

PARTS LIST

8/5/2008 1:45 PM

<i>Fiber-Span</i>				ASSY TITLE: TCC SYNTHESIZER BOARD	PART LIST NO.: 305-0192-BOM				
					REV: A				
ITEM	REF DES	Fiber-Span P/N	MFR P/N	DESCRIPTION	QTY	VALUE	PREF	P/L	MFR
12	C29-30,C33, C39-41,C43-46, C48,C59-60,C62		ECJ-1VC1H1J	CAP,CER CHIP,50V,NPO,0603	13	100pF			PANASONIC
13	C32		ECJ-1VB1E104K	CAP,CER CHIP,50V,X7R,0603	1	0.1uF			PANASONIC
14	C34		C1206C105K3RAC	CAP,CER CHIP,25V,X7R,1206	1	1uF			KEMET
15	C35		ECJ-1VB1H103K	CAP,CER CHIP,50V,X7R,0603	1	0.01uF			PANASONIC
16	C36		ECS-T1AX226R	CAP,TANT CHIP,10V,1412	1	22uF			PANASONIC
17	C38 C42 C47 C61		ECJ-1VC1H102J	CAP,CER CHIP,50V,NPO,0603	3	1000PF			PANASONIC
18	C53		ECS-T1CC226R	CAP,TANT CHIP,16V,2412	1	22uF			PANASONIC
19									
20	CR1,CR2		B340LA	DIODE,SCHOTTKY RECTIFIER	2				DIODES INC.
21									
22	DC1-2		DBTC-9-4	DIRECTIONAL COUPLER	2				MIN-CKT
23									
24	FL1,FL2		TT63207B-240M	HELICAL FILTER,3 SECT,7mm	2	240-BW50			TEMWELL
25									
26	J3		PZC36DFAN	DIP HDR, 6 PINS (SEE NOTE)	1				SULLINS
27									
28	L1		LL2012-F47NK	IND,CHIP,0805, w/ POLARITY	1	47nH			TOKO
29	L2		EXC-ML16A270U	RF BEAD	1	27 OHM			PANASONIC
30	L3-5		5T-22-3/32	IND., WW, w/2 BEADS	3	5 T			Fiber-Span
31									
32	R1,R3-4,R7, R9-11,R45		ERJ-3GEYJ103	RES,CHIP,1/10W,5%,0603	8	10K			PANASONIC
33	R2,R5-6		ERJ-3GEYJ102	RES,CHIP,1/10W,5%,0603	3	1K			PANASONIC
34	R8		ERJ-3GEYJ472	RES,CHIP,1/10W,5%,0603	1	4.7K			PANASONIC

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ITEM	REF DES	Fiber-Span P/N	MFR P/N	DESCRIPTION	QTY	VALUE	PREF	P/L	MFR
35	R12,R18		ERJ-3GEYJ100	RES,CHIP,1/10W,5%,0603	2	10			PANASONIC
36	R13		ERJ-3GEYJ101	RES,CHIP,1/10W,5%,0603	1	100			PANASONIC
37	R14		30BJ250-10	RES,COMP,1/4W,5%, w/1BD	1	10			XICON
38	R15		ERJ-3GEYJ390	RES,CHIP,1/10W,5%,0603	1	39			PANASONIC
39	R16		ERJ-3GEYJ332	RES,CHIP,1/10W,5%,0603	1	3.3K			PANASONIC
40	R17		ERJ-3GEYJ153	RES,CHIP,1/10W,5%,0603	1	15K			PANASONIC
41	R19,R21,R30,R32		ERJ-3GEYJ331	RES,CHIP,1/10W,5%,0603	4	330			PANASONIC
42	R20,R31		ERJ-3GEYJ180	RES,CHIP,1/10W,5%,0603	1	18			PANASONIC
43	R23,R27,R34,R38		301-0	RES,CHIP,0603	4	0			XICON
44	R25,R36		ERJ-12ZYJ111	RES,CHIP,1/2W,5%,2010	2	110			PANASONIC
45	R29		ERJ-12ZYJ510	RES,CHIP,1/2W,5%,2010	1	51			PANASONIC
46	R40		ERJ-3EKF1212V	RES,CHIP,1/10W,1%,0603	1	12.1K			PANASONIC
47	R41		ERJ-3EKF2321V	RES,CHIP,1/10W,1%,0603	1	2.32K			PANASONIC
48	R47								
49									
50	U1		MC9S12A128BCFU	16-BIT MICROCONTROLLER	1				MOTOROLA
51	U2		MAX13080EESD	TRANSCEIVERS,RS-485/RS-422	1				MAXIM
52	U3		DS1233DZ-5	5V ECONO RESET	1				DALLAS
53	U4		LM2903M	DUAL COMP,LOW POWER	1				NAT'L SEMI.
54	U5		MAX221ECAE	RS232 TX/RX	1				MAXIM
55	U6		B1901AHMS-8.0000	XTAL OSCILLATOR	1				BOMAR
56	U7		LMX2316TM	LOW PWR FREQ SYNTHESIZER	1				NAT'L SEMI.
57	U8		MFC205A	VOLTAGE CONTROLLED OSC.	1	205-280			SYNERGY
58	U9,U10		SGA-4186	MMIC AMPLIFIER	2				SIRENZA
59	U11		LM2937IMP-5.0	REGULATOR,LOW DROPOUT,5V	1				NAT'L SEMI.
60	U12		LM2941S	REGULATOR,LOW DROPOUT,8V,1A	1				NAT'L SEMI.

