



Bill of Material

6185 Phyllis Driver, Unit D
Cypress, CA 90630
Tel: (714) 230-8333
Fax: (714) 230-8341

Approved by: LE
Ass: LPA0800-050-SC01-DR
DWG: 3217603E

Date: Oct. 20, 2003
Material: FR-4 & 31-mils
Rev. A

Item	Part No.	Description	QTY	Reference	Manufactory Part No.
1	CAP 101J 0805	Capacitor 100pF 0805 JS	25	C1,C10,C12,C13,C18,C19	201R15C101JV4E
				C22,C25,C29,C30,C33,C39	
				C40,C41,C46,C50,C51,C54	
				C58,C59,C66,C85,C86,C87	
				C88,	
2	CAP 101A 0805	Capacitor 100pF 0805 AVX	17	C2,C4,C7,C14,C16,C20,C23	08051A101JAT2A
				C26,C34,C36,C42,C43,C44	
				C47,C52,C53,C55, C61, C62,	
				C63.	
3	CAP 104A 0805	Capacitor 0.1uF/50V 0805 AVX	30	C8,C11,C15,C17,C21,C24	08055C104KAT2A
				C27,C35,C37,C48,C56,C60	
				C67,C68,C69,C70,C71,C72	
				C73,C74,C77,C78,C79,C80	
				C81,C82,C83,C92,C93,C94	
4	CAP 104M 1210	Capacitor 0.1uF/50V 1210 Murata	5	C3,C5,C75,C76,C84	GRM42-2X7R104K050AL
5	CAP 105T 1206	Capacitor Tantalum 1.0uF/16V 1206	6	C9,C28,C38,C45,C49,C57	TAJA105K016R
6	CAP 106T DT50	Capacitor Tantalum 10uF/50V Size D	1	C6	293D106X905E2T
7	CAP102A0805	Capacitor 1000pF 0805 AVX	2	C89,C90	08051C102KAT2A
8	N/A	N/A	3	C31,C32,C91	N/A
9	COU1D130410	Directional Coupler 10dB (800-1200Mhz)	1	CPL7.	1D1304-10

10	COU HY860012	Hybrid Coupler 3dB 90degree SO-8	7	CPL2,CPL3,CPL4,CPL5	HY86-12
				CPL6,CPL8,CPL9	
11	DIO HSMP 3810	Pin Diode SOT-23	7	D1,D18,D19,D20,D21,D22	HSMP-3810-TR1
				D23.	
12	DIO BAV-99-7	ESD Diode SOT-23	1	D24	BAV99-7
13	DIO MMBV0105	Silicon Tuning Diode	16	D2,D3,D4,D5,D6,D7,D8,D9	MMBV105GLT1
				D10,D11,D12,D13,D14,D15	
				D16,D17	
14	IND 820C 0805	Inductor 82nH 0805	14	L1,L2,L3,L4,L5,L6,L7,L8,L9	0805CS-820XJBC
				L10,L11,L12,L13,L15	
15	IND8N2J0805	Inductor 8.2nH 0805 JS	1	L14	L-15C8N2JE
16	MHL9236M000	RF Linear LDMOS Amplifiers	1	Q1	MHL9236M
17	TRA MMBT-2222	NPN Medium Power Transistor SOT-23	5	Q3,Q5,Q7,Q10,Q12	MMBT2222ALT1
18	AMP GAL5	Amplifier	5	Q2,Q4,Q6,Q8,Q9	GALI5
19	AMP AH1	Amplifier	1	Q11	AH1
20	RES 51R1 1206	Resistor 51.1 OHM 1206 1%	2	R1,R42	RK73H2BT51R1F
21	RES 2740 1206	Resistor 274 OHM 1206 1%	3	R3,R33,R48	RK73H2BT2740F
22	RES 1001 0805	Resistor 1K 0805 1%	17	R4,R5,R6,R7,R8,R9,R10,R11	RK73H2AT1001F
				R12,R16,R17,R18,R19,R20	
				R21,R22,R23	
23	RES 1001 1206	Resistor 1K 1206 1%	4	R34,R46,R49,R61	RK73H2BT1000F
24	RES 0000 0805	Resistor 0 OHM 0805	5	R13,R31,R51,R54,R58	RM73Z2AT
25	RES 0000 1206	Resistor 0 OHM 1206	1	R47	RM73Z2BT
26	RES10R01206	Resistor 10 OHM 1206 1%	5	R2,R24,R29,R40,R41	RK73H2BT10R0F
27	RES75R00805	Resistor 75 OHM 0805 1%	3	R30,R32,R58.	RK73H2AT75R0F
28	RES 2210 0805	Resistor 221 OHM 0805 1%	2	R38,R39	RK73H2AT2210F
29	RES 51R1 0805	Resistor 51.1 OHM 0805 1%	3	R43,R44,R53	RK73H2AT51R1F
30	RES 1000 0805	Resistor 100 OHM 0805 1%	1	R45	RK73H2AT1000F
31	RES 10020805	Resistor 10 K 0805 1%	1	R63	RK73H2AT1002F
32	ETC1.6-4-2-3	Transformer	1	T1	ETC1.6-4-2-3
33	AD 8362 ARU	Power Detector	1	U1	AD 8362
34	RES 104E-TRI	Trimmer Pot 100K	2	VR1,VR2	GV4TW104K
35		2x10-2.5mm-Socket	1	CON1	1158-20G2
36	RES15000805	Resistor 150 OHM 0805 1%	1	R13	RK73H2AT1500F
37	RES68R10805	Resistor 68.1 OHM 0805 1%	2	R14, R15	RK73H2AT68R1F
38	RES12100805	Resistor 121 OHM 0805 1%	1	R31	RK73H2AT1210F

39	RES90R90805	Resistor 90.9 OHM 0805 1%	2	R59,R60	RK73H2AT90R9F
40	COU1D130420	Directional Coupler 20dB (800-1200MHz)	1	CPL1	1D1304-20



