



Item	Qty	Reference	Description	Order#	Manufacturer
	1	Q1	NPN Digital Transistor (built-in resistors)	DTC114YE	Rohm
	1	R1	Res Thick Film 22R 1/10W +/-5% 0603	MCR03EZPJ220	Rohm
	12	R2-R13	Chip Coils for High Frequency horizontal wire wound, 0402, 18nH, +/-5%	HK100518NJ-T	TaiyoYuden
	6	D1-D6	White Right-Angle Surface Mount LED	SMLF13WBDW1	Rohm
	1	U1	CapTouch Programmable Controller for Single Electrode Capacitance Sensors	AD7147ACPZ-1REEL	Analog Devices
	3	C2-C4	Monolithic Ceramic Capacitors 0402, X5R, 0.10μF, 10Vdc, +/-10%	GRM155R61A104KA01D	Murata
	1	C1	Monolithic Ceramic Capacitors 0402, X7R, 10nF, 25Vdc, +/-10%	GRM155R71E103KA01D	Murata
	1		Keypad Flex	Full flex	Flex plus

Duo

Date: 10 Sept 2008

Main BOM

Item	Qty	Reference	Description	Order#	Manufacturer
	1	ANT501	Bluetooth Antenna	LDA312G7313F-237	Murata
3	1	BAT301	Backup Battery	HB414 II06E	Seiko Instruments
21	2	C101 C303	Monolithic Ceramic Capacitors 0402, X7R, 1000pF, 50Vdc, +/-10% Monolithic Ceramic Capacitors 0402, X5R, 1000pF, 50Vdc, +/-10%	GRM155R71H102KA01D UMK105BJ102KV	Murata Taiyo
44	6	C102 C318 C1004 C1005 C1006 C1007	Monolithic Ceramic Capacitors 0603, X5R, 4.7uF, 6.3Vdc, +/-10%	GRM188R60J475KE19D	Murata
14	54	C103 C106 C107 C108 C109 C111 C112 C113 C114 C117 C118 C119 C120 C121 C122 C326 C327 C330 C350 C402 C403 C405 C512 C513 C604 C708 C709 C710 C712 C714 C724 C801 C802 C803 C804 C805 C806 C807 C808 C809 C811 C812 C813 C907 C908 C909 C910 C913 C914 C915 C1001 C1002 C1018 C1048 C1059 C1065 C1101 C1102 C1105 C1109	Monolithic Ceramic Capacitors 0402, X5R, 0.10uF, 10Vdc, +/-10%	GRM155R61A104KA01D	Murata
22	33	C104 C105 C116 C305 C306 C307 C309 C310 C311 C312 C313 C314 C401 C606 C607 C608 C609 C613 C720 C721 C722 C723 C903 C1010 C1011 C1014 C1015 C1016 C1017 C1023 C1024 C1055 C1070	Monolithic Ceramic Capacitors 0402, X5R, 1uF, 10Vdc, +/-10%	GRM155R61A105KE15D	Murata
36	2	C110 C308	Monolithic Ceramic Capacitors 0402, X5R, 470nF, 6.3Vdc, +/- 10% Monolithic Ceramic Capacitors 0402, X5R, 470nF, 6.3Vdc, +/- 10%	GRM155R60J474KE19D JMK105BJ474KV	Murata Taiyo
15	2	C115 C335	Monolithic Ceramic Capacitors 0402, X7R, 10nF, 25Vdc, +/-10%	GRM155R71E103KA01D	Murata
12	1	C123	Monolithic Ceramic Capacitors 0402, C0G, 0.5pF, 50Vdc, +/-10%	GRM1555C1HR50KZ01J GRM1555C1HR50CZ01	Murata
16	5	C124 C505 C1052 C1053 C1054	Monolithic Ceramic Capacitors 0402, CH/COH, 10pF, 50Vdc, 5% Monolithic Ceramic Capacitors 0402, CH/COH, 10pF, 50Vdc, +/-0.5pF	GJM1552C1H100JB01D UMK105CH100DV	Murata Taiyo
35	1	C125	Monolithic Ceramic Capacitors 0402, C0G, 4.7pF, 50Vdc, +/-0.1pF	GRM1555C1H4R7BZ01J	Murata
13	3	C201 C202 C203	Monolithic Ceramic Capacitors 0402, C0G, 1.5pF, 50Vdc, +/-0.05pF	GJM1555C1H1R5W	Murata
47	4	C272 C612 C1003 C1103	Monolithic Ceramic Capacitors 0805, B, 4.7uF, 10Vdc, 10% Monolithic Ceramic Capacitors 0805, B, 4.7uF, 10Vdc, 10%	GRM21BB31A475K GRM21BR61A475KA	Murata
28	1	C274	Monolithic Ceramic Capacitors 0402, C0G, 2p7F, 50Vdc, +/-0.05pF	GJM1555C1H2R7WB01J	Murata
33	19	C282 C293 C317 C603 C701 C705 C906 C1012 C1013 C1019 C1041 C1043 C1044 C1045 C1046 C1047 C1071 C1106 C1108 C1109 4444 C1120 C1025 1026	Monolithic Ceramic Capacitors 0402, C0G, 33pF, 50Vdc, 5%	GRM1555C1H330JZ01D	Murata
45	7	C284 C304 C315 C602 C611 C713 C905	Monolithic Ceramic Capacitors 0805, X7R, 10uF, 10Vdc, 10%	GRM21BR71A106K GRM21BR61A106K	Murata

