

7.0 PARTS LISTS

7.1 800 MHZ DRIVER MODULE 900029A001, REV. F

SYMBOL	PART NUMBER	DESCRIPTION
---- CAPACITORS ----		
C1	186-0002	4.7 μ F, CAP1210 Y5V SMT.
C2 and C3	200006A002	47pF, CAP RF NPO 0805 SMT
C4	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C5 and C6	200006A002	47pF, CAP RF NPO 0805 SMT
C7	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C8	200006A002	47pF, CAP RF NPO 0805 SMT
C9	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C10	200006A002	47pF, CAP RF NPO 0805 SMT
C11	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C12	200006A002	47pF, CAP RF NPO 0805 SMT
C13 thru C15	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C16 thru C18	200006A002	47pF, CAP RF NPO 0805 SMT.
C19 and C20	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C21	200006A002	47pF, CAP RF NPO 0805 SMT.
C22 thru C26	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C27	200004A003	0.01 μ F, 100V, CAP, SMT 0805.
C28 thru C39	200006A002	47pF, CAP RF NPO 0805 SMT.
C100	200006A002	47pF, CAP RF NPO 0805 SMT.
C101 and C102	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C103 thru C106	200006A002	47pF, CAP RF NPO 0805 SMT.
C107	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.

SYMBOL	PART NUMBER	DESCRIPTION
C108	200006A002	47pF, CAP RF NPO 0805 SMT.
C109	186-0002	4.7 μ F, CAP1210 Y5V SMT.
C110	200004A001	0.001 μ F, 100V, CAP, SMT, 0805.
C111	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C112	200006A002	47pF, CAP RF NPO 0805 SMT.
C113 thru C117	921-00019-022	2.2pF, CAP, S, 0805.
C118	200006A002	47pF, CAP RF NPO 0805 SMT.
C119	200001A037	10 pF $\pm$ 5%, CAP, SMT, 1111, RF PORC, 500.
C120	200001A034	7.5 pF $\pm$ 0.1 pF, CAP, SMT, 1111, RF PORC, 500.
C122	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C123	200004A001	0.001 μ F, 100V, CAP, SMT, 0805.
C124	200006A002	47pF, CAP RF NPO 0805 SMT.
C125	200001A052	43 pF, 5%, CAP, SMT, 1111, RF PORC, 500.
C126	200004A001	0.001 μ F, 100V, CAP, SMT, 0805.
C127	200003A001	0.1 μ F $\pm$ 10%, 50V, CAP 0805.
C128	186-0002	4.7 μ F, CAP1210 Y5V SMT.
C130	200001A034	7.5 pF $\pm$ 0.1 pF, CAP, SMT, 1111, RF PORC, 500.
C131	200001A052	43 pF $\pm$ 5%, CAP, SMT, 1111, RF PORC, 500.
C132	200001A035	8.2 pF $\pm$ 0.1 pF, CAP, SMT, 1111, RF PORC, 500.
----- DIODES -----		
D1	925-00127-001	2.5V Shunt Voltage Reference.
D2 thru D4	926-00018-001	SWITCHING.
D5	925-00127-002	IC: 5.0 VOLT REF,PREC.
D9	340004A001	30 V TRANSIENT SUPPRESSOR.
D10	340003A001	SMT SCHOTTKY RECTIFIER 15 AMP 50V.
----- FERRITE BEAD -----		
FB100	600002A001	Chip: Ferrite Bead 1806.
----- CONNECTOR -----		
J13	440002A003	Header: SMT 0.1 2X5 POS, SHROUDED.
----- INDUCTOR -----		
L100	928-00017-018	1.8nH, S.

PARTS LIST

SYMBOL	PART NUMBER	DESCRIPTION
L101	928-00017-068	6.8nH, S. ----- PRINTED WIRE BOARD -----
PCB	500017A001	DRIVE MODULE ----- TRANSISTORS -----
Q1 thru Q3	310003A001	NPN
Q4	310004A001	PNP
Q5	310003A001	NPN ----- COUPLER -----
QC100	149-0001	3dB SMT ----- RESISTORS -----
R1	120001A001	POT: 5k Ohm Multi-Turn.
R2	100003A014	6.340 k Ohms, 0.125W, 1%, 0805.
R3 thru R8	100003A001	10k Ohms, 0.125W, 1%, 0805.
R9	120001A001	Pot: 5k Ohms Multi-Turn.
R10 thru R16	100003A014	6.340 k Ohms, 0.125W, 1%, 0805.
R17	100001A022	1Meg Ohm, .125w, 0805.
R18	100001A015	82k Ohms, 5% .125W, 0805.
R19	100003A001	10k Ohms, 0.125W, 1%, 0805
R20	100003A014	6.340 k Ohms, 0.125W, 1%, 0805.
R21	100003A001	10k Ohms, 0.125W, 1%, 0805.
R22	100001A015	82k Ohms, 5%, 0.125W. 0805.
R23	100003A001	10k Ohms, 0.125W, 1%, 0805.
R24	100003A003	1.0k Ohm, 0.125W, 1%, 0805.
R25	100003A001	10k Ohms, 0.125W, 1%, 0805.
R27 thru R30	100003A001	10k Ohms, 0.125W, 1%, 0805.
R31	100003A003	1.0k Ohms, 0.125W, 1%, 0805.
R32	100001A022	1 Meg Ohm, 0.125W, 0805.
R33	100003A015	8.250k Ohms, 1%, 0.125W, 0805.
R34	100003A001	10k Ohms, 0.125W, 1%, 0805.
R35	100001A022	1 Meg Ohm, 0.125W, 0805.
R36	100003A001	10k Ohms, 0.125W, 1%, 0805.
R38 and R39	100003A001	10k Ohms, 0.125W, 1%, 0805.
R40	100001A012	130 Ohms, 5% .125W, 0805.

