

Analog Reference Revised: Monday, January 19, 2004
 BOM NEC KMP6J1N1
 Main Board: Revision: EP 2.0C

Bill Of Materials January 19,2004 15:48:25

Item	Quantity	Reference	Value	Tol%	Rating	PCB Footprint	Description	Part Number	Manufacturer
1	1	BAT J1	1301-SND10417			CONN-BATT-1717273-1	Battery Connector	1717273-1	AMP
2	1	BT1	3V Li Coin Cell			ML414S/F9D		ML414S/F9DE	Panasonic
3	1	C1	0.033uF	+80, -20%	25V	0402C	Y5V	MCH152F5333ZK	Rohm
4	1	C2	0.033uF	+80, -20%	25V	0402C	Y5V	MCH152F5333ZK	Rohm
5	24	C3	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C12	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C13	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C16	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C17	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C18	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C19	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C20	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C27	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C49	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C63	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C66	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C71	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C93	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C94	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C95	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C123	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C127	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C153	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C173	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C174	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C175	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C177	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
		C178	0.1uF	10%	10V	0402C	X5R	GRP155R61A104KA01E	Murata
6	8	C4	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
		C5	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
		C26	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
		C50	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
		C98	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
		C102	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
		C113	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata

		C114	1000pF	10%	50V	0402C	X7R	GRP155R71H102KA01E	Murata
7	2	C7	1800pF	10%	50V	0402C	X7R	GRM155R71H182K	PHIL
		C6	1800pF	10%	50V	0402C	X7R	GRM155R71H182K	PHIL
8	20	C8	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C9	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C10	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C11	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C14	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C23	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C48	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C52	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C53	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C56	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C57	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C61	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C62	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C69	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C70	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C75	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C77	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C159	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C162	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
		C171	1uF	+/-20%	6.3V	0402C	X5R	GRM155R60J105CE19D	Murata
9	1	C15	1uF	10%	6.3V	0603C	X5R	GRM188R60J105KZ27E	Murata
10	9	C21	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C33	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C34	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C40	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C42	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C101	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C118	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C144	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
		C145	0.01uF	10%	25V	0402C	X7R	GRP155R71E103KA01E	Murata
11	9	C22	DNI			0402C		DNI	
		C24	DNI			0402C		DNI	
		C82	DNI			0402C		DNI	
		C90	DNI			0402C		DNI	
		C108	DNI			0402C		DNI	
		C134	DNI			0402C		DNI	
		C170	DNI			0402C		DNI	
		C183	DNI			0402C		DNI	
		C184	DNI			0402C		DNI	
12	9	C25	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C30	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C36	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C38	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C84	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM