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Date: Oct, 20 2003

Ass: LPA0800-050-SC01-PRE-ERR

Material: FR-4 & 31-mils

DWG: 3217604E

Rev. A

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1	CAP 101J 0805	Capacitor 100pF 0805 JS	16	C29,C33,C34,C35,C40,C41,C44,C47	201R15C101JV4E
				C51,C54,C55,C56,C71,C73,C75,C74.	
2	CAP 101A 0805	Capacitor 100pF 0805 AVX	11	C30,C36,C38,C42,C45,C48,C52,C53	08051A101JAT2A
				C76,C81,C85.	
3	CAP 104A 0805	Capacitor 0.1uF/50V 0805 AVX	23	C31,C37,C39,C43,C46,C49,C72,C77	08055C104KAT2A
				C79,C82,C92,C104,C105,C106,C107	
				C108,C109,C110,C112,C113,C114	
				C115, C86.	
4	CAP 105T 1206	Capacitor Tantalum 1.0uF/16V 1206	5	C32,C50,C78,C83,C87.	TAJA105K016R
5	CAP 3R3J 0805	Capacitor 3.3pF 0805 JS	1	C80	201C15R3R3CV4E
6		2x5-2.5mm-Socket	1	CON2	1158-20G2
7	COU HY860012	Hybrid Coupler 3dB 90degree SO-8	4	CPL3,CPL4,CPL5,CPL6.	HY86-12
8	DIO MMBV 105	Silicon Tuning Diode	16	D1,D2,D4,D5,D6,D7,D8,D9,D10,D11	MMBV105GLT1
				D12,D13,D14,D15,D16,D17	
9	DIO HSMP 3810	Pin Diode SOT-23	3	D3,D18,D19	HSMP-3810-TR1
10	DIO BAV-99	ESD Diode SOT-23	1	D20	BAV99-7
11	DIO CMPD 0914	Switching Diode	2	D21,D22	CMPD914
12	RES 0000 1206	Resistor 0 OHM 1206	3	J1,J2,J3	RM73Z2BT
13	IND 820C 0805	Inductor 82nH 0805	11	L5,L6,L7,L8,L9,L10,L11,L12,L16,L18	0805CS-820XJBC
				L20.	
14	IND 6N8J 0805	Inductor 6.8nH 0805 JS	2	L17,L19.	L-15C6N8JE

15	AMP GAL5	Amplifier	3	Q3,Q5,Q10	GAL5
16	AMP AH102	Amplifier	1	Q11	AH102
17	TRA MMBT-2222	NPN Medium Power Transistor SOT-23	2	Q4,Q6	MMBT2222ALT1
18	RES 1001 0805	Resistor 1K 0805 1%	17	R4,R5,R8,R9,R10,R11,R12,R13,R16	RK73H2AT1001F
				R17,R18,R19,R20,R21,R22,R23,R58	
19	RES 1001 1206	Resistor 1K 1206 1%	1	R51	RK73H2AT1001F
20	RES 2210 0805	Resistor 221 OHM 0805 1%	2	R25,R26	RK73H2AT2210F
21	RES 2740 1206	Resistor 274 OHM 1206 1%	1	R7	RK73H2BT2740F
22	RES10R01206	Resistor 10 OHM 1206 1%	3	R3,R24,R50	RK73H2BT10R0F
23	RES 1002 0805	Resistor 10K 0805 1%	1	R55	RK73H2AT1002F
24	RES 0000 0805	Resistor 0 OHM 0805	3	R6,R28,R46,	RM73Z2AT
25	RES 0000 1206	Resistor 0 OHM 1206	2	R56, R57.	RM73Z2BT
26	RES 51R1 0805	Resistor 51.1 OHM 0805 1%	1	R30	RK73H2AT51R1F
27	RES 75R0 0805	Resistor 75 OHM 0805 1%	1	R49	RK73H2AT75R0F
28	RES 2741 0805	Resistor 2.74K 0805 1%	1	R52	RK73H2AT2741F
29	RES82520805	Resistor 82.5K 0805 1%	1	R53	RK73H2AT8252F
30	RES 1000 0805	Resistor 100 OHM 0805 1%	1	R54	RK73H2AT1000F
31	N/A	N/A	6	R14,R15,R27,R29,R47,R48	N/A
32	REG7808DPAK	3 Terminal 8V/ 0.5A	1	U1	MC78M08DPAK
33	IC AD8361	DC-2.5GHz True Power Detector	1	U2	AD8361ARM
34	IC C00 LM2903	Dual Differential Comparator	1	U4	LM2903VD
35	RES 104E-TRI	Trimmer Pot 100K	3	VR4,VR5,VR6	GV4TW104K
36	AMP00AH0001	Amplifier	1	Q12	AH1



