BOM SHEET			MODEL NAME		ELS-1000			
Depart./Name H/W		H/W	COLOR					
Date 2015. 07. 14		2015. 07. 14	VERSION					
						1		
ne	Reference Rev 00		Total SMT		I	<u>, '</u>		
No	ITI	EM (DESCRIPTION)	MAKER P/N	Q'ty	Total	Refernce Number		
	MAIN B'd							
1	РСВ		ELS-1000-MAIN	1	1			
2	CPU (452 pin FBC	GA, 0.65pitch)	CLM9722(FALCO'S)	1	1	U100		
3	DDR2 SDRAM		K4T1G164QG_BCE7	2	2	U101 U102		
4	NAND FLASH		K9F1G08U0E-SCB0	1	1	U300		
5	High-speed video	o data receiver	THCV220	2	2	U400 U401		
6	Audio Codec		ALC5633Q	1	1	U600		
7	2.4GHz WLAN Mo	odule	DDWNW-NMS1M	1	1	U701		
8	CSR8645 Stereo I	ROM Solution Module	DDBCW-NMR3M	1	1	U702		
9	8-bit CMOS Micro	ocontrollers with nano Watt Tech	PIC16F886I-SS	1	1	U801		
10	8CH Auto Sensitiv	vity Calibration Capacitive Touch	ANMG08	1	1	U805		
11	3-Axis, Digital Ac	celerometer	ADXL345BCCZ	1	1	U804		
12	2.8W MONO CLAS	SS D AUDIO POWER AMP	TS4962IQT	2	2	U602 U603		
13	I2C Real Time Clo	ock/Calendar	ISL1208IU8Z-TK	1	1	U402		
14	Voltage Detector	Series	NCP301LSN33T1G	1	1	U802		
15	3A,40V,200KHz S	tep Down Converter	EUP3453WIR1	1	1	U900		
16	6V,2A Dual ,SYNC	C Buck Regulator	MP2122GJ	2	2	U901 U902		
17	96% Efficient Boo	ost Converter With 4A Switch	TPS61032PWPR	1	1	U905		
18	500mA High Spee	ed LDO Regulator	XC6503D331MR-G	2	2	U800 U807		
19	700mA High Spee	ed LDO Regulator	XC6210B332MR-G	4	4	U601 U700 U806 U903		
20	700mA High Spee	ed LDO Regulator	XC6210B302MR-G	1	1	U703		
21	1A LDO Voltage F	Regulator	XC6220B331MR-G	1	1	U904		
22	Chip NTC Thermis	stor	ETCH160808 104F4050FST	1	1	Т800		
23	Crystal 24MHz-32	225	SX-32	1	1	X200		
24	Crystal 27MHz-32	225	SX-32	1	1	X201		
25	Crystal 32.768KH	Z	FC-135	1	1	X400		
26	Lithium Recharge	able Battery	MS621FE-FL11E	1	1	BT400		
27	4V Drive Pch MOS	SFET	RRR040P03	7	7	Q302 Q801 Q803 Q804 Q900 Q903 Q906		
28	General Purpose	Transistor	MMBT2222ALT3G	5	5	Q301 Q802 Q902 Q904 Q905		
29	NPN Dual Genera	l Purose Transistors	MBT2222ADW1T1G	1	1	Q901		
30	N CHANNEL MOS	FIELD EFFECT TRANSISTOR	KTK5134S	6	6	Q300 Q600 Q601 Q602 Q603 Q604		
31	Schottky Barrier [Diode	RB520S30T1G	6	6	D400 D800 D801 D805 D806 D807		
32	Schottky Power R	lectifier	MBR130T1G	1	1	D802		
33	Schottky Power R	lectifier	MBRA210ET3G	2	2	D803 D804		
	Schottky Power R	dectifier	MBRA340T3G	1	1	D907		
	Schttky Rectifier		SS36	2	2	D900 D904		
36		nt Voltage Suppressors	SMCJ36A	2	2	D901 D903		
37	TVS COMPONENT		PRSB6.8C	2	2	V600 V601		
38	Multilayer Chip Va	aristor	AVLC5S02050	7	7	V300 V301 V302 V303 V304 V306 V307		
39	EMIFIL(Inductor ty	ype) Chip Ferrite Bead	BLM15PD121SN1	16	16	FB501 FB504 FB506 FB604 FB605 FB607 FB608 FB609 FB700 FB701 FB702 FB703 FB704 FB705 FB902 FB903		
40	EMIFIL(Inductor ty	ype) Chip Ferrite Bead	BLM18PG121SN1	1	1	FB904		
41	Multilayer Chip Fe	errite Bead	GZ1005D601CTF	1	1	FB900		
42	Multilayer Chip Fe	errite Bead	GZ1608D152TF	1	1	FB901		
43	Multilayer Chip Fe	errite Bead	BLM21PG121SN1	5	5	FB706 FB707 FB708 FB709 FB906		
44	SMD Power Induc	etors	SWPA8040S330MT	1	1	L900		
45	SMD Power Induc	etors	SWPA6028S2R2MT	4	4	L901 L902 L903 L904		
46	SMD Power Induc	ctors	YC104RT-6R8M	1	1	L905		
47	Surface Mount Ch	HIP LED(RED/1608)	HT-191USD-J009	5	5	LED613 LED614 LED615 LED616 LED617		