		C87	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C88	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C185	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
		C186	33pF	5%	50V	0402C	NP0	MCH155A330JK T/R	ROHM
13	10	C28	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C45	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C54	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C55	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C58	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C59	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C60	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C73	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C180	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
		C182	2.2uF	10%	6.3V	0603C	X5R	GRM188R60J225KE01D	Murata
14	2	C121	270pF	10%	50V	0402C	X7R	GRM155R71H271K	Murata
		C46	270pF	10%	50V	0402C	X7R	GRM155R71H271K	Murata
15	1	C47	0.022uF	+80, -20%	25V	0402C	Y5V	MCH152F5223ZK	Rohm
16	1	C64	10uF	10%	10V	CASEA	3216 tantalum	TAJA106K010R	AVX
17	3	C65	22pF	5%	50V	0402C	COG	GRP1555COG220JZ01E	Murata
		C117	22pF	5%	50V	0402C	COG	GRP1555COG220JZ01E	Murata
		C160	22pF	5%	50V	0402C	COG	GRP1555COG220JZ01E	Murata
18	2	C67	10pF	5%	50V	0402C	COG	GRP1555COG100DZ01E	Murata
		C179	10pF	5%	50V	0402C	COG	GRP1555COG100DZ01E	Murata
19	1	C68	10pF	5%	50V	0402C	COG	GRP1555COG100DZ01E	Murata
20	3	C76	470pF	10%	50V	0402C	X7R	GRP155R71H471KA01E	Murata
		C92	470pF	10%	50V	0402C	X7R	GRP155R71H471KA01E	Murata
		C181	470pF	10%	50V	0402C	X7R	GRP155R71H471KA01E	Murata
21	10	C80	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C129	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C130	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C131	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C137	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C147	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C148	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C149	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C158	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
		C161	100pF	5%	50V	0402C	COG	GRP1555COG101JD01E	Murata
22	5	C81	3.0pF	+/-0.25pF	50V	0402C	NP0	MCH155A030CK T/R	ROHM
		C83	3.0pF	+/-0.25pF	50V	0402C	NP0	MCH155A030CK T/R	ROHM
		C106	3.0pF	+/-0.25pF	50V	0402C	NP0	MCH155A030CK T/R	ROHM
		C109	3.0pF	+/-0.25pF	50V	0402C	NP0	MCH155A030CK T/R	ROHM
		C110	3.0pF	+/-0.25pF	50V	0402C	NP0	MCH155A030CK T/R	ROHM
23	2	C85	1.0pF	+/-0.25pF	50V	0402C	COG	GRP1555COG1R0CZ01E	Murata
		C86	1.0pF	+/-0.25pF	50V	0402C	COG	GRP1555COG1R0CZ01E	Murata
24	4	C89	3.3pF	+/-0.25pF	50V	0402C	NP0	0402CG339C9B200	PHIL
		C116	3.3pF	+/-0.25pF	50V	0402C	NP0	0402CG339C9B200	PHIL
		C140	3.3pF	+/-0.25pF	50V	0402C	NP0	0402CG339C9B200	PHIL

		C143	3.3pF	+/-0.25pF	50V	0402C	NP0	0402CG339C9B200	PHIL
25	5	C91	6.0pF	+/-0.5pF	50V	0402C	NP0	MCH155A060DK T/R	ROHM
		C97	6.0pF	+/-0.5pF	50V	0402C	NP0	MCH155A060DK T/R	ROHM
		C99	6.0pF	+/-0.5pF	50V	0402C	NP0	MCH155A060DK T/R	ROHM
		C103	6.0pF	+/-0.5pF	50V	0402C	NP0	MCH155A060DK T/R	ROHM
		C104	6.0pF	+/-0.5pF	50V	0402C	NP0	MCH155A060DK T/R	ROHM
26	1	C96	1.5pF	+/-0.25pF	50V	0402C	NP0	MCH155A1R5CK T/R	ROHM
27	1	C100	7.0pf	+/-0.5pF	50V	0402C	NP0	MCH155A070DK T/R	ROHM
28	1	C105	2.0pF	+/-0.25pF	50V	0402C	COG	GRP1555COG2R0CZ01E	Murata
29	2	C111	15pF	5%	50V	0402C	COG	GRM36COG150J50	Murata
		C107	15pF	5%	50V	0402C	COG	GRM36COG150J50	Murata
30	2	C119	0.0056uF	5%	16V	ECHU-J1	Plastic Film 0805 high grd	ECH-U1C562JB5	Panasonic
		C115	0.0056uF	5%	16V	ECHU-J1	Plastic Film 0805 high grd	ECH-U1C562JB5	Panasonic
31	1	C120	560pF	10%	50V	0402C	X7R	GRP155R71H561KA01E	Murata
32	2	C122	12pF	5%	50V	0402C	NP0	0402CG120J9B200	PHIL
		C124	12pF	5%	50V	0402C	NP0	0402CG120J9B200	PHIL
33	2	C132	3.6pF	+/-0.5pF	50V	0402C	COG	GJM1555C1H3R6B0	
		C135	3.6pF	+/-0.5pF	50V	0402C	COG	GJM1555C1H3R6B0	
34	2	C167	0.5pF	+/-0.25pF	50V	0402C	NP0	MCH155A0R5CK	ROHM
		C142	0.5pF	+/-0.25pF	50V	0402C	NP0	MCH155A0R5CK	ROHM
35	1	C146	680pF	10%	50V	0402C	X7R	MCH155C681KK T/R	ROHM
36	4	C150	18pF	5%	50V	0402C	COG	GRM36COG180J50	Murata
		C152	18pF	5%	50V	0402C	COG	GRM36COG180J50	Murata
		C156	18pF	5%	50V	0402C	COG	GRM36COG180J50	Murata
		C157	18pF	5%	50V	0402C	COG	GRM36COG180J50	Murata
37	1	C151	0.0082uF	5%	16V	ECHU-J1	Plastic Film 0805 high grd	ECH-U1C822JB5	Panasonic
38	1	C163	68pF	5%	50V	0402C	NP0	MCH155A680JK T/R	ROHM
39	1	C164	47pF	5%	50V	0402C	NP0	MCH155A470JK T/R	ROHM
40	1	D1	BBY-58-02V			SC79	Infineon	BBY-58-02V	Infineon
41	11	D2	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D3	AVL14K02200			0402R-SE	ESD Diode	AVL14K02200	Amotech
		D4	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D5	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D6	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D7	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D8	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D9	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D11	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D12	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
		D13	AVL14K02200			0402R	ESD Diode	AVL14K02200	Amotech
42	4	FD1	Fiducial			FID		NOT ASSIGNED	
		FD2	Fiducial			FID		NOT ASSIGNED	
		FD3	Fiducial			FID		NOT ASSIGNED	
		FD4	Fiducial			FID		NOT ASSIGNED	
43	1	FL1	B7701			QCS5C	GSM850 RX SAW	B7701	Epcos
44	1	FL2	B7822			QCS5C	DCS RX SAW	B7822	Epcos