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Date: Oct. 20, 2003

Ass: LPA0800-050-SC01-ERR

Material: RF-35 & 30-mils

DWG: 3217605E

Rev. A

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1	CAP 820C 1210	Capacitor 82pF 1210 ATC	2	C1,C2	100B820CW500XT
2	CAP 8R2C 1210	Capacitor 8.2pF 1210 ATC	1	C3,C4,C18.	100B8R2CW500XT
3	CAP 101J 0805	Capacitor 100pF 0805 JS	5	C5,C6,C84,C87,C98	201R15C101JV4E
4	CAP 101C 1210	Capacitor 100pF 1210 ATC	3	C7,C10,C13,	100B101JW500X
5	CAP 104A 0805	Capacitor 0.1uF/50V 0805 AVX	3	C85,C88,C99	08055C104KAT2A
6	CAP 104A 1210	Capacitor 0.1uF 1210 AVX	3	C8,C11,C14	12105C104KAT2A
7	CAP 105T 1206	Capacitor Tantalum 1.0uF/16V 1206	3	C86,C89,C100	TAJA105K016R
8	CAP 106T DT50	Capacitor Tantalum 10uF/50V Size D	3	C9,C12,C15,C20.	293D106X905E2T
9	CAP 391M 0805	Capacitor 390pF 0805	3	C94,C95,C102	GRM40X7R391R50AD
10	N/A	N/A	2	J2,J3	N/A
11	JUMP	JUMP	1	L1	
12	MRF91200000	Transistor 880MHz, 120W, 26V	1	Q1	MRF9120
13	MRF90300000	Transistor 945MHz, 30W, 26V	1	Q2	MRF9030
14	RES 1001 0805	Resistor 1K 0805 1%	3	R35,R36,R39	RK73H2AT1001F
16	RES 5R10 0805	Resistor 5.1 OHM 0805 1%	3	R41,R43,R44	RK73H2AT5R10F
17	RES51110805	Resistor 5.11K 0805 1%	2	R42,R46	RK73H2AT5112F
18	RES30120805	Resistor 30.1K 0805 1%	2	R38,R41	RK73H2AT3012F
19	REG7805DPAK	Regulator D-PAK	1	U3	MC78M05DPAK
20	TRI94100000	Trimmer Capacitor 1-4pF Top Adj	1	VC1	9410-0
21	RES 103E-TRI	Trimmer Pot 10K Top Adj	2	VR1,VR2	GV4EW103K
22	CAP3R6C1210	Capacitor 3.6pF 1210 ATC	1	C19	100B3R6CW500XT

23	CAP4R7C1210	Capacitor 4.7pF 1210 ATC	1	C17	100B4R7CW500XT
24	CAP0R9C1210	Capacitor 0.9pF 1210 ATC	1	C16	100B0R9BW500XT
25	CAP100J0805	Capacitor 10pF 0805 Johanson	2	C90,C97.	201R15C100JV4E
26	CAP4R7J0805	Capacitor 4.7pF 0805 Johanson	1	C91	201R15C4R7CV4E
27	CAP120J0805	Capacitor 12pF 0805 Johanson	1	C101	201R15C120JV4E



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Ass: LPA0800-050-SC01-SAMPCPL
DWG: 3217606E

Date: Oct. 20, 2003
Material: RF-35 & 30-mils
Rev. A

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1	RES51R11206	Resistor 51.1 OHM 1206 1%	1	R1	RK73H2BT51R1F
2	RES24301206	Resistor 243 OHM 1206 1%	1	R3	RK73H2BT2400F
3	RES61R91206	Resistor 61.9 OHM 1206 1%	2	R2,R4.	RK73H2BT61R9F
4	IND180J0805	Inductor 18nH 0805 Johanson	1	C1.	L-15C18NJE
5	IND390J0805	Inductor 39nH 0805 Johanson	1	C2	L-15C39NJE



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Date: Oct. 20, 2003

Ass: LPA0800-050-SC01-DL

Material: FR-4 & 31-mils

DWG: 3217607E

Rev. B

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1	RES 51R1 1206	Resistor 51.1 OHM 1206 1%	2	R4,R8.	RK73H2BT51R1F
2	RES 0000 1206	Resistor 0 OHM 1206	1	R2.	RM73Z2BT
3	N/A	N/A	2	R1,R3.	N/A
4	COU1D130410	Directional Coupler 10dB	2	CPL1,CPL2	1D1304-10
		(800-1200Mhz)			
5	COUDL206100	Tube 10NS DL SM	3	DL1,DL2,DL3.	XDL20-6-100
6	RES56R21206	Resistor 56.2 OHM 1206 1%	1	R5	RK73H2BT56R0F
7	RES11501206	Resistor 115 OHM 1206 1%	2	R6,R7.	RK73H2BT1150F



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Date: Oct 20, 2003

Ass: LPA0800-050-SC01-OUTCPL

Material: RF-35 & 30-mils

DWG: 3217608E

Rev. A

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1	CAP 101J 0805	Capacitor 100pF 0805 JS	2	C1,C2	201R15C101JV4E
2	CAP 104A 0805	Capacitor 0.1uF/50V 0805 AVX	6	C3,C4,C5,C6,C7,C8	08055C104KAT2A
3	COU1D130410	Directional Coupler 10dB (800-1200Mhz)	1	CPL1	1D1304-10
4	COUHY860012	Hybrid Coupler 3dB 90degree SO-8	1	CPL2	HY86-12
5	ISO8586100L	Isolators Counter Clockwise	1	ISO1	111-85-86-BVT20
6	RES 51R1 1206	Resistor 51.1 OHM 1206 1%	4	R1,R5,R6,R16	RK73H2BT51R1F
7	RES 75R0 0805	Resistor 75 OHM 0805 1%	2	R10,R14	RK73H2AT75R0F
8	RES24301206	Resistor 243 OHM 1206 1%	2	R7,R12	RK73H2BT2400F
9	RES61R91206	Resistor 61.9 OHM 1206 1%	4	R8,R9,R11,R13	RK73H2BT61R9F
10	RFP50TW100W	RF Terminal 50 OHM/100W	1	R15	RFP-100-50TW
11	IC AD 8361	DC-2.5GHz True Power Detector	2	U1,U2	AD8361ARM
12	RES75R01206	Resistor 75 OHM 1206 1%	1	R2	RK73H2BT75R0F
13	RES90R91206	Resistor 90.9 OHM 1206 1%	2	R3,R4.	RK73H2BT90R9F



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Ass: LPA0800-050-SC01-PILOTTONE