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ITEM	REF DES	Fiber-Span P/N	MFR P/N	DESCRIPTION	QTY	VALUE	PREF	P/L	MFR
61	U13		ZSR800G	REGULATOR,8V	1				ZETEX
62	U15		SGA-6586	MMIC AMPLIFIER	1				SIRENZA
63	Y1		ECS-40-20-5PDN	CRYSTAL	1				ECS
64			56-590-65/3BC	FERRITE BEAD	6				ELNA
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BOM Single Level *(With Phantom Blow-Through)*

285-0247

Power Amplifier, 10 Watt, VHF, <32uS,
ChSys, G1

Rev 1

Last Update

5/8/2009

Part	Rev	Qty	Description	Reference Designators	Part Type
285-0247-ASY		0	Power Amplifier, 10 Watt, VHF, <32uS, ChSys, G1		
285-0247-SPI		0	Power Amplifier, 10 Watt, VHF, <32uS, ChSys, G1		
290-0241		1	VHF Pre-Driver Amplifier, ChSys		
290-0242		1	VHF Driver Amplifier, ChSys	A2	
290-0243		1	VHF Final Stage Amplifier, ChSys	A3	
305-0195	C	1	PCBA, Key Logic board 310-0195, ChSys	A4	
525-0122		1	RF Isolator, VHF, 132-174MHz, 125W Continous Power, 15W Load, N F		
540-0059		1	Attenuator, Coaxial Variable Voltage, 10-2500 MHz, 40 dB Attenuation	A3	
546-0002-L09		1	RF Cable,SMA-m_to_SMA- m,RG405,.085",Semiflex,9",Non- Comp	RF CABLE4	
546-0018-L03		1	RF Cable,SMA-m_to_SMA-m- RA,RG405,.085",Semiflex,3",Non- Comp	RF CABLE3	
546-0042-L10		1	RF Cable,SMA-f-BH_to_SMA-m- RA,RG405,.085",Semiflex,10",Non- Comp	RF CABLE1	
546-0058-L03		1	RF Cable,SMA-m-RA_to_SMA-m- RA,RG405,.085",Semiflex,3",Non- Comp	RF CABLE2	
610-0031		1	Adapter, RF, N-Female to SMA- Female, Panel Mount, Non-Comp	J1	
620-0054		1	Power Supply, Switching, Single Output, 12V DC, 12A, 150W RoHS	A5	
745-0035		1	Switch, non Illuminated Rocker DPDT, 15A	B3	
755-0005		1	AC, Line Cord, IEC Compatible, Black, 7.6', 13A, 125V, RoHS		
755-0008		1	AC,Power Entry Module, Line Filter,RFI Power Line,10A, IEC, Non-Comp	J2	
760-0009		1	Fuse, Slo-Blo, 250V, 1A,3AG,1pt25Length,0pt25Diameter , Non-Comp	F1	
765-0217	A	1	Wire ASY, AC, IEC to Rocker Switch & Power Supply	H1	
765-0218	A	1	Wire ASY, DC, Power Supply to Pre-amp & Power Amp	H2	
765-0220	A	1	Wire ASY, DC, Pre-amp to Power Amp & Key Board	H3	