17	1	C287	Monolithic Ceramic Capacitors 0402, C0G, 12pF, 50Vdc, +/- 5%	GRM1535C1H120JDD5 GRM1555C1H120JDD5	Murata
19	1	C288	Monolithic Ceramic Capacitors 0402, C0G, 180pF, 50Vdc, +/- 5%	GRM1555C1H181JA01E	Murata
23	1	C290	Monolithic Ceramic Capacitors 0402, C0H, 2.2pF, 16Vdc, 5%	EVK105CH2R2JW	TaiyoYuden
38	1	C291	Monolithic Ceramic Capacitors 0402, C0H, 47pF, 50Vdc, +/- 5%	UMK105CH470JV	TaiyoYuden
18	1	C292	Monolithic Ceramic Capacitors 0402, C0G, 150pF, 50Vdc +/-5%	GRM1555C1H151JA01J	Murata
20	4	C296 C297 C298 C299	Monolithic Ceramic Capacitors 0402, C0G, 18pF, 50Vdc, 5% Monolithic Ceramic Capacitors 0402, C0G, 18pF, 50Vdc, +/-5%	GJM1555C1H180JB01J UMK105CH180JV-F	Murata Taiyo
40	1	C319	Monolithic Ceramic Capacitors 0402, X7R, 4.7nF, 25Vdc, +/- 10%	GRM155R71E472KA01J GRM155R71H472KA01J	Murata
37	1	C320	Monolithic Ceramic Capacitors 0402, X7R, 47nF, 16Vdc, +/- 10%	GRM155R71C473KA01J	Murata
27	4	C324 C325 C328 C329	Monolithic Ceramic Capacitors 0402, COG, 27pF, 50Vdc, +/-5%	GRM1555C1H270JZ01D	Murata
26	3	C331 C332 C1104	Monolithic Ceramic Capacitors 0402, COH, 22pF, 50Vdc, +/-5%	GRM1552C1H220JZ01D GRM1555C1H220JZ01D	Murata
9	1	C503	Monolithic Ceramic Capacitors 0201, C0G, 100pF, 25Vdc, +/-0.5pF	GRM0335C1E101J	Murata
31	1	C504	Monolithic Ceramic Capacitors 0402, C0G, 3.3pF, 25Vdc, +/-0.05pF	GRM1555C1E3R3WZ01D	Murata
10	3	C506 C508 C510	Monolithic Ceramic Capacitors 0201, B, 10nF, 10V, +/-10% Monolithic Ceramic Capacitors 0201, B, 10nF, 10V, +/-10%	GRM033B11A103K GRM033R71A103K	Murata
8	1	C507	Monolithic Ceramic Capacitors 0201, B, 0.10uF, 6.3Vdc, +/-10%	GRM033B30J104K	Murata
24	2	C509 C614	Monolithic Ceramic Capacitors 0402, X5R, 2.2uF, 4Vdc, +/-20%	GRM155R60G225ME15D	Murata
11	1	C511	Monolithic Ceramic Capacitors 0201, C0G, 15pF, 25Vdc, 5%	GRM0335C1E150J	Murata
50	1	C601	TMCMB Series Tantalum Electrolytic Capacitors 100uF, 10Vdc, +/-10%	TMCMB1A107KTRF	Hitachi
25	1	C605	Cap Cer Multilayer 22nF 16V +/-10% 0402 X7R	EMK105B7223KV-F	Taiyo Yuden
29	7	C711 C725 C819 C820 C821 C1056 C1057	Monolithic Ceramic Capacitors 0402, X7R, 3.3nF, 50Vdc, +/-10%	GMD155R71H332KA01J	Murata
43	1	C810	Monolithic Ceramic Capacitors 0603, X5R, 4.7uF, 6.3Vdc, +/-10%	GRM188R60J475KE19D	Murata
32	1	C818	Monolithic Ceramic Capacitors 0402, X7R, 33n, 16Vdc, +/-10%	EMK105B7333K	Taiyo Yuden
34	5	C906 C1062 C1063 C1064 C1065	Monolithic Ceramic Capacitors 0402, C0G, 39pF, 50Vdc, 5%	GRM1555C1H390JZ01D	Murata
39	8	C1020 C1039 C1040 C1042 C1049 C1050 C1051 C1060	Monolithic Ceramic Capacitors 0402, COH, 47pF, 50Vdc, +/-5%	GRM1552C1H470JZ01D	Murata
48	2	C1058 C1061	Monolithic Ceramic Capacitor 1206 X5R 100uF, 6.3V +/- 20%	GRM31CR60J107M	Murata
95	2	D601 D602	Schottky Barrier Diode	RB521G-30	Rohm
56	1	D715	White Right-Angle Surface Mount LED	SMLF13WBDW1	SMLF13WBDW1
132	0	D904	Two-color surface mount LEDs packaged with white diffused epoxy	SML-521MUW	ROHM
151	12	ESD1001 ESD1002 ESD 1003 ESD1004 ESD1006 ESD1105 ESD1108 ESD 1109 ESD1110 ESD1111 ESD1112 ESD1113	Multilayer Ceramic TVS, 0402, VDC 5.6V;320W; Clamping Voltage=24V	VC040205X150WP B72590D0050A060	AVX Epcos
149	2	ESD1106 ESD1107	USB Varistor	USB0005WP	AVX
63	4	FB1001 FB1002 FB1003 FB1004	Chip FerriteBeads 220ohm at 100MHz, rated current 1400mA	BLM18PG221SN1	Murata
	2	IDEN_GND-A, IDEN_GND-B	Cannon Universal Contact Series 3.5mm	120220-0204	ITT
6	1	J280	RF Connector	51-3608-50-R	Astron
7	1	J601	3 pins SMT battery connector	300008MB003G100ZL	Suyin