45	1	FL3	B7824			CSSP4	PCS RX SAW	B7824	Epcos
46	1	FL4	TFS360F			TFS360F	360MHz IF SAW	TFS360F	Telefilter
47	1	FL5	B7825			QCS5C	PCS RX SAW	B7825	Epcos
48	1	FL6	B7723			B7723	850 TX SAW	B7723	Epcos
49	1	F1	USB1.1			EXC24CC271U		EXC24CC271U	Panasonic
50	1	G1	GEN-3TERM-EARTH			CONTACT-EARTH-MR		EARTH CONTACT(MR)	NEC
51	1	G2	GEN-3TERM-EARTH			CONTACT-EARTH-ML		EARTH CONTACT(ML)	NEC
52	1	J1	SIM HOLDER			CONN-SIM-BM05106_2	SIM Holder	BM0156-L2	FOXLINK
53	1	J2	System Connector			AXR511888601		AXR511888602	Panasonic
54	1	J3	MIC			WM-63GNT330			
55	1	J4	Molex 55900 1091			55900-1091		HEADSET(55900-1091)	
56	1	J5	WA5B060VA2			JAE-WA5B060VA2		WA5B060VA2	JAE
57	1	J7	ANT FD 1			FLEXI_FD 2			
58	1	J8	FH23_21S			FH23-21S-0.3SHW		KEYPAD(FH23-21S-0.3SHW)	Hirose
59	1	J9	MURATA			MM8430A		RF_CON(MM8430A-2600RB3)	Murata
60	1	J10	HOSIDEN			TERM-SPKR-TCX0553		SPEAKER PADS(TCX0553-010100)	Hoshiden
61	1	J11	Vibrator Contact			VIB_CON			
62	1	J12	GEN-2TERM-CHARGER			TERMINAL-CHARGER-R		TERMINAL-CHARGER-L	
63	1	J13	GEN-2TERM-CHARGER			TERMINAL-CHARGER-L		TERMINAL-CHARGER-R	
64	5	K1	Ground Pad			2P_0805C_1		GROUND CONTACT	
		K2	Ground Pad			2P_0805C_1		GROUND CONTACT	
		K3	Ground Pad			2P_0805C_1		GROUND CONTACT	
		K4	Ground Pad			2P_0805C_1		GROUND CONTACT	
		K5	Ground Pad			2P_0805C_1		GROUND CONTACT	
65	3	LL2	EXC24CB221			EXC24C	Bead Array	EXC24CB221	Panasonic
		LL3	EXC24CB221			EXC24C	Bead Array	EXC24CB221	Panasonic
		LL4	EXC24CB221			EXC24C	Bead Array	EXC24CB221	Panasonic
66	1	L1	2.2nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH2N2S	TOKO
67	1	L2	18nH	5%	300mA	0402L	Chip Inductor	LL1005-FH18NJ	TOKO
68	2	L12	3.9nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH3N9S	TOKO
		L3	3.9nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH3N9S	TOKO
69	1	L4	3.3nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH3N3S	TOKO
70	1	L5	1.0nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH1N0S	TOKO
71	1	L6	47nH	5%	200mA	0402L	Chip Inductor	LL1005-FH47NJ	TOKO
72	2	L8	22nH	5%	300mA	0402L	Chip Inductor	LL1005-FH22NJ	TOKO
		L7	22nH	5%	300mA	0402L	Chip Inductor	LL1005-FH22NJ	TOKO
73	1	L9	100nH	5%	400mA	0402L	Chip Inductor	LL1005-FHR10J	TOKO
74	1	L10	6.8nH	5%	300mA	0402L	Chip Inductor	LL1005-FH6N8J	TOKO
75	1	L11	39nH	5%	200mA	0402L	Chip Inductor	LL1005-FH39NJ	TOKO
76	1	L13	1.8nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH1N8S	TOKO
77	3	L14	12nH	5%	300mA	0402L	Chip Inductor	LL1005-FH12NJ	TOKO
		L18	12nH	5%	300mA	0402L	Chip Inductor	LL1005-FH12NJ	TOKO
		L20	12nH	5%	300mA	0402L	Chip Inductor	LL1005-FH12NJ	TOKO
78	2	L17	4.7nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH4N7S	TOKO
		L15	4.7nH	+/- .3nH	300mA	0402L	Chip Inductor	LL1005-FH4N7S	TOKO
79	1	L21		0	5%	1/16W	0603L	MCR03J000E	ROHM
80	1	L22	1.8nH	5%		0603L			