SYMBOL	PART NUMBER	DESCRIPTION
R41	100003A001	10k Ohms, 0.125W, 1%, 0805.
R42	100003A014	6.340 k Ohms, 0.125W, 1%, 0805.
R43	100001A015	82k Ohms, 5%, 0.125W, 0805.
R44	120001A001	Pot: 5k Ohms Multi-Turn.
R45	100003A001	10k Ohms, 0.125W, 1%, 0805.
R46	100003A005	49.9 Ohms, 0.125W, 1%, 0805.
R47 and R48	100003A001	10k Ohms, 0.125W, 1%, 0805.
R49	100003A014	6.340k Ohm, 0.125w, 1%, 0805.
R52	100003A003	1.0k Ohms, 0.125W, 1%, 0805.
R53	100003A014	6.340k Ohm, 0.125w, 1%, 0805.
R57 and R58	100003A001	10k Ohms, 0.125W, 1%, 0805.
R62	100003A003	1.0k Ohms, 0.125W, 1%, 0805.
R63	100003A001	10k Ohms, 0.125W, 1%, 0805.
R64	100001A015	82k Ohms, 5%, 0.125W, 0805.
R67	100003A001	10k Ohms, 0.125W, 1%, 0805.
R68	100003A014	6.340k Ohm, 0.125w, 1%, 0805.
R70 thru R74	100003A003	1.0k Ohms, 0.125W, 1%, 0805.
R75	100003A016	590 Ohms, 0.125W, 1%, 0805.
R76 thru R80	100003A003	1.0k Ohms, 0.125W, 1%, 0805.
R101	100001A012	130 Ohms, 5%, 0.125W, 0805.
R102	100003A005	49.9 Ohms, 0.125W, 1%, 0805.
R103	100001A012	130 Ohms, 5%, 0.125W, 0805.
R104	100001A024	300 Ohms, 0.125W, 0805.
R105	100003A008	17.4 Ohms, 0.125W, 1%, 0805.
R106	100001A024	300 Ohms, 0.125W, 0805.
R107	100001A012	130 Ohms, 5%, 0.125W, 0805.
R109	100003A001	10k Ohms, 0.125W, 1%, 0805.
R110	120001A001	Pot, 5k Ohm Multi-Turn
R111 ²	100003A010	9.09k Ohms, 0.125W, 1%, 0805.
R112	923-00051-100	10 Ohms 0.25W, 5%, S, 1206.
R113	100005A001	50 Ohm Term, 25 Watts.
		----- INTEGRATED CIRCUITS -----
U1	920-00223-006	V-REG, FXD, +24V, 3A.

² Refer to PRODUCTION CHANGES.

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SYMBOL	PART NUMBER	DESCRIPTION
U2	920-00223-005	V-REG, FXD, +15V,3A.
U3	920-00223-004	V-REG, FXD, +6V,3A.
U4 and U5	370001A002	QUAD JFET INPUT OP AMP.
U6	370004A001	IC, SMT DUAL J-K FLIP W/ RESET.
U7 and U8	370001A002	QUAD JFET INPUT OP AMP.
U100	925-00083-002	IC, ATTN, VOLT VAR.
U101	925-00131-002	IC, AMPLFR, PWR, LI.