<i>Part</i>	<i>Rev</i>	<i>Qty</i>	<i>Description</i>	<i>Reference Designators</i>	<i>Part Type</i>
765-0221	A	1	Wire ASY, DC, Power Supply to Fan, Key Board & Panel Led	H4	
765-0222	A	1	Wire ASY, DC, Power Amp Signal Alarm	H5	
765-0223	A	1	Wire ASY, DC, Key Signal	H6	
780-0222		1	Barrier Block, 6Pos, Flanged, through hole pins	J3	
837-0260		1	FAN DC AXIAL 12V 92X38 3600 RPM	B1	
837-0261		1	FINGER GUARD 92MM METAL Grill	23	
837-0262		1	FUSEHOLDR 3AG STRAIGHT PANEL MNT	B2	
850-0161	B	1	FAB, Cover, Amplifier, Chassis	10	Custom
850-0162	B	1	FAB, Fan Duct	11	Custom
850-0163	B	2	FAB, Fan Duct, End Cap	12	Custom
850-0174	A	1	Fabrication of Power Supply Mounting Plate.	13	
850-0221	A	1	FAB, Front Panel, RF Power Amplifier, Reduced I/Os, ChSys, 800,UHF,VHF		Custom
850-0222	A	1	FAB, Chassis, RF Power Amplifier		
850-0226	A	1	Plate, Mounting, for COAX Isolator 9T18-11 (Fiber-Span P/N 490-0055)		
900-0033		4	Screw, Machine, Phillips, Panhead, 2-56 x 1/4", 18-8 SS	46	
900-0064		13	Screw, Machine, Phillips, Panhead, 4-40 X 1/4", Non-Comp	47	
900-0066		16	Screw, Machine, Phillips, Panhead, 4-40 x 7/16", Non-Comp	48	
900-0076		4	Screw, Machine, Phillips, Panhead,18-8 SS,4-40 x 3/4", Non-Comp	49	
900-0086		4	Screw, 6-32 x 5/16 Phillips Pan Head, Non-Comp	51	
900-0092		22	Screw, Phillips, Panhead, 6-32 x 3/8", Non-Comp	52	
900-0096		9	Screw, Machine, Panhead, SS, 6-32 x 5/8, Non-Comp	53	
900-0099		3	Screw, Machine Panhead, Phillips, 6-32 x 1/4", Non-Comp	50	
900-0106		4	Screw, Machine, Phillips Pan Head, 6-32 x 2 in, 18-8 SS, RoHS	54	
900-0183		16	18-8 SS Hex Nylon-Insert Locknut 4-40, 1/4" Width, 9/64" Ht	61	
900-0198		8	Pan Head Phil Machine Screw, 18-8 SS, Internal Washer, 8-32 Thread		
900-0199		4	18-8 Stainless Steel Socket Head Cap Screw 8-32, 1-3/8" Length	55	
910-0002		4	Nut, 2-56, Hex 3/16" on flats, Thk 1/16", SS, Non-Comp	60	

<i>Part</i>	<i>Rev</i>	<i>Qty</i>	<i>Description</i>	<i>Reference Designators</i>	<i>Part Type</i>
910-0012		12	Nut, 6-32, Hex, SS, Non-Comp	62	
910-0016		6	Nut, Hex, 8-32, Non-Comp	63	
915-0071		4	Standoff, F/F, 5/16" Hex, 1" L, length, 8-32 Zinc-Plated Steel	67	
915-0072		8	Standoff, F/F, 1/4" Hex, 1" L, length, 6-32 Zinc-Plated Steel	64	
925-0023		11	Washer, 4-40 Lock, Non-Comp	57	
925-0024		13	Washer, Split Lock, #6, ID.148, OD.25, 031Thk, 18-8SS, Non-Comp	58	
925-0028		4	Washer, Flat, #6, OD 5/16", ID .156, .027-.048 Thk, 18-8SS, Non- Comp	59	
925-0037		4	Washer, Split Lock, #2, ID094, OD172, Thk020, 18-8SS, Non- Comp	56	
930-0033		4	Spacer, #4, 1/4"OD, 0.115ID, 1/4"Length, Al, Roun d, Non-Comp	65	