81	7	L26	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
		L27	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
		L28	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
		L29	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
		L30	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
		L31	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
		L34	EZADT			EZADT-NOM	Bead array	EZADT33AAAJ	Panasonic
82	1	L35	1.0uH	5%		2P_0805L_1-NEC		LPO3310-222MX	
83	2	L36		5%	1/16W	0402L	Chip Resistor	RM73Z1ETP	KOA
		L37		5%	1/16W	0402L	Chip Resistor	RM73Z1ETP	KOA
84	1	Q1	BC869			SOT89	Transistor	BC869	PHILIPS
85	1	Q2	BC858BL3			TSLP-3	PNP Transistor	BC858BLTx	ON Semi.
86	1	Q3	BC847W			SOT323		BC847W	PHILIPS
87	1	RT1	NHQM104R5			2P_0805R_1	Thermistor	NHQM104R5	BOWTHORPE
88	2	R1	63K	5%	1/16W	0402R			
		R4	63K	5%	1/16W	0402R			
89	5	R16	10K	5%	1/16W	0402R	Chip Resistor	MCR01J103E	ROHM
		R44	10K	5%	1/16W	0402R	Chip Resistor	MCR01J103E	ROHM
		R90	10K	5%	1/16W	0402R	Chip Resistor	MCR01J103E	ROHM
		R91	10K	5%	1/16W	0402R	Chip Resistor	MCR01J103E	ROHM
		R105	10K	5%	1/16W	0402R	Chip Resistor	MCR01J103E	ROHM
90	4	R17	DNI			0402R		DNI	
		R95	DNI			0402R		DNI	
		R96	DNI			0402R		DNI	
		R100	DNI			0402R		DNI	
91	4	R34	2k	5%	1/16W	0402R	Chip Resistor	MCR01J202E	ROHM
		R35	2k	5%	1/16W	0402R	Chip Resistor	MCR01J202E	ROHM
		R36	2k	5%	1/16W	0402R	Chip Resistor	MCR01J202E	ROHM
		R78	2k	5%	1/16W	0402R	Chip Resistor	MCR01J202E	ROHM
92	3	R37		5%	1/16W	0402R	Chip Resistor	RM73Z1ETP	KOA
		R93		5%	1/16W	0402R	Chip Resistor	RM73Z1ETP	KOA
		R104		5%	1/16W	0402R	Chip Resistor	RM73Z1ETP	KOA
93	2	R39	31k	5%	1/16W	0402R			
		R38	31k	5%	1/16W	0402R			
94	2	R73	3.3k	5%	1/16W	0402R	Chip Resistor	MCR01F332E	ROHM
		R40	3.3k	5%	1/16W	0402R	Chip Resistor	MCR01F332E	ROHM
95	2	R41	5.1k	5%	1/16W	0402R	Chip Resistor	MCR01J512E	ROHM
		R42	5.1k	5%	1/16W	0402R	Chip Resistor	MCR01J512E	ROHM
96	1	R43	0.22	5%	0.1W	0603R		RLC16KR220J	
97	2	R82	1k	5%	1/16W	0402R	Chip Resistor	MCR01J102E	ROHM
		R45	1k	5%	1/16W	0402R	Chip Resistor	MCR01J102E	ROHM
98	1	R46	200K	5%	1/16W	0402R	Chip Resistor	MCR01J204E	ROHM
99	1	R47	10M	5%	1/16W	0603R	Chip Resistor	ERJ-3GEYJ106V	Panasonic
100	1	R48	750K	5%	1/16W	0402R	Chip Resistor	MCR01F754E	ROHM
101	1	R49	240K	5%	1/16W	0402R	Chip Resistor	MCR01F244E	ROHM
102	2	R70	22k	5%	1/16W	0402R	Chip Resistor	MCR01J223E	ROHM
		R50	22k	5%	1/16W	0402R	Chip Resistor	MCR01J223E	ROHM