Material: FR-4 & 31-mils

DWG: 3219609E

Rev. B

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1		2X8-2.5mm-Header	1	CON1.	
2	COUHY860012	Hybrid Coupler 3dB 90degree	3	CPL1,CPL2,CPL3.	HY86-12
		SO-8 (0.82-0.90 GHz))			
3	COU4D130400	Power Dividers In-Phase	1	CPL4.	4D1304
4	CAP101J0805	Capacitor 100pF 0805 Johanson	24	C1,C6,C7,C10,C11,C12,C13,	201R15C101JV4E
				C14,C15,C17,C21,	
				C25,C26,C27,C30,C31,C34,	
				C35,C36,C51,C57,	
				C58,C60,C66.	
5	CAP103M0805	Capacitor 0.01uF 0805 Murata/AVX	4	C2,C3,C73,C76.	GRM40X7R103K050AD
6	CAP1R5A0805	Capacitor 1.5pF 0805 AVX	6	C4,C5,C96,C97,C100,C101.	0805A1R5CA2T2A
7	CAP104A0805	Capacitor 0.1uF /50V 0805 AVX	39	C8,C18,C19,C20,C28,C32,	08055C104KAT2A
				C37,C38,C45,C46,C47,	
				C49,C53,C55,C65,	
				C70,C71,C72,C74,C75,C77,	
				C78,C79,C80,C81,C82,C83,	
				C84,C85,C86,C87,C89,C91,	
				C93,C94,C95,C99,C103,	
				C105.	
8	CAP105T1206	Capacitor Tantalum 1.0uF / 16V 1206 AVX	12	C9,C29,C33,C48,C52,C59,	TAJA105K016R
				C61,C88,C90,C98,C107,	
				C108.	

9	CAP560A0805	Capacitor 56pF 0805 AVX	4	C41,C42,C43,C44.	08051A560JATN
10	CAP102A0805	Capacitor 1000pF 0805 AVX	4	C50,C54,C63,C69.	08051C102KAT2A
11	CAP106TAT16	Capacitor Tantalum 10uF / 16V 1206	2	C59,C61.	TAJA106K016R
12	DIOHSMP3810	Pin Diode	3	D1,D2, D3.	HSMP-3810-TR1
13	IND100C0805	Inductor 10nH 0805	2	L2,L10.	0805CS-100CJBC
14	IND820C0805	Inductor 82nH 0805	5	L3,L4,L6,L8, L13.	0805CS-820XJBC
15	IND8N2J0805	Inductor 8.2nH 0805 Johanson	1	L7.	L-15C8N2JE
16	AMPGALI0005	Amplifier	1	Q1,Q4.	GALI5
17	TRAMMBT2222	NPN Medium Power Transistor (Switching)	2	Q2, Q8.	MMBT2222ALT1
18	AMP00AH0001	Amplifier	2	Q5.	AH1
19			1	Q7.	ZXM61N02
20	RES12R11206	Resistor 12.1 OHM 1206 1%	1	R3.	RK73H2BT12R1F
21	RES43201206	Resistor 432 OHM 1206 1%	2	R4,R5.	RK73H2BT4320F
22	RES10R01206	Resistor 10 OHM 1206 1%	2	R6,R29.	RK73H2BT10R0F
23	RES00001206	Resistor 0 OHM 1206	4	R7,R14,R30,R31.	RM73Z2BT
24	N/A	N/A	6	R8,R9,R15,R16,R32,R33.	N/A
25	RES22100805	Resistor 221 OHM 0805 1%	3	R10,R11, R77.	RK73H2AT2210F
26	RES10011206	Resistor 1K 1206 1%	2	R12, R34.	RK73H2AT1001F
27	RES51R10805	Resistor 51.1 OHM 0805 1%	10	R13,R20,R28,R37,R38,R41, R42,R43,R44,R45.	RK73H2AT51R1F
28	RES00000805	Resistor 0 OHM 0805	2	R17,R26.	RM73Z2AT
29	N/A	N/A	4	R18,R19,R25,R27.	N/A
30	RES10R00805	Resistor 10 OHM 0805 1%	15	R21,R22, R76,R82,R84,R85, R94,R95,R96,R97,R98,R99, R100,R101,R102.	RK73H2AT10R0F
31	RES20010805	Resistor 2K 0805 1%	5	R23,R49,R58,R80,R81.	RK73H2AT2001F
32	RES10020805	Resistor 10K 0805 1%	18	R35,R39,R40,R47,R50,R56, R59,R65,R66,R68,R69,R70, R72,R74,R75,R78,R79, R108.	RK73H2AT1002F
33	RES20030805	Resistor 200K 0805 1%	9	R36,R51,R53,R61,R62,R64, R67,R71,R73.	RK73H2AT2003F
34	RES10030805	Resistor 100K 0805 1%	4	R46,R48,R55,R57.	RK73H2AT1003F
35	RES20020805	Resistor 20K 0805 1%	4	R52,R54,R60,R63.	RK73H2AT2002F
36	RES51100805	Resistor 511 OHM 0805 1%	6	R83,R89,R90,R91,R92,R93.	RK73H2AT5110F
37			1	U1.	SI4133-BM
38	ICC00AD8313	0.1GHz---2.5GHz,70dB Logarithmic	1	U2.	AD8313ARM

		Detector / Controller			
39	ICC0OPA2277		5	U3,U11,U12,U14,U15.	OPA2277UA
40	ICCHMC284MS	Terminated SPDT Switch , DC-3GHz	2	U4,U5.	HMC284MS8G
41	MIXCB3LV3C1	VCO	1	U6.	CB3LV-3C-10
42	REG00LM2937	500 Am Low Dropout- 3.3V Regulator SOT-223	1	U7.	LM2937IMP-3.3
43	MIXHMC207S8	IC SMT Dbl-Bal Mixer 0.7-2 GHz, ECCN EAR99	2	U8,U9.	HMC207S8
44	ICC0SMP0400	CMOS Quad Sample-and-Hold Amplifier	1	U13.	SMP04
45	ICC0MAX861E	IC Switched-Capacitor Voltage Converters	1	U16.	MAX861ESA
46	TRI104E0000	Trimmer Pot 100K Top Adj	3	VR1,VR2,VR3.	GV4TW104K
47	IND4N7J0805	Inductor 4.7nH 0805 Johanson	1	L11	L-15C4N7SE
48	CAP104A0805	Capacitor 0.1uF /50V 0805 AVX	1	C104	08055C104KAT2A
49	RES20R00805	Resistor 20 OHM 0805	1	R106	RK73H2AT20R0F
50	RES61910805	Resistor 6.19K 0805 1%	1	R107	RK73H2AT6191F
51	RES12120805	Resistor 12.1K 0805 1%	1	R109	RK73H2AT1212F
52	RES56210805	Resistor 5.62K 0805 1%	1	R110	RK73H2AT5621F
53		Zenner Diode SOT23-5	1	U17	TL431IDBVR
53		Low-Dropout Regulator SOT23-5	1	U18	REG101-A
54			3	L5,L9,L14.	NIN-FAR47MTRF
55	CAP332M0805	Capacitor 3300pF 0805 Mfg Murata	2	C64,C68	GRM40X7R332K50AD
56	CAP105M0805	Capacitor 1.0uF 0805 Murata	3	C40,C62,C67.	GRM40X7R105K016AL