154	1	J701	0.3 mm pitch - Rotary Backlock Connector	XF2B-3545-31A	OMRON
	1	J703	0.5mm pitch FPC connector	FH19SC-10S-0.5SH(05)	Hirose
53	1	J705	Camera module socket	CLE9124-1501F	SMK
80	1	J901	70pin B2B Connector	52991-0708	Molex
148	1	J902	2mm RF Connector	UMCR-2250005R	Harwin
84	1	J1101	SIM card and microSD 2 in 1	54-4102-16-R	Astron
150	1	J1102	Mini USB B connector 10-pin	215+916+2450	ACT
144	1	J1103	5-pole audio jack	M706-2010746	Harwin
51	1	J1104	SIM Card Connector	MM800320IW	Harwin
66	3	L201 L283 L285	Chip Coils for High Frequency horizontal wire wound, 0402, 10nH, +/- 5%	HK100510NJ-T	TaiyoYuden
70	1	L261	Chip Coils for High Frequency horizontal wire wound, 0402, 3.3nH, +/- 0.3nH	HK10053N3S-T	TaiyoYuden
71	2	L271 L290	Chip Coils for High Frequency horizontal wire wound, 0402, 5.6nH, +/- 0.3nH	HK10055N6S-T	TaiyoYuden
68	1	L272	Chip Coils for High Frequency horizontal wire wound, 0402, 15nH, +/- 5%	HK100515NJ-T	TaiyoYuden
72	3	L286 L288 L296	Chip Coils for High Frequency horizontal wire wound, 0402, 6n8H, +/- 5%	HK10056N8J-T	TaiyoYuden
67	2	L291 L295	Chip Coils for High Frequency horizontal wire wound, 0402, 12nH, +/- 5%	HK100512NJ-T	TaiyoYuden
69	1	L292	Chip Coils for High Frequency horizontal wire wound, 0402, 18nH, +/- 5%	HK100518NJ-T	TaiyoYuden
77	1	L501	Chip Coils for High Frequency horizontal wire wound, 0201, 3.9nH, +/- 0.2nH	LQP03TN3N9C	Murata
76	1	L502	Chip Coils for High Frequency horizontal wire wound, 0201, 22nH, +/- 5%	LQP03TN22NJ	Murata
	0	L503	Chip Coils for High Frequency horizontal wire wound, 0402, 1n8H, +/- 5%	HK10051N8J-T HK10051N8S-T	Taiyo Yuden
75	1	L601	Wire-wound inductor 3015 1.5uH 30%	NR 3015T 1R5N	TaiyoYuden
78	5	L1001 L1002 L1101 L1103 L1107	Ind Multilayer Chip 1uH ±10% 0402	LK10051R0K	Taiyo Yuden
59	2	Q702 Q901	NPN Digital Transistor (built-in resistors)	DTC114YE	Rohm
87	2	Q902 Q1100 Q1102	Dual Bias Resistor Transistors	MUN5314DW 1T1G UMD9N	ON Semi Rohm
87	1	Q1100	Dual Bias Resistor Transistors	EMD29T2R	Rohm
146	1	Q1101	Transistor Digital	DTC144EE	Rohm
114	8	R101 R102 R103 R104 R808 R809 R1002 R1004	Res Thick Film 2.2k 1/16W +/-5% 0402	MCR01MZPJ222	Rohm
118	1	R105	Res Thick Film 45K3 1/16W +/-1% 0402	MCR01MZPF4532	Rohm
109	2	R107 R603	Res Thick Film 1M5 1/16W +/-5% 0402	MCR01MZPJ155	Rohm
112	1	R110	Res Thick Film 220k 1/16W +/-5% 0402	MCR01MZPJ224	Rohm