103	3	R54		100	5%	1/16W	0402R	Chip Resistor	MCR01J101E	ROHM
		R55		100	5%	1/16W	0402R	Chip Resistor	MCR01J101E	ROHM
		R56		100	5%	1/16W	0402R	Chip Resistor	MCR01J101E	ROHM
104	9	R57	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R58	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R60	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R97	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R98	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R106	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R107	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R108	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
		R109	100k		5%	1/16W	0402R	Chip Resistor	R-100K-5%	ROHM
105	1	R59		820	5%	1/16W	0402R	Chip Resistor	MCR01J821E	ROHM
106	2	R61		82	5%	1/16W	0402R	Chip Resistor	ERJ-2GEJ820X	Panasonic
		R62		82	5%	1/16W	0402R	Chip Resistor	ERJ-2GEJ820X	Panasonic
107	1	R63	4.7k		5%	50V	0402R	Chip Resistor	MCR01F472E	ROHM
108	1	R64	12k		5%	1/16W	0402R	Chip Resistor	MCR01J123E	ROHM
109	1	R65	3k		5%	50V	0402R	Chip Resistor	MCR01J302E	ROHM
110	5	R66	56k		5%	1/16W	0402R	Chip Resistor	MCR01J563E	ROHM
		R67	56k		5%	1/16W	0402R	Chip Resistor	MCR01J563E	ROHM
		R68	56k		5%	1/16W	0402R	Chip Resistor	MCR01J563E	ROHM
		R69	56k		5%	1/16W	0402R	Chip Resistor	MCR01J563E	ROHM
		R71	56k		5%	1/16W	0402R	Chip Resistor	MCR01J563E	ROHM
111	1	R72	3.6k		5%	1/16W	0402R	Chip Resistor	MCR01F362E	ROHM
112	4	R74	20k		5%	1/16W	0402R	Chip Resistor	ERJ-2RKJ203X	Panasonic
		R79	20k		5%	1/16W	0402R	Chip Resistor	ERJ-2RKJ203X	Panasonic
		R84	20k		5%	1/16W	0402R	Chip Resistor	ERJ-2RKJ203X	Panasonic
		R86	20k		5%	1/16W	0402R	Chip Resistor	ERJ-2RKJ203X	Panasonic
113	5	R75	1.0k		5%	1/16W	0402R	Chip Resistor	9C04021A1R00JLH	PhIL
		R77	1.0k		5%	1/16W	0402R	Chip Resistor	9C04021A1R00JLH	PhIL
		R81	1.0k		5%	1/16W	0402R	Chip Resistor	9C04021A1R00JLH	PhIL
		R83	1.0k		5%	1/16W	0402R	Chip Resistor	9C04021A1R00JLH	PhIL
		R85	1.0k		5%	1/16W	0402R	Chip Resistor	9C04021A1R00JLH	PhIL
114	1	R87		150	5%	1/16W	0402R	Chip Resistor	MCR01F151E	ROHM
115	1	R88		180	5%	1/16W	0402R	Chip Resistor	MCR01F181E	ROHM
116	1	R103	330k		5%		0603R		MCR03EZJ334	
117	2	S2	SIDEKEY_6TERM				EVQP7-NEC	SWITCH	EVQ3P701K	Panasonic
		S1	SIDEKEY_6TERM				EVQP7-NEC	SWITCH	EVQ3P701K	Panasonic
118	3	TP1	TP				TSTPAD		TEST PAD	
		TP2	TP				TSTPAD		TEST PAD	
		TP3	TP				TSTPAD		TEST PAD	
119	1	U1	BCM2132 C0				FBGA12X12-276L	EDGE ASIC	BCM2132 C0	Broadcom
120	1	U2	Stacked Quad B				SCSP-88		RD38F3040L0ZTQ0	Intel
121	1	U13	YMU762 MA3				C-PK32QP-0-2	40 Poly Audio Synth.	YMU762 MA3	Yamaha
122	1	U14	PCF50603HN				HVQFN48	PMU	PCF50603HN	PHILLIPS
123	1	U15	MAX8561				TDFN-8		MAX8560	Maxim
124	1	U16	MAX8532EBTJ				UCSP-6		MAX8532EBTJ	Maxim