Bill of Material

6185 Phyllis Driver, Unit D
Cypress, CA 90630
Tel: (714) 230-8333
Fax: (714) 230-8341

Approved by: LE

Date: Oct. 20, 2003

Ass: LPA0800-050-SC01-DET

Material: FR-4 & 31-mils

DWG: 3219610E

Rev. A

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1	CAP101J0805	Capacitor 100pF 0805 Johanson	11	C1,C2,C3,C6,C9,C10,C11,C12, C13,C16,C19.	201R15C101JV4E
2	CAP104A0805	Capacitor 0.1uF /50V 0805 AVX	7	C4,C7,C14,C17,C18,C20,C21.	08055C104KAT2A
3	CAP105T1206	Capacitor Tantalum 1.0uF/16V 1206 AVX	3	C5,C8,C15.	TAJA105K016R
4	N/A	N/A	1	C22	N/A
5	DIOHSMP3810	Pin Diode	1	D1	HSMP-3810-TR1
6	IND820C0805	Inductor 82nH 0805	4	L1,L2,L3,L5.	0805CS-820XJBC
7	N/A	N/A	1	L4	N/A
8	AMPGALI0005	Amplifier	2	Q1,Q4	GALI5
9	AMP00AH0001	Amplifier	1	Q2	AH1
10	TRAMMBT2222	NPN Medium Power Transistor (Switching)	1	Q3	MMBT2222ALT1
11	N/A	N/A	2	R7,R8	N/A
12	N/A	N/A	1	R3	N/A
13	RES10R01206	Resistor 10 OHM 1206 1%	2	R1,R9	RK73H2BT10R0F
14	RES00001206	Resistor 0 OHM 1206	2	R2,R6	RM73Z2BT
15	RES27401206	Resistor 274 OHM 1206 1%	1	R4	RK73H2BT2740F
16	RES10011206	Resistor 1K 1206 1%	1	R5	RK73H2AT1001F
17	RES75R00805	Resistor 75 OHM 0805 1%	1	R10	RK73H2AT75R0F
18	ICC00AD8361	DC-2.5GHz True Power Detector	1	U1	AD8361ARM



Bill of Material

6185 Phyllis Driver, Unit D
Cypress, CA 90630
Tel: (714) 230-8333
Fax: (714) 230-8341

Approved by: LE

Date: Oct. 20, 2003

Assy:LPA0800-050-SC01-V2-MAIN

Material: RF-35 & 30-mils

DWG:3217612E

Rev. A

Item	Parts Number	Description	QTY	Reference	Manufactory Part No.
1			8	BL1,BL2,BL3,BL4,BL5,BL6,BL7,BL8.	
2	COU1D130403	Hybrid Coupler 3dB (800-1200MHz)	6	CPL1,CPL2,CPL3,CPL4,CPL5,CPL6.	1D1304-3
3	CAP820C1210	Capacitor 82pF 1210 ATC	8	C1,C2,C3,C4,C5,C6,C7,C8.	100B820CW500XT
4	CAP8R2C1210	Capacitor 8.2pF 1210 ATC	13	C9,C10,C11,C12,C13,C14,	100B8R2CW500XT
				C15,C16,C106,C107,C108,	
				C109,C80.	
5	CAP101J0805	Capacitor 100pF 0805 Johanson	15	C17,C18,C43,C47,C51,C55,C58,C63,	201R15C101JV4E
				C66,C70,C84,C120,C121,C122,C125.	
6	CAP101C1210	Capacitor 100pF 1210 ATC	9	C19,C22,C25,C28,C31,C34,	100B101JW500X
				C37,C40,C75.	
7	CAP104A1210	Capacitor 0.1uF 1210 AVX	10	C20,C23,C26,C29,C32,C35,	12105C104KAT2A
				C38,C41,C76,C114.	
8	CAP106TDT50	Capacitor Tantalum 10uF / 50V Size D	10	C21,C24,C27,C30,C33,C36,	293D106X905E2T
				C39,C42,C77,C89.	
9	CAP104A0805	Capacitor 0.1uF /50V 0805 AVX	18	C44,C48,C52,C56,C59,C64,	08055C104KAT2A
				C67,C71,C85,C90,C91,C92,	
				C93,C94,C95,C96,C97,C115.	
10	CAP391M0805	Capacitor 390pF 0805 AVX	9	C45,C46,C50,C61,C62,C69,	GRM40X7R391R50AD
				C73,C74,C83.	
11	CAP105T1206	Capacitor Tantalum 1.0uF / 16V 1206 AVX	9	C45,C49,C53,C57,C60,C65,	TAJA105K016R
				C68,C72,C86.	
12		N/A	1	C78.	N/A