End of BOM

BOM Single Level *(With Phantom Blow-Through)*

290-0241

VHF Pre-Driver Amplifier, ChSys

Rev 1

Last Update

5/8/2009

Part	Rev	Qty	Description	Reference Designators	Part Type
290-0237-ASY	A	1	Pre-Driver Housing Assembly , 800, UHF & VHF, ChSys, All Bands		
290-0237-MOD	A	0	Pre-Driver Housing Assembly , 800, UHF & VHF, ChSys, All Bands		
290-0237-SPI	A	0	Pre-Driver Housing Assembly , 800, UHF & VHF, ChSys, All Bands		
305-0141	D	1	PCBA, Amplifier Pre-Driver, ChSys, All Bands, 5-1000MHz		
585-0028		2	SMA-Recept, Square Flange, 0.059", LG Diel		
615-0014		2	RF Coax Tin Plated Cable EZ-Flex 47, EZ Formable .047(50ohm)		
700-0065		12	Ferrite Bead, EMI Shield Beads Z=40OHM @ 100MHz		
705-0142		12	Cap, Feed-Thru, 1000pf, ±20%, 10A Max, 8-32 Thread 705-0144 valid Sub		
805-0046		8	Wire, Hookup, AWG24, Stranded_7/32,Red,Teflon,MIL-W-16878ETypeET,RoHS		
805-0079		2	Wire Teflon Hook-up,24 awg orange Beldon		
805-0096		20	Wire, Hookup, AWG24, Stranded, White, Teflon,1000Ft.		
850-0156	A	1	FAB, Cover, Amplifier, Pre-Driver		Custom
850-0172-FAB		1	Pre-Driver Housing Insulator		
850-0173	A	1	Fabrication of Amplifier Pre-Driver Stage Housing		
900-0033		8	Screw, Machine, Phillips, Panhead, 2-56 x 1/4", 18-8 SS		
900-0185		2	Terminal LockwasherLug #6 Angle		
900-0208		16	Pan Head with Split Washer Zinc-Plated Steel, 4-40 Thread, 1/4", SEMS		
925-0037		8	Washer, Split Lock,#2, ID094,OD172,Thk020,18-8SS, Non-Comp		
940-0029		1	Aluminum Foil Tape, w/Conductive Adhesive, 2" W x 36 yds L		

End of BOM

PARTS LIST

3/20/2009 5:03 PM

FIBER-SPAN 111 Corporate Blvd. South Plainfield, NJ 07080 908-754-0646		MODEL / PRODUCT:	NEXT ASSY:	ASSY TITLE: AMPLIFIER, PRE-DRIVER	PART LIST / ASSY NO.: 305-0141-BOM					
		PROGRAM MANAGER:	CHARGE #:	NOTES: NOTE: -1 INDICATES SINGLE CHANNEL (CH-A) OPERATION * Items Containing a FS P/N will be supplied by FS						
		ISSUED BY: SS	DATE: 3/24/2008							
		APPROVED BY:	DATE:							
		REV: E	DATE: 3/20/2009							
FILE: PL52500-0409-A	ECN #:	EFFECTIVE DATE:								
ER #:										

ITEM	REF DES	Fiber-Span P/N	MFR P/N	DESCRIPTION	QTY	VALUE	PREF	P/L	MFR
1		310-0177	52500-03-09	ASSEMBLY DRAWING	REF				
2			52500-04-09	SCHEMATIC	REF				
3			52500-07-09	PRINTED CIRCUIT BOARD	1				
4									
5	AT4		AT-220	DIGITAL ATTENUATOR,30dB, 4 - BIT	1				MACOM
6									
7	C52,56,59,61,66		ECJ-1VC1H101J	CAP,CER CHIP,NPO,50V,0603	5	100pF			PANASONIC
8	C53,57,58,62		ECJ-1VC1H102J	CAP,CER CHIP,NPO,50V,0603	4	1000pF			PANASONIC
9	C54,55,65,69,72,		ECJ-1VB1E104K	CAP,CER CHIP,X7R,25V,0603	9	0.1uF			PANASONIC
	75,76,79,80								
10	C60	705-0157	C11AH5R1A9UXL	CAP, PORCELAIN CHIP	1	5.1pF			DIEL. LABS
11	C63		ECE-A1CU101	CAP,ALUM ELECT,16V	1	100uF			PANASONIC
12	C64 C68		ECJ-1VB1H103K	CAP,CER CHIP,X7R,50V,0603	2	.01uF			PANASONIC
13	C67		ECS-T1EX225R	CAP,CHIP,TANTALUM,25V,3528-21	1	2.2uF			PANASONIC
14	C70		ECJ-1VB1E473K	CAP,CER CHIP,X7R,25V,0603	1	0.047uF			PANASONIC

