Resistor 475Kohm 1%	RES271-475K-RC	475	kOhm	3	FOR OSC BDS	R232, R259, R336	n/a
Line 142	RES	271-680K-RC	Xicon	Metal Film Resistor 680Kohm 1%	RES271-680K-RC	680	kOhm	1		VCA,R18	N/A
Line 143	RES	271-680-RC	Xicon	Metal Film Resistor 680ohm 1%	RES271-680-RC	680	Ohm	4			N/A
Line 144	RES	271-820-RC	Xicon	Metal Film Resistor 820ohm 1%	RES271-820-RC	820	Ohm	3		R205, R207, VCF,R5	n/a
Line 145	SEMI	RLB0914-101KL	Bourns	Fixed Inductors 100uH 10% 1.0A	SEMIRLB0914-101KL	1	each	2		L1, L3	n/a
Line 146	SLD	PTL45-1500-105A2	Bourns	Slide Potentiometers 15MM LEVER 1MOHMS 45MM TRVL OR LED	SLDPTL45-1500-105A2	1	mOhm	6			45mm
Line 147	SLD	PTL45-1500-104A3	Bourns	Slide Pots 15MM LEVER 100KOHMS 45MM TRVL OR LED Log	SLDPTL45-1500-104A3	100	kOhm	21			45mm
Line 148	SLD	PTL45-1500-104B1	Bourns	Slide Potentiometers 100K LINEAR 20% 45mm travel	SLDPTL45-1500-104B1	100	kOhm	30			45mm
Line 149	SO	801301	Fastener Superstore	4.5 mm OD Hex Standoffs (M-F) / M3-0.5 x 12 mm / Aluminum	SO801301	12	mm	20			M3
Line 150	SO	SPC-NL3MF/50-10	Electronics Salon	50mm Nylon M3 Threaded Hex Male-Female Standoff	SOSPC-NL3MF/50-10	50	mm	8	BENCH STANDOFFS for ASSEMBLY		M3
Line 151	SW	C56313L2X	Switchcraft	Slide Switches DPTT PCB TINI SLIDE	SWC56313L2X	1	each	1			DPTT
Line 152	SW	FB15ANEP2-HA	NKK Switches	Pushbutton Switches SPST OFF(ON) BLACK CAP	SWFB15ANEP2-HA	1	each	1			PSST OFF (ON)
Line 153	SW	CWT12AAS1	NKK Switches	Rocker Switches SPDT ON-NONE-ON	SWCWT12AAS1	1	each	1			T ON-NONE
Line 154	SW	C56206L2X	Switchcraft	Slide Switches DPDT PCB TINI SLIDE	SWC56206L2X	1	each	5			DPDT
Line 155	TRM	3362P-1-103LF	Bourns	Trimmer Resistors - Through Hole 1/4"SQ 10KOHMS 3362	TRM3362P-1-103LF	10	kOhm	6			3362P
Line 156	TRM	3362P-1-253LF	Bourns	Trimmer Resistors - Through Hole 1/4"SQ 25KOHMS 10% 0.5WATTS	TRM3362P-1-253LF	25	kOhm	3			3362P
Line 157	TRM	3362P-1-503LF	Alpha	Trimmer Resistors - Through Hole 1/4"SQ 50KOHMS 3362	TRM3362P-1-503LF	50	kOhm	2			3362P
Line 158	TRM	PTC10V-100K	Piher	Trimmer Resistors - Through Hole 100Kohms 10mm Rnd	TRMPTC10V-100K	100	kOhm	1			PTC10V

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 159	TRM	3362P-1-104LF	Alpha	100K OHM TRIMMER POTENTIOMETER CERMET 1 TURN 3362P	TRM3362P-1-104LF	100	kOhm	12	1 FOR FILTER/PWR BOM		3362P
Line 160	TRM	3362P-1-251LF	Bourns	Through Hole TRIMMER - 1/4" SQ ST CERMET 250ohm	TRM3362P-1-251LF	250	Ohm	1			3362P
Line 161	TRM	3362P-1-254LF	Bourns	Trimmer Resistors - Through Hole 1/4"SQ 250KOHMS 10% 0.5WATTS	TRM3362P-1-254LF	250	kOhm	1			3362P
Line 162	TRM	3296W-1-501LF	Bourns	500 OHM TRIMMER POTENTIOMETER CERMET 25 TURNS 3296W	TRM3296W-1-501LF	500	Ohm	2			3296W