125	1	U18	LMSP-0079TEMP			LMZ149	850/1800/1900 TR Switch	LMSP-0141TEMP	Murata
126	1	U19	PMB6253			P-VQFN-48-1	GSM Transceiver	PMB6253	Infineon
127	1	U20	BGA428			SOT-363	PCS LNA	BGA428	Infineon
128	1	U21	MAX4702EGE			16QFN	Analog Mux	MAX4702EGE	Maxim
129	1	U22	MAX4695EGC			QFN-12-3X3X0.9MM		MAX4695EGC	Maxim
130	1	U23	PMB2100R 42B			TSSOP-10-NOGND	GSM / DCS Main VCO	PMB2100R 42B	Infineon
131	1	U24	PMB2102 EA1			TSSOP-10-NOGND	GSM850/PCS Main VCO	PMB2102 EA1	Infineon
132	1	U25	EHF2BD1800			EHF2BE	1800MHz 1:1 Balun	EHF2BD1800	Panasonic
133	1	U26	RF2705			LCC24	RF Quad Mod	RF2705	RF Micro Devices
134	1	U27	PMB2113			TSSOP-10-NOGND	GSM850/1800/1900 TX VCO	PMB2113	Infineon
135	1	U28	RF3145			RF3110	GPRS / EDGE PA	RF3145	RF Micro Devices
136	1	U29	MAX8532EBT2			UCSP-6		MAX8532EBT2	Maxim
137	3	U30	EZJZSV270PAK		16V	EXC24C		EZJZSV270PAK	Panasonic
		U31	EZJZSV270PAK		16V	EXC24C		EZJZSV270PAK	Panasonic
		U32	EZJZSV270PAK		16V	EXC24C		EZJZSV270PAK	Panasonic
138	1	Y1	NC-T3			NC-T3	32 KHz crystal	NC-T3	Seiko Instruments
139	1	Y2	TSS-6-13000			FCX-04C	13 Mhz X-tal	TSS-6-13000	TEW