13	CAP5R6C1210	Capacitor 5.6pF 1210 ATC	3	C79,C82,C123.	00B5R6CW500XT
14	CAP3R6C1210	Capacitor 3.6pF 1210 ATC	2	C81,C124.	100B3R6CW500XT
15	CAP120J0805	Capacitor 12pF 0805 Johanson	1	C87.	201R15C120JV4E
16	CAP3R6J0805	Capacitor 3.6pF 0805 Johanson	1	C88.	201R15C3R6CV4E
17	CAP0R9C1210	Capacitor 0.9pF 1210 ATC	4	C98,C99,C100,C101.	100B0R9BW500XT
18	CAP4R7C1210	Capacitor 4.7pF 1210 ATC	4	C102,C103,C104,C105.	100B4R7CW500XT
19	CAP3R6C1210	Capacitor 3.6pF 1210 ATC	4	C110,C111,C112,C113.	100B3R6CW500XT
20	CAP2R2C1210	Capacitor 2.2pF 1210 ATC	4	C116,C117,C118,C119.	100B2R2CW500XT
21	CAP3R3J0805	Capacitor 3.3pF 0805 Johanson	1	C120.	201C15R3R3CV4E
22		JUM	1	L1.	
23	MRF91200000	Transistor 880MHz, 120W, 26V	4	Q1,Q2,Q3,Q4.	MRF9120
24	MRF90850000	Transistor 880MHz, 90W, 26V	1	Q5.	MRF9085
25	RFP50TW100W	RF Terminal 50 OHM/100W	1	R1.	RFP-100-50TW
26	RES50R0E10W	Resistor 50 OHM / 10W Size E 2%	2	R3,R2.	82-3001B-50-2
27	RES50R0E40W	Resistor 50 OHM / 40W Size E 2%	2	R5,R4.	82-3998-50-2
28	RES10010805	Resistor 1K 0805 1%	9	R6,R10,R14,R18,R21,R26, R29,R33,R38.	RK73H2AT1001F
29	RES51110805	Resistor 5.11K 0805 1%	9	R7,R11,R15,R19,R23,R27, R31,R35,R40	RK73H2AT5111F
30	RES30120805	Resistor 30.1K 0805 1%	9	R8,R12,R16,R20,R24,R28, R30,R34,R41.	RK73H2AT3012F
31	RES5R110805	Resistor 5.11 OHM 0805 1%	9	R9,R13,R17,R22,R25,R32, R36,R37,R39.	RK73H2AT5R10F
32	RES51R1E01W	Resistor 51.1 OHM / 1W Size E 1%	1	R42	CRCW251251R1F67
33	TRA0AD22100	Voltage Output Temperature Sensor with Signal Conditioning	1	S1	AD22100AT
34	REG7805DPAK	3 Terminal 5V/ 0.5A Positive Voltage Regulator DPAK	1	U1	MC78M05DPAK
35	TRI94100000	Trimmer Capacitor 1-4pF Top Adj	1	VC1	9410-0
36	TRI103E0000	Trimmer Pot 10K Top Adj	9	VR1,VR2,VR3,VR4,VR5,VR6, VR7,VR8,VR9.	GV4EW103K
37	CAP1R5J0805	Capacitor 1.5pF 0805 Johanson	1	Add 1.5pF on top of C87	201R15C1R5CV4E
38	CAP2R2J0805	Capacitor 2.2pF 0805 Johanson	1	Add 2.2pF just before VC1	201R15C2R2CV4E



Bravo Tech, Inc.

6185 Phyllis Drive, Unit D
Cypress, CA 90630
Voice: (714) 230 8333

Date 10/22/2003
DWG: 3219611E Rev.B
Material:FR-4,31mils

P/N : Main AMP Mother Board Rev.B
LPA0800-050-SC01;
LPA0800-050-TA01;
LPA1900-040-SC01

Item	Part Number	Description	QTY	Reference
1	CAP101A0805	Capacitor 100pF 0805 AVX	10	C1,C10,C11,C12,C13,C14,C15,C16,C17,C18,
2	CAP106TDT50	Capacitor Tantalum 10uF / 50V Size D	2	C20,C22,
3	CAP474NRL50	Pola Capacitor 470uF/50V Mfg Nichiconpc	2	C19,C21,
4	CAP475M100V	Capacitor Ceramic 4.7uF/100V 2606	1	C23,
5	CON113220G230	2 x 10 pins Doulde Row Horizontal Right Angle Sockets for .025 Thru Hole	1	P1,
6	CON2H200H25	2x10 Header High Dual Row 2.54	1	P2,
7	CONQ001PT00	Quick Fit Terminal	1	27VIN,
8	COR002F4220	Magnetic Core	1	L1,
9	PCB-3219-611E RB	FR-4, 0.031" (Main Amp Mother Board)	1	PCB11,



Bravo Tech, Inc.