Line 163	TRN	2N3954	Vishay	2N3954	TRN2N3954	1	each	1		Q17	TO-71
Line 164	TRN	BC558BTA	Fairchild Semiconductor	BC558 Transistors Bipolar - BJT TO- 92 PNP GP AMP	TRNBC558	1	each	9		VCF,Q3, 4015,Q2, 4015,Q5, Q14, Q26, Q44, VCA,Q3, VCA,Q4, VCA,Q8	TO-92-3
Line 165	TRN	2N3906TF	Central Semiconductor	2N3906 PNP Transistor	TRN2N3906	1	each	29	3 FOR OSC BDS 6 FOR FILTER/PWR BOM		TO-92-3
Line 166	TRN	2N3958	Vishay	2N3958	TRN2N3958	1	each	2		4015,Q7, VCF,Q17	TO-71
Line 167	TRN	2N4125	Fairchild Semiconductor	2N4125	TRN2N4125	1	each	3	OSC BDS	Q30, Q35, Q46	TO-92-3
Line 168	TRN	2N4392	Central Semiconductor	2N4392 JFET N-Chan JFET	TRN2N4392	1	each	4		4015,Q4, ADSR,Q3, Q2, Q3	TO-18
Line 169	TRN	BC33740TA	Fairchild Semiconductor	BC337 Bipolar Transistors - BJT NPN 45V 800mA HFE/630	TRNBC337	1	Each	8		T1, T2, T3, T4, T5, T6, T7, T8	TO-92-3
Line 170	TRN	2N4870	Multicomp	2N4870	TRN2N4870	1	each	1		Q45	TO-18
Line 171	TRN	2N5459	Fairchild Semiconductor	2N5459 Transistor	TRN2N5459	1	each	6	OSC BDS	Q23, Q24, Q31, Q32, Q40, Q41	TO-92-3
Line 172	TRN	2N5172	Central Semiconductor	2N5172 NPN Transistor	TRN2N5172	1	each	17			TO-92-3

BOM Line	Type	Mfg Part Number	Manufacturer	Short Description	SKU	Value	Unit	Qty	Part Notes	Reference Designator	Package
Line 173	TRN	MJE182STU	Fairchild Semiconductor	MJE182STU Bipolar Transistors - BJT NPN Epitaxial Sil	TRNMJE182STU	1	each	2		Q30L, Q30R	TO-126
Line 174	TRN	2N5460	Central Semiconductor	2N5460 JFET P-Ch Junc FET	TRN2N5460	1	each	2		ADSR,Q4, Q5	TO-92-3
Line 175	TRN	MJE172STU	Fairchild Semiconductor	MJE172STU Bipolar Transistors - BJT PNP Epitaxial Sil	TRNMJE172STU	1	each	2		Q32L, Q32R	TO-126
Line 176	TRN	2N5087	Central Semiconductor	2N5087 Bipolar Transistors - BJT PNP Gen Pur SS	TRN2N5087	1	each	8	FOR FILTER/PWR BOM	Q4, Q7, Q8, Q9, Q10, Q11, Q12, Q13	TO-92-3
Line 177	TRN	2N3904TF	Central Semiconductor	2N3904 NPN Transistor	TRN2N3904	3	each	29	3 FOR OSC BDS 1 FOR FILTER/PWR BOM		TO-92-3
Line 178	VREG	LM2991S/NOPB	Texas Instruments	LM2991S LDO Voltage Regulators NEG LDO ADJ REG	VREGLM2991S/NOPB	1	Each	1		IC6	TO-263-5
Line 179	VREG	TL1963AKTTR	Texas Instruments	TL1963 LDO Voltage Regulators Sgl Out LDO 1.5A Adj Fast Trans Resp	VREGTL1963AKTTR	1	each	1		IC7	TO-263-5
Line 180	WIR	RCAMLML3FT	synthCube	Dual RCA Audio Cable - 3 FT M-M	WIRRCAMLML3FT	1	each	1			n/a
Line 181	WIR	9174 BK005	Alpha	Coaxial Cables 26AWG 1C SHIELD BLACK RG-174 1' LONG	WIR9174 BK005	1	foot	10	ALSO FOR REVERB CABLES		n/a
Line 182	WIR	2187876-5M	Jameco	stranded hookup wire 5 meter bundle 24awg	WIR2187876-5M	5	meters	1			24AWG