FLEX INTERFACE AND SPEAKER Revised: Friday, January 16, 2004

BOM NEC KMP6J1N1 Revision: EP 3.0

Broadcom Corporation

Bill Of Materials January 16,2004 16:02:26

Item	Quantity	Reference	Value	Tol%	Rating	PCB Footprint	Description	Part Number	Manufacturer
1	5	C1	0.1uF	10%	6.3V	2P_0402C_1	X5R	GRP155R61A104KA01E	Murata
		C2	0.1uF	10%	6.3V	2P_0402C_1	X5R	GRP155R61A104KA01E	Murata
		C7	0.1uF	10%	6.3V	2P_0402C_1	X5R	GRP155R61A104KA01E	Murata
		C14	0.1uF	10%	6.3V	2P_0402C_1	X5R	GRP155R61A104KA01E	Murata
		C15	0.1uF	10%	6.3V	2P_0402C_1	X5R	GRP155R61A104KA01E	Murata
2	3	C3	1uF	+/-10%	6.3V	2P_0603C_1	X5R	GRM188F51A105CZ27E	Murata
		C6	1uF	+/-10%	6.3V	2P_0603C_1	X5R	GRM188F51A105CZ27E	Murata
		C12	1uF	+/-10%	6.3V	2P_0603C_1	X5R	GRM188F51A105CZ27E	Murata
3	2	C4	1uF	+/-10%	10V	2P_0603C_1	X5R	GRM188F51A105CZ27E	Murata
		C5	1uF	+/-10%	10V	2P_0603C_1	X5R	GRM188F51A105CZ27E	Murata
4	3	C9	2.2uF	+/-10%	6.3V	2P_0603C_1	X5R	RM188R60J225KE01D	Murata
		C10	2.2uF	+/-10%	6.3V	2P_0603C_1	X5R	RM188R60J225KE01D	Murata
		C11	2.2uF	+/-10%	6.3V	2P_0603C_1	X5R	RM188R60J225KE01D	Murata
5	1	C13	10uF	+80, -20%	6.3V	2P_0805C_1	Y5V	GRM40Y5V106Z6.3	Murata
6	1	D1	SMAZ5V1			SMAZ5V1	DIODES INC	SMAZ5V1	DIODES INC
7	4	FD1	Fiducial			FID	Fiducial	Fiducial	
		FD2	Fiducial			FID	Fiducial	Fiducial	
		FD3	Fiducial			FID	Fiducial	Fiducial	
		FD4	Fiducial			FID	Fiducial	Fiducial	
8	1	G1	GEN-3TERM-EARTH			CONTACT-EARTH-UR	Grounding Pad	Grounding Pad	
9	1	G2	GEN-3TERM-EARTH			CONTACT-EARTH-UL	Grounding Pad	Grounding Pad	
10	3	H1	STANDOFF			HOLE-1.3MM		HOLE-1.3MM	
		H2	STANDOFF			HOLE-1.3MM		HOLE-1.3MM	
		H3	STANDOFF			HOLE-1.3MM		HOLE-1.3MM	
11	1	H6	STANDOFF			HOLE-2.3MM		HOLE-2.3MM	
12	1	J1	NEC_LCD_BACKLIGHT			CONN-NEC-LCD-10A-NEC	ACF Contact Pads	S6D0110A	Samsung
13	1	J2	NEC_CAM_CON_24			FH23-23S-0.3SHW MIRROR	Camera Connector	FH23-23S-0.3SHW	Hirose
14	1	J3	LCD UNIT			CONN-NEC-LCD-27-NEC	ACF Contact Pads	CONN-NEC-LCD-27-NEC	
15	1	J4	MR-0911			HDR2113-010010-NEC	Audio Receiver Pads	HDR2113-010010-NEC	Hosiden
16	1	J5	SUB LCD UNIT			CONN-NEC-LCD-10B-NEC	ACF Contact Pads	RB259Z?	Seiko
17	1	J6	30-PIN Flex Connector 1			CONN-LCD-FLEX-32	ACF Contact Pads	30 PINS ACF -1	
18	1	J7	30-PIN Flex Connector 1			CONN-LCD-FLEX-32_MOD	ACF Contact Pads	30 PINS ACF -2	
19	1	LED1	LED1			CL-196		CL-196	
20	1	LL1	EXC24CB221			EXC24C	Bead Array	EXC24CB221	Panasonic
21	2	L2	EZADT			EZADT-NOM	Bead array	EZADT	Panasonic
		L1	EZADT			EZADT-NOM	Bead array	EZADT	Panasonic