6185 Phyllis Drive, Unit D
Cypress, CA 90630
Voice: (714) 230 8333

Date 10/22/2003
DWG: 3219612E Rev.B
Material:FR-4,62mils

P/N : Main Mother Board
LPA0800-050-SC01;
LPA0800-050-TA01;
LPA1900-040-SC01

Item	Part Number	Description	QTY	Reference
1	CAP101A0805	Capacitor 100pF 0805 AVX	2	C31,C42,
2	CAP103M0805	Capacitor 0.01uF 0805 Murata/AVX	2	C6,C7,
3	CAP104A0805	Capacitor 0.1uF /50V 0805 AVX	4	C1,C2,C3,C5,
4	CAP106T1206	Capacitor Tantalum 10uF/10V 1206	1	C8,
5	CAP106TDT50	Capacitor Tantalum 10uF / 50V Size D	2	C41,C43,
6	CAP107TDT16	Capacitor Tantalum 100uF / 16V Size D	2	C33,C36,
7	CAP221A0805	Capacitor 220pF 0805 AVX	1	C39,
8	CAP223A0805	Capacitor 0.022uF 0805	1	C40,
9	CAP474M0805	Capacitor 0.47uF/25V 0805 Murata	2	C32,C35,
10	CAP475M100V	Capacitor Ceramic 4.7uF/100V 2606	1	C19,
11	CAP684A0805	Capacitor 0.68uF 0805 AVX	1	C38,
12	CON1M060020	6 pins Wrie to Board Header Connector 2mm	1	P3,
13	CON2F200020	2x10 pins Vertical Board to Board Receptacle 2mm Female	1	P1,
14	CON2H100025	2x5 pins Header Straight 2.54mm Male	1	P6,
15	CON54102040	PCB 40pins Receptacle SMT Dual Row Vertical 25.0mm Stack Heigh , Pitch Slimstack 0.50mm	2	J1,J2,
16	DIO0BAV99-7	ESD Diode	10	D1,D10,D11,D12,D2,D5,D6,D7,D8,D9,
17	DIO30BQ0600	Diode Schottky 60V 3A AMC	1	D4,
18	DIOCMPD0914	Switching Diode	1	D3,
19	ICC00LT3430	High Voltage,3A,200KHz Step-Down Switching Regulator TSSOP-16	1	U3,
20	ICC0EPM3064	Programmable Logic Device Family 3.3V TQFP-44	1	U2,
21	ICC74HC245P	Octal 3-State Transceivers TSSOP-20	1	U6,
22	IDC2M100025	2 x 5 pins Shrouder Header Connector Straight 2.54mm	1	P4,
23	IND330CUP3B	Inductor 33nH 1.9A SMT	2	L5,L6,
24	IND470C0UP2	Inductor 47nH 1.9A SMT	1	L4,
25	OSC0CTX267L	Clock OSC 12.352 MHz 3.3 V SMT	1	U1,
26	PCB3219612ERB	FR-4, 0.062" (Main Mother Board)	1	PCB12,
27	RCC2H169025	16 pins PCB Dual Header Lock Right Angle 2.54mm Mfg AMP	1	P5,
28	REG00LM2937	500 Am Low Dropout -3.3V Regulator SOT-223	1	U4,
29	RES10010805	Resistor 1K 0805 1%	4	R26,R5,R6,R7,
30	RES10030805	Resistor 100K 0805 1%	1	R25,
31	RES15020805	Resistor 15K 0805 1%	1	R12,
32	RES33210805	Resistor 3.32K 0805 1%	1	R14,
33	RES47510805	Resistor 4.75K 0805 1%	1	R13,



Bravo Tech, Inc.

6185 Phyllis Drive, Unit D
Cypress, CA 90630
Voice: (714) 230 8333

Date 11/12/2003

P/N : LCD Board Rev.C

DWG: 3219613E

Item	Part Number	Description	QTY	Reference
1	CAP101A0805	Capacitor 100pF 0805 AVX	2	C1,C2,
2	CAP104A0805	Capacitor 0.1uF /50V 0805 AVX	6	C3,C4,C5,C6,C7,C8
3	CAP106T1206	Capacitor Tantalum 10uF / 10V 1206 AVX	1	C9,
4	CONBSW12020	20pins Single Straight 2.54mm Socket mfg Samtec	1	P1,
5	DIO001N4004	Diode SMT	2	D3,D4,
6	ICC74HC4094	IC SO-16	2	U1,U2,
7	ICC74HC14	IC SO-14	1	U3
8	IRF7478SO08	HEXFET Power MOSFET SO-8	2	U4,U5,
9	LED611102	LED 5mm Hi-Eff Red Duffused	1	D1,
10	LEDYL671116	LED 5mm Yellow Difused	1	D2,
11	PCB-3219-613E RB	FR-4, 0.062" (LCD Board)	1	PCB13,
12	RCC2H140025	14 pins PCB Dual Header Lock Straight 2.54mm Mfg AMP	1	P2,
13	RCC2H160025	16 pins PCB Dual Header Lock Straight 2.54mm Mfg AMP	1	P11,
14	RES10010805	Resistor 1K 0805 1%	5	R1,R2,R3,R4,R5,
15	RES10020805	Resistor 10K 0805 1%	2	R7,R9,
16	RES10030805	Resistor 100K 0805 1%	2	R14,R15,
17	RES10R01206	Resistor 10 OHM 1206 1%	1	R6,
18	RES30100805	Resistor 301 OHM 0805 1%	1	R11,
19	RES30110805	Resistor 3.01K 0805 1%	1	R10,
20	RES30R10805	Resistor 30.1 OHM 0805 1%	2	R23,R24,
21	RES3R321206	Resistor 3.32 OHM 1206 1%	8	R16,R17,R18,R19,R20,R21,R22,R25,
22	SWIA12AP000	Swth Mfg NKK for ADC	1	S1,
23	SWIAB15APFA	Switch Reset Mfg NKK for LPA0800-050-SC01	1	S2,
24	TER39860703	PCB Headers 5.08mm R.A. 3 pins	1	P3,
25	TRAMMBT2222	NPN Medium Power Transistor (Switching)	2	Q1,Q2,
26	TRI102E0000	Trimmer Pot 1K Top Adj	1	R8,



Bravo Tech, Inc.