7.2 800 MHZ PA OUTPUT MODULE 900030A001, REV. A

SYMBOL	PART NUMBER	DESCRIPTION
		----- CAPACITORS -----
C1	200003A001	0.1 μ F $\pm$ 10%, 50V, 0805.
C2 and C3	200006A002	47pF, RF, NPO, 0805, SMT.
C4	200003A001	0.1 μ F $\pm$ 10%, 50V, 0805.
C5 and C6	200006A002	47pF, RF, NPO, 0805, SMT.
C7	200003A001	0.1 μ F $\pm$ 10%, 50V, 0805.
C8 thru C12	200006A002	47pF, RF, NPO, 0805, SMT.
		----- DIODES -----
D1 thru D3	340001A001	DUAL
		----- PRINTED WIRE BOARD -----
PCB	500018A001	OUTPUT MODULE
		----- RESISTOR -----
R2	03003-750	75 Ohms $\pm$ 5%, 0.25W.
R3	03003-101	100 Ohms, S, 1206, 5%, 0.125W.
R4	03003-750	75 Ohms $\pm$ 5%, 0.25W.
R5	923-00030-750	75 Ohms $\pm$ 5%, S, 2512 (NEW).
R6	11143-101	100 Ohms $\pm$ 5%, S, 2512.
R7	923-00030-750	75 Ohms $\pm$ 5%, S, 2512 (NEW).
R8	11143-510	51 Ohms $\pm$ 5%, S, 2512.

SYMBOL	PART NUMBER	DESCRIPTION
R10	11143-101	100 Ohms $\pm 5\%$, S, 2512.
R11	923-00030-750	75 Ohms $\pm 5\%$, S, 2512 (NEW).
R12	11143-101	100 Ohms $\pm 5\%$, S, 2512.
R13	100001A001	100k Ohms, $\pm 5\%$, 0.125W, 0805.
R14	100001A008	1.0K Ohms, $\pm 5\%$, 0.125W, 0805.
R15	100001A001	100k Ohms, $\pm 5\%$, 0.125W, 0805.
R16	100001A008	1.0K Ohms, $\pm 5\%$, 0.125W, 0805.
R17	100001A001	100k Ohms, $\pm 5\%$, 0.125W, 0805.
R18	100001A008	1.0K Ohms, $\pm 5\%$, 0.125W, 0805.

7.3 850-870 MHZ ASSM TOP 990028A001, REV. F

SYMBOL	PART NUMBER	DESCRIPTION
	05794-001	PIN,TERM,GROUND POST.
	115-115	WIRE, 18 AWG STR. TEFLON, RED.
	116-001	TUBING, SHRINK, 3/32", BLACK 0.5 IN FOR RED FAN WIRE, 0.5 IN FOR FILTER WIRE (0.08 EA).
	116-003	TUBING SHRINK, BLK 3/16" 2 X 1 IN FOR TERMINAL BLOCK WIRES.
	120-127	SCREW 2-56 X 1/2 PPH, ZINC PLATED FOR COUPLER ATTACHMENT (2 EA).
	120-205	SCREW, 4-40 X 5/16 SOC HD CAP, BLACK OXIDE 4 PC FOR ATTENUATORS; 2 PC FOR BLF2043F (Qty: 6).
	121-208	WASHER, LOCK # 4 SPRING, ZINC 4 PC ATTENUATORS; 2 PC FOR BLF2043F (Qty: 6).
	121-218	WASHER, LOCK # 6 SPLIT, 18-8 4PC FOR FAN; 2PC FOR DC POWER CABLE.
	130002A001	BNC STATIC CAP - CEP 08.
	150003A001	CHASSIS, EA-SERIES
	150004A001	INNER CHASSIS WALL, EA-SERIES.
	160002A001	A - BRACKETS, EA-SERIES (Qty: 2).
	165-001	FILTER,EMI,SUPP.
	183001A001	CIRCULATOR, 850-870 MHz.
	198001A001	SPECTRUM TERMINAL BLOCK # 52-160-002-C.
	199001A001	SPECTRUM BLOCK COVER # 54-205-002.