PARTS LIST

3/20/2009 5:03 PM

<i>FIBER-SPAN</i>				ASSY TITLE: AMPLIFIER, PRE-DRIVER	PART LIST NO.: 305-0141-BOM				
					REV: E				
ITEM	REF DES	Fiber-Span P/N	MFR P/N	DESCRIPTION	QTY	VALUE	PREF	P/L	MFR
15	C73		ECS-T1CC226R	CAP,CHIP,TANTALUM,16V,6032-23	1	22uF			PANASONIC
16	C74		NOT USED						
17									
18	CR1		B340LA	DIODE,SCHOTTKY,40V,3A,Surf-M	1				DIODES,INC
19									
20	FL1		LFCN-1000	FILTER, LOW PASS, DC-1000 MHz	1				MINI CKTS
21									
22	L1	700-0064	LL2012-F82NT	INDUCTOR,SURFACE MT	1	82nH			TOKO
23	L2	700-0019	LL2012-F33NK	INDUCTOR,SURFACE MT	1	33nH			TOKO
24									
25	R34		30BJ250-10	RES,COMP,1/4W,5%, w/ 2BD	1	10			XICON
26	R35 R37		ERJ-3GEYJ103V	RES, CER. CHIP, 5% 0603	2	10K			PANASONIC
27									
28	R36		30BJ250-10	RES,COMP,1/4W,5%, w/1BD	1	10			XICON
29	R38		767-163-R10K	RES NET,8 RES,16 PIN,SMD	1	10K			CTS
30	R39		ERJ-12ZYJ270U	RES,CHIP,1/2W,5%,2010	1	27			PANASONIC
31	R40		ERJ-3GEYJ391V	RES,CHIP,1/10W,5%, 0603	1	390			PANASONIC
32	R41		ERJ-3GEYJ181V	RES,CHIP,1/10W,5%,0603	1	180			PANASONIC
33	R42	725-0415	RL1632R-1R00-F	RES,CHIP,1/2W,1%,1206	1	1.00			SUSUMU
34	R43		ERJ-3EKF6340V	RES,CHIP,1/10W,1%,0603	1	634			PANASONIC
35	R44		ERJ-3EKF4221V	RES,CHIP,1/10W,1%,0603	1	4.22K			PANASONIC
36	R45-46		ERJ-3EKF1820V	RES,CHIP,1/10W,1%,0603	2	182			PANASONIC
37	R47		ERJ-3GEYJ105V	RES,CHIP,1/10W,5%,0603	1	1M			PANASONIC
38	R48		ERJ-3EKF1212V	RES,CHIP,1/10W,1%,0603	1	12.1K			PANASONIC
39	R49		ERJ-3EKF2321V	RES,CHIP,1/10W,1%,0603	1	2.32K			PANASONIC

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<i>FIBER-SPAN</i>				ASSY TITLE: AMPLIFIER, PRE-DRIVER	PART LIST NO.: 305-0141-BOM				
					REV: E				
ITEM	REF DES	Fiber-Span P/N	MFR P/N	DESCRIPTION	QTY	VALUE	PREF	P/L	MFR
40									
41	U5		SN74HC04D	IC,HEX INVERTER,14-SOIC	1				TI
42	U6	490-0047	SXA-289	IC,MMIC AMPLIFIER	1				Sirenza
43	U7		ZXCT1010ESTA	IC,CURRENT MONITOR,TO-23-5	1				ZETEX
44	U8		LTC1042CN8	IC,WINDOW COMPARATOR,8-DIP	1				LINEAR TEC
45	U10		LM2941S	IC,VOLT REG,ADJ w/ENBL,TO-263-5	1				NATIONAL
46	U11		ZSR500GTA	IC,VOLT REG,+5V,200ma,SOT-223	1				ZETEX
47	U14-15		SN74LVC1G06DBVR	IC,SINGLE INVERTER,SOT-23-5	2				TI
48									
49									
50			56-590-65/3BC	FERRITE BEAD	3				ELNA
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