99	26	R112 R113 R114 R302 R401 R606 R701 R802 R803 R804 R807 R819 R820 R821 R823 R824 R825 R826 R827 R830 R902 R903 R1101 R1102 R1103 R1104 R1105 R1106 R1107 R1108 R1109 R1117	Res Thick Film 10K 1/16W +/-5% 0402	MCR01MZPJ103	Rohm
122	1	R115	Res Thick Film 68R 1/16W +/-5% 0402	MCR01MZPJ680	Rohm
122	1	R201	Res Thick Film 68R 1/16W +/-5% 0402	MCR01MZPJ680	Rohm
	1	R116	Res Thick Film 1.8R 1/16W +/-5% 0402	MCR01MZPJ1R8	Rohm
97	18	R508 R509 R510 R511 R542 R709 R805 R806 R810 R811 R812 R813 R814 R815 R816 R817 R828 R904 R1001 R1021 R1022 R1111	Res thick Film 0R 1/16W 5% 0402	MCR01MZPJ000	Rohm
	4	R283 R284 R911 R921	Res thick Film 0R 1/16W 5% 0402	MCR01MZPJ000	Rohm
	1	R542 C501	Multilayer Ceramic Chip Capacitor 0.75pF	MCH1554R75C GRM1555C1HR75BZ01D GRM1555C1HR75CZ01D	Rohm Murata Murata
101	1	R295	Res Thick Film 10R 1/16W 5% 0402	MCR01MZPJ100	Rohm
105	1	R297	Res Thick Film 15K 1/16W 1% 0402	MCR01MZPF1502	Rohm
106	1	R303	Res Thick Film 15K 1/16W +/-5% 0402	MCR01MZPJ153	Rohm
111	2	R304 R305	Res Thick Film 200K 1/16W +/-5% 0402	MCR01MZPJ204	Rohm
103	1	R306	Res Thick Film 121K 1/16W +/-1% 0402	MCR01MZPF1213	Rohm
123	1	R307	Res Thick Film 82K 1/16W +/-5% 0402	MCR01MZPJ823	Rohm
98	7	R308 R605 R901 R909 R1114 R1118 R1119	Res Thick Film 100K 1/16W +/-5% 0402	MCR01MZPJ104	Rohm
96	1	R506	Res Thick Film 2.2R 1/20W +/-5% 0201	MCR006YZPJ2R2	Rohm
115	1	R601 R806	Res Thick Film 30R 1/16W +/-5% 0402	MCR01MZPJ300	Rohm
127	1	R602	Res Thick Film 0.22 1/4W +/-1% 0805	MCR10EZHFL220	Rohm
119	1	R604	Res Thick Film 51R 1/16W +/-5% 0402	MCR01MZPJ510	Rohm
	1	R702	Res Thick Film 4.3K 1/16W +/-5% 0402	MCR01MZPJ432	Rohm
110	1	R703	Res Thick Film 2.2K 1/16W +/-5% 0402	MCR01MZPJ222	Rohm
107	1	R706	Res Thick Film 180R 1/16W +/-5% 0402	MCR01MZPJ181	Rohm
121	1	R707	RES 62K OHM 1/16W 1% 0402 SMD	MCR01MZPF6202	Rohm
117	1	R708 R1144	RES 56K OHM 1/16W 1% 0402 SMD	MCR01MZPF5602	Rohm
108	0	R822	Res Thick Film 1K 1/16W +/-5% 0402	MCR01MZPJ102	Rohm
126	1	R905	Res thick Film 0R 1/8W 5% 0805	MCR10EZPJ000	Rohm
116	0	R912 R913	Res Thick Film 330R 1/16W +/-5% 0402	MCR01MZPJ331	Rohm
104	2	R1016 R1017	Res thick Film 150K 1/16W 1% 0402	MCR01MZPF1503	Rohm
113	2	R1112 R1113	Res thick Film 27R 1/16W 5% 0402	MCR01MZPJ270	Rohm
141	6	SW701 SW702 SW 703 SW704 SW705 SW706	Compact sized side-push TACT switch with guided bosses	SKRELGE010	ALPS
137	1	SW707	Slider Switch	SSAD110100	ALPS
90	1	U101	Locosto Plus Quad-Band (850/900/1800/1900)	D6553BQZPHR	TI
130	1	U292	Saw Filters for Communication Equipment DCS	B39182B9402K610	Epcos
129	1	U294	Saw Filters for Communication Equipment GSM900	B39941B9401K610	Epcos