6185 Phyllis Drive, Unit D
Cypress, CA 90630
Voice: (714) 230 8333

Date 10/22/2003
DWG: 3219617E Rev.B
Material:FR-4,31mils

P/N : **Error Amplifier Mother Board Rev.B**
LPA0800-050-SC01;
LPA0800-050-TA01;
LPA1900-040-SC01

Item	Part Number	Description	QTY	Reference
1	CAP101A0805	Capacitor 100pF 0805 AVX	4	C3,C4,C5,C7,
2	CAP106TDT50	Capacitor Tantalum 10uF / 50V Size D	2	C11,C13,
3	CAP107TDT16	Capacitor Tantalum 100uF / 16V Size D	2	C6,C9,
4	CAP226TDT25	Capacitor Tantalum 22uF / 25V Size D	1	C2,
5	CAP474M0805	Capacitor 0.47uF/25V 0805 Murata	1	C8,
6	CAP474NRL50	Pola Capacitor 470uF/50V Mfg Nichiconpc	2	C10,C12,
7	CAP475M100V	Capacitor Ceramic 4.7uF/100V 2606	1	C14,
8	CON113220G230	2 x 10 pins Doulde Row Horizontal Right Angle Sockets for .025 Thru Hole	1	P5,
9	CON113240G2	2 x 20 pins Doulde Row Horizontal Right Angle Sockets for .025 Thru Hole	1	P8,
10	CON2H404025	40pins Higher 400" Header 2.54mm	1	P7,
11	COR002F4220	Magnetic Core	1	L2,
12	IND470C0UP2	Inductor 47nH 1.9A SMT	1	L1,
13	PCB3219617ERB	FR-4, 0.031" (Error Amp Mother Board)	1	PCB17,
14	RCC2H169025	16 pins PCB Dual Header Lock Right Angle 2.54mm Mfg AMP	1	P6,
15	REG00LM7812	3 Terminal 12V/ 1A Positive Voltage Regulator TO-220	1	U1,
16	TRA0AD22100	Voltage Output Temperature Sensor with Signal Conditioning	1	S1,



Bravo Tech, Inc.

6185 Phyllis Drive, Unit D
Cypress, CA 90630
Voice: (714) 230 8333

Date 10/22/2003

DWG: 3227602E Rev.B

Material:FR-4,45mils

P/N : Universal-003
LPA0800-050-SC01;
LPA0800-050-TA01;
LPA1900-040-SC01

Item	Part Number	Description	QTY	Reference
1	CAP103M0603	Capacitor 0.01uF 0603 Murata	36	C30,C31,C32,C34,C35,C36,C38,C39,C40,C42,C43,C44,C46,C47,C48,C50,C51,C52,C73,C74,C75,C76,C79,C80,C81,C82,C87,C88,C89,C90,C91,C92,C93,C94,C95,C96,
2	CAP104M0603	Capacitor 0.1uF 0603 Murata	38	C0,C1,C11,C12,C13,C14,C15,C16,C17,C18,C19,C2,C20,C21,C22,C23,C24,C3,C4,C41,C45,C5,C54,C55,C56,C57,C59,C6,C63,C64,C65,C66,C77,C78,C83,C84,C85,C86,
3	CAP105T1206	Capacitor Tantalum 1.0uF / 16V 1206 AVX	1	C9,
4	CAP106T1206	Capacitor Tantalum 10uF / 10V 1206 AVX	5	C10,C25,C26,C27,C8,
5	CAP336T1210	Capacitor Tantalum 33uF / 10V 1210	1	C7,
6	CAP474M0603	Capacitor 0.47uF 0603 Murata	14	C33,C37,C49,C53,C58,C60,C61,C62,C67,C68,C69,C70,C71,C72,
7	CON53885040	PCB 40pins Plug SMT Dual Row Vertical 2.50mm,Stack Heigh , Pitch Slimstack 0.50mm	2	J1,J2,
8	CRYESA80000	Crystal 8 MHz . Temp -40 to 85	1	G1,
9	ICC0MAX202E	ESD-Protected,+5V RS-232 Transceivers SO-16	1	U6,
10	ICCMC33204D	Low Voltage Rail-to-Rail Operational Amplifier SO-14	4	U1,U2,U3,U4,
11	ICCSP56F807	Flash Digital Signal Processors LQFP160	1	U7,
12	PCB-3227-602E RB	FR-4, 0.040" (Universal-003)	1	PCB2,
13	REG00LM2937	500 Am Low Dropout -3.3V Regulator SOT-223	1	U5,
14	RES10010603	Resistor 1K 0603 1%	3	R108,R15,R17,
15	RES10020603	Resistor 10K 0603 1%	17	R1,R10,R116,R118,R120,R122,R124,R126,R128,R2,R3,R4,R5,R6,R7,R8,R97,
16	RES10030603	Resistor 100K 0603 1%	50	R101,R103,R104,R106,R107,R110,R111,R113,R129,R13,R130,R131,R14,R24,R27,R28,R29,R32,R33,R34,R35,R38,R39,R40,R41,R44,R45,R46,R50,R51,R52,R56,R57,R59,R61,R62,R64,R68,R69,R74,R75,R77,R79,R80,R82,R92,R93,R94,R98,R99,



Bravo Tech, Inc.

6185 Phyllis Drive, Unit D
Cypress, CA 90630
Voice: (714) 230 8333

Date 10/22/2003

DWG: 3227602E Rev.B

Material:FR-4,45mils

P/N : Universal-003
LPA0800-050-SC01;
LPA0800-050-TA01;
LPA1900-040-SC01

Item	Part Number	Description	QTY	Reference
17	RES10050603	Resistor 10M 0603 1%	1	R11,
18	RES12100805	Resistor 121 OHM 0805 1%	1	R16,
19	RES15030603	Resistor 150K 0603	9	R100,R112,R132,R36,R42,R58,R63,R81,R95,
20	RES20000603	Resistor 200 OHM 0603 1%	1	R109,
21	RES20030603	Resistor 200K 0603 1%	4	R20,R26,R48,R54,
22	RES30100603	Resistor 301 OHM 0603 1%	16	R102,R105,R114,R135,R136,R25,R31,R37,R43,R49, R55,R60,R65,R66,R78,R83,
23	RES30120603	Resistor 30.1K 0603 1%	5	R30,R67,R73,R87,R91,
24	RES75010603	Resistor 7.5K 0603 1%	17	R115,R117,R119,R121,R123,R125,R127,R70,R71,R72, R84,R85,R86,R88,R89,R90,R96,
25	RES75020603	Resistor 75K 0603 1%	5	R21,R22,R23,R47,R53,
26	TRAMMBT2222	NPN Medium Power Transistor (Switching)	1	Q1,