22	1	Q1	FDN357N			SOT-23	FAIRCHILD	FDN357N	FAIRCHILD
23	2	R8	100k	0.50%	1/16W	2P_0402R_1	0.50%	MCR01J104E	ROHM
		R1	100k	0.50%	1/16W	2P_0402R_1	0.50%	MCR01J104E	ROHM
24	1	R2	120k	0.50%	1/16W	2P_0402R_1	0.50%	MCR01J154	ROHM
25	1	R3	33k	1%	1/16W	2P_0402R_1	5%	MCR01J333E	ROHM
26	3	R4	68	5%	1/16W	2P_0402R_1	5%	R-68-1%	ROHM
		R5	68	5%	1/16W	2P_0402R_1	5%	R-68-1%	ROHM
		R6	68	5%	1/16W	2P_0402R_1	5%	R-68-1%	ROHM
27	3	R9	DNI			2P_0402R_1	DNI	DNI	
		R11	DNI			2P_0402R_1	DNI	DNI	
		R12	DNI			2P_0402R_1	DNI	DNI	
28	1	R10	0	1%	1/16W	2P_0402R_1	5%	RM73Z1ETP	ROHM
29	1	U1	EZJZSV270CAK			EXC24	ESD / Filter	EZJZSV270CAK	Panasonic
30	1	U3	LTC 3205			QFN-24-4X4		LTC 3205	Linear Technology
31	1	U4	CL_4705-FWD-D			MAY-VK0013-002	Picture Light	CL_4705-FWD-D	
32	1	U6	MAX8883EUTJJ			SOT23-6	Dual LDO	MAX8883EUTJJ	Maxim

5. Alignment and Calibration.

Each unit of the KMP6J1N1-1A model is calibrated at the factory. Three main subsystems are calibrated during this process: 1) Frequency Calibration, 13MHz clock calibration; 2) Receive Level and 3) Transmit Power Level.

Frequency Calibration

The frequency calibration step characterizes and corrects the initial frequency error of the 13MHz VCXO.

In this calibration step, an initial control value is written to the AFC DAC controlling the 13MHz VCXO. The transmitter is set to a given channel and a signal is transmitted to the receiving test equipment. Based on this transmitted signal, the test equipment computes and reports the frequency error of the handset's transmitter. This step is repeated with a second control value written to the AFC DAC. Based on these two DAC settings and corresponding frequency errors, the zero point and control slope of the 13MHz VCXO tuning characteristic is calculated and the values are saved and subsequently stored in the handset's Flash memory. Frequency Calibration needs to be performed in one frequency band only.

Receive Level Calibration

The receive level calibration characterizes and corrects the gain of the RF and baseband circuitry from the antenna input to the digital demodulation circuitry.

In this calibration step the test equipment outputs a signal on a known channel and at two known level input levels. Based on the difference between the known input levels and the detected levels at the handset's receiver, correction values are computed of each gain setting of the handset's receiver. These correction values are saved and subsequently stored in the handset's Flash memory for use during normal operation. Receive Level calibration is performed for supported frequency band.

Transmit Power Level Calibration

Transmit Power Calibration sets the transmitter power for each defined transmit power level for all supported bands and modulation modes. Transmit power level is controlled by means of an analog signal generated by the Automatic Power Control (APC) DAC which is applied to power control circuitry in the RF Power Amplifier for GMSK mode or to a Variable Gain Amplifier (VGA) driving the PA in 8PSK mode.

In this calibration step, the transmitter is set to a given channel and nominal power level and the transmitted signal is received by the test equipment. The test equipment reports the actual transmit power level, a correction is made to the APC DAC setting based on the difference between the desired and actual power and the output power is adjusted. This process is continued until the actual transmitted power matches the desired transmit power, at which point the DAC setting is saved. The same sequence is performed for every defined power level in a given frequency band. The APC DAC settings are saved and subsequently stored in the handset's Flash memory. Separate Transmit power calibration steps are performed for each frequency band supported by the handset and also for each modulation type (GMSK and 8PSK).