PARTS LIST

SYMBOL	PART NUMBER	DESCRIPTION
	300003A001	BLF2043F, RF POWER TRANSISTOR NOTE: Use thin layer of thermal grease under part.
	300-0054	TRANSISITOR, MRF184.
	390001A001	NEW: NUT, 6-32 HEX KEPS STL ZNC FOR TERMINAL BLOCK ATTACHMENT (Qty: 2).
	400002A001	A - HOUSING, FAN C-SERIES.
	410-0011F	NUT , 4-40x1/4x3/32 HEX KEPS NUT 4 PC FOR BNC-CONN; 2 PC FOR CABLE - 10 POS-RIBBON (Qty: 6).
	410-0013	SCR,4/40x5/16 PPH STL ZP THDFRM 7 PC FOR DRIVER PCB; 8 PC FOR OUTPUT PCB, 4 PC FOR ALCATEL ATTACHMENT,4 PC FILTER CONN (Qty: 23).
	410-0044F	SCREW 8-32 x 3/8 PHIL PAN TYPE F ZP" FOR LOW PASS FILTER ATTACHMENT.
	410-0045	SCREW 6-32 x 2 3/4 SLTD MS ZP" SCREW FAN TO HEATSINK (Qty: 4).
	410-0048	#2 x 7/32 x .020 FT STL WASH Z FOR COUPLER ATTACHMENT (Qty: 2).
	410-0049F	# 2 MED SPLIT STL L/W ZP FOR COUPLER ATTACHMENT (Qty: 2).
	410004A002	SEMS JACK SCREWS (Qty: 2).
	410005A001	6-32 X 5/16 STL ZP. SPLIT LIW SEMS PHIL PAN 4 PC SCREW CHASSIS TO HEATSINK, 2 PC FOR INNER CHASSIS WALL, 23 PC FOR COVER, 6 PC FOR BRACKETS ATTACHMENT (Qty: 35).
	410-0066	SCREW, 4-40 x 3/8 STL SWAGEFORM ZP 4 PC FOR N-CONN; 12 PC FOR 184 PALLETS ATTACHMENT, 3 PC FOR INNER CHASSIS WALL (Qty: 19).
	410-0076	6-32 x 3/4 PHIL PAN STL M/S ZP FOR TERMINAL BLOCK AND COVER ATTACHMENT (Qty: 2).
	420-0003M	FAN GRILLS – LARGE.
	420-0010	FAN, ROTRON MC24B3.
	430-0002	WIRE, RED 14 AWG UL1015-1441-2, 2.5 IN TERMINAL BLOCK TO J1 ON DRIVER PCB (0.21 FT).
	430-0003K	UL1015-1441-0 14 GA BLK 2.5 IN TERMINAL BLOCK TO J2 ON DRIVER PCB (0.21 FT).
	440010A001	BNC -23110-000N.
	450007A001	HEATSINK.

SYMBOL	PART NUMBER	DESCRIPTION
	460008A001	FRONT PANEL.
	480-0011	HEAT SHRINK TUBING 1/8" 5.5 IN FOR FAN WIRES (0.46 FT).
	500-00801-001	H – CCA,184 PALLET (Qty: 2).
	500011A001	PCB, RF CONNECTOR (Qty: 2).
	710002A001	Low Pass Filter 850-960 MHz, Microlab # LB-D62.
	740002A002	LABEL - WARRANTY, PLAIN (Qty: 2).
	740004A001	CURRENT LABEL / FREQUENCY LABEL.
	800001A001	COUPLER, RFP-915-90-400.
	900029A001	E - CCA, 800 MHz DRIVER MODULE.
	900030A001	A - CCA, 800 MHz OUTPUT MODULE.
	910-00144-002	CABLE,RIBBON,26C 4.75 IN BETWEEN J11 AND J4 (0.4 IN).
	920-00253-001	ATTENUATOR,100W, 20DB (Qty: 2).
	930008A001	B - CBL, DIN 10 POS-RIBBON-DB 9 FILTER SDR CUP.
	930017A001	DC POWER CABLE.
	930018A001	EXTERNAL CONTROL CABLE

7.4 CCA,184 PALLET 500-00801-001, REV. I

SYMBOL	PART NUMBER	DESCRIPTION
	100-02406-002	B - PLATE,MRF184, 60 ----- CAPACITORS -----
C1 and C2	200001A052	43 pF $\pm 5\%$, SMT, 1111, RF PORC, 500.
C6	200001A052	43 pF $\pm 5\%$, SMT, 1111, RF PORC, 500.
C7	921-00051-102	1000pF, S, 120.
C8	161-096	1 μ F, A - CAP S, 1206.
C9 and C10	164-044	10 μ F, CAP TAN, 734.
C11 and C12	161-096	1 μ F, A - CAP S, 1206.
C13	921-00051-102	1000pF, CAP,S, 120.
C14	921-00021-390	39pF, CAP, S, 0805.
C16 thru C18	161-096	1 μ F, A - CAP S, 1206.
PCB	200-00801-001	184 PALLET.

PARTS LIST

SYMBOL	PART NUMBER	DESCRIPTION
		---- INDUCTOR ----
L1	920-00232-002	BEAD, FERRITE, 47.
		---- RESISTORS ----
R1	923-00051-122	S, 1.2k Ohms, 1206.
R2	23-00051-1819	S, 180 Ohms, 1206, 5.
R3	923-00051-122	S, 1.2k, 1206.
R4	923-00032-502	VAR,MULTI TU.
R5	923-00051-100	S,10 Ohms,1206, 5%,0.25W.
R6	923-00051-103	S, 10k Ohms, 1206, 5.
R7	03003-272	S, 2.7k Ohms, 1206.
R8	923-00051-122	S,1.2k Ohms, 1206.
		---- INTEGRATED CIRCUITS ----
U1	925-00137-001	TEMP SENSOR,4.

7.5 PRODUCTION CHANGES

850-870 MHz ASSM TOP 990028A001, Rev. F

To improve loss of drive power detection. Changed resistor R11. Resistor R11 was 100003A001, 10k Ohms, 0125W, 1%, 0805.