131	1	U295	Saw Filters for Communication Equipment PCS	B39202B9403K610	Epcos
128	1	U296	PA Tx Module(QUAD-BAND GSM850/GSM900/DCS/PCS)	RF7115_4.5	Rf Micro Devices
147	1	U301	Triton-Lite Power/Audio Management chip PG 2.4	T3031FZPH (R)	Texas Instrument
135	1	U401	SPANSION 1.8V 128Mb/64Mb MIRROR BIT	S71NS128PC0ZJETV0	Spansion
73	1	U402	64M x 8bits NAND Flash Memory	K9F1208R0C-J	Samsung
4	1	U501	BlueCore4ROM Single Chip Bluetooth + EDR System	BC41B143A06-IXB-E4	csr
54	1	U502	Balun/BPF for Bluetooth	DBF81F104-CSR-T	Soshin
140	1	U503 U904 U4006	LOW VOLTAGE 0.5[?] MAX QUAD SPDT SWITCH WITH BREAK-BEFORE-MAKE FEATURE	STG3699AQTR	STM
62	1	U601	P-Channel 1.8V Specified powerTrench MOSFET	FDJ1027P	Fairchild
153	1	U602	600mA, Step-down DC-DC converter	XC9236A18DMR	TOREX
93	1	U603	1.2V 4-Pin LDO	XC6221B121NR XC6221B122NR	TOREX TOREX
92	1	U604	3.3V 4-Pin LDO	R1114Q331D-TR-F	RICOH
94	1	U605	2.8V 4-Pin LDO	XC6221B281NR XC6221B282NR	TOREX TOREX
5	1	U701	Ambient Light Sensor	BH1600FVCTR	Rohm
	1	U708	3-Channel Ultra High Efficiency LED Driver	CAT3643HV2-T2	Catalyst
82	1	U801	Renesas 32-bit RISC Microcomputer SH-Mobile Series	R8J73540BGZV	Renesas
91	2	U802 U902 U906	4-bits Level Shifter	PI74STX4G4245ZJE	Pericom
134	0	U803	2-Input Positive AND Gate	SN74LVC1G08DCK	TI
133	1	U902	4-bit Level Shifter with 3-state Outputs	SN74AVC4T245RSVR	TI
152	1	U1001	WM8990 Stereo Multimedia CODEC	WM8990ECS/RV	Wolfson Microelectronics
139	1	U1002 U4004	LOW VOLTAGE 0.5 OHM MAX DUAL SPDT SWITCH	STG3684AUTR	ST
145	1	U1005	Filterless High Efficiency 2.5W Switching Audio Amplifier	TPA2010D1YZFT	TI
65	1	U1100	2-port Hi-Speed USB Switch	ADG772BCPZ-REEL7	ADI
89	1	Y101	SMT 26MHz Crystal unit	NX3225SA-W-191-866	NDK
138	1	Y301	TUNNING FORK CRYSTAL	SSP-T7-F-12.5PF20PPM	SEIKO INSTRUMENT

	1	Y501	SMT 26MHz Crystal unit	EXS00A-CS01625/NX322	NDK
	1		Main Shield Can + Frame		
	1		Bluetooth Shield Can		
	1		8 layer PCB		

Duo

Date: 10 Sept 2008

Back-end EM BOM

Item	Qty	Reference	Description	Order#	Manufacturer
2	1	ANT201	Antenna Pads (GSM)		
74	1	ANT902	Antenna Pads (iDEN/GPS)		
85	1	MIC1001	Electret Condenser Microphone	B4015AL443-419	GoerTek
60	1	RCV1001	Dynamic Receiver - 32ohm +/-15% @1KHz, 1Vrms, 104dB +/- 3dB SPL, distortion <5%	EMR1107SPB3	EM-TECH
61	2	SPK1002 SPK1003	DYNAMIC SPEAKER & RECEIVER ; 8ohm +/- 15%@2KHz, 1Vrms, 86+/-3 dB; nom pwr 0.5W, max pwr 1W, distortion <10%@1kHz, 0.1W	EMS1630BPB1	EM-TECH
58	1	VIB601	Vibrator -pancake type	1027RFN01-10T	CXD
	1		Coaxial cable 1.13mm dia, 60mm length. assembly with connectors on both ends	M102380-IW-L0.06	Harwin
	1		LCD Module	NM200CND	Tovis
	1		Camera Module	VS6724G0FB/TR	STM
	1		iDEN Module	N2475AMOT	Motorola
	1		Battery Pack		
	2		EMI GASKET (2 SIDES COND ADH)	ID - 45WNRf-5-2-4-23F-UL	Fabri-Tech
	2				