48	Surface Mount Ch	HIP LED(BLUE/1608)	HT-191NB-K713	5	5	LED608 LED609 LED610 LED611 LED612		
49	SURFACE MOUNT	T LED	LRGB9553-5-B01	8	8	LED600 LED601 LED602 LED603 LED604 LED605 LED606		
50	CHIP INDUCTOR	1.5nH (1005)	HK10051N5S-T	1	1	C716		
51	CHIP INDUCTOR	1.8nH (1005)	HK10051N8S-T	1	1	C717		
	1	3.9nH (1005)	HK10053N9S-T	4	I ₁	C705		

No	ITEM (DESCRIPTION)	MAKER P/N	Q'ty	Total	Refernce Number
53	CAP. CERAMIC CHIP 1.5pF (1005)	0402N1R5D500LT	1	1	C704
	CAP. CERAMIC CHIP 5pF (1005)	0402N5R0D500LT	1	1	C816
55	CAP. CERAMIC CHIP 10pF (1005)	0402N100J500LT	3	3	C815 C817 C818
56	CAP. CERAMIC CHIP 12pF (1005)	0402N120J500LT	2	2	C205 C206
57	CAP. CERAMIC CHIP 100pF (1005)	0402N101J500LT	14	14	C101 C103 C112 C114 C419 C422 C425 C428 C431 C434
58	CAP. CERAMIC CHIP 330pF (1005)	0402B331K500CT	1	1	C437 C440 C603 C604 C904
	CAP. CERAMIC CHIP 390pF (1005)	0402B391K500CT	2	2	C901 C917
	CAP. CERAMIC CHIP 1nF (1005)	0402B102K500CT	14	14	C100 C102 C111 C113 C417 C420 C423 C426 C429 C432
	CAP. CERAMIC CHIP 1.5nF (1005)	0402B152K500CT	1	1	C435 C909
62	CAP. CERAMIC CHIP 1.8nF (1005)	0402B182K500CT	1	1	C200
	CAP. CERAMIC CHIP 100nF (1005)	EMK105B7104KV-F	117	117	C104 C105 C106 C107 C108 C109 C115 C116 C117 C118 C119 C120 C122 C123 C124 C125 C201 C202 C203 C211 C300 C301 C303 C304 C305 C306 C403 C407 C418 C421 C424 C427 C430 C433 C436 C439 C500 C502 C503 C504 C505 C506 C507 C508 C509 C510 C513 C516 C518 C519 C520 C521 C522 C523 C524 C525 C526 C529 C530 C533 C534 C535 C536 C537 C538 C539 C540 C541 C543 C545 C546 C547 C549 C550 C551 C552 C553 C554 C555 C558 C560 C561 C562 C563 C564 C565 C566 C567 C568 C602 C606 C609 C613 C618 C706 C707 C709 C710 C711 C722 C724 C802 C803 C806 C819 C828 C830 C902 C908 C913 C914 C920 C930 C941 C942 C948 C949
64	CAP. CERAMIC CHIP 100nF/25V (1005)	TMK105BJ104KV-F	4	4	C400 C401 C404 C405
65	CAP. CERAMIC CHIP 1uF (1005)	LMK105BJ105KV-F	23	23	C410 C531 C569 C608 C623 C624 C625 C626 C627 C718 C719 C800 C801 C807 C811 C812 C814 C820 C831 C832 C833 C834 C915
66	CAP. CERAMIC CHIP 2.2nF/16V/X7R (1608)	0603B222K500CT	4	4	C629 C630 C631 C632
67	CAP. CERAMIC CHIP 1uF/16V/X7R (1608)	EDK107BJ105KA-T	8	8	C633 C634 C635 C636 C700 C712 C826 C938
68	CAP. CERAMIC CHIP 1uF/50V (2012)	0805B105K500CT	5	5	C637 C638 C903 C905 C916
69	CAP. CERAMIC CHIP 2.2uF (1608)	LMK107BJ225KA-T	3	3	C402 C406 C946
70	CAP. CERAMIC CHIP 4.7uF (1608)	LDK107BJ475KA-T	8	8	C501 C514 C517 C544 C556 C607 C723 C944
71	CAP. CERAMIC CHIP 4.7uF/50V (3216)	CL31A475KBHNNNE	3	3	C900 C906 C907
72	CAP. CERAMIC CHIP 10uF/16V/X5R (2012)	CL21A106KOFNNNE	18	18	C212 C302 C601 C605 C612 C617 C726 C727 C813 C922 C923
73	CAP. CERAMIC CHIP 22uF (2012)	JMK212BJ226MG-T	20	20	C110 C121 C511 C512 C527 C528 C532 C548 C570 C701 C713
74	TANTAL_CAP 100uF / 10V (3528)-B TYPE	TAJB107M010RNJ	1	1	TA904
75	TANTAL_CAP 47uF / 10V (3528)—B TYPE	TAJB476K010RNJ	3	3	TA900 TA901 TA902
76	RES. CHIP 0 ohm +-5%(J) 1/16W (1005)	WR04X000PTL	191	191	R210 R211 R212 R213 R214 R215 R216 R225 R226 R229 R230 R231 R232 R247 R248 R249 R250 R251 R252 R253 R254 R255 R256 R266 R268 R269 R270 R271 R315 R316 R319 R320 R322 R327 R328 R329 R330 R331 R332 R333 R334 R342 R343 R344 R345 R349 R352 R355 R400 R401 R402 R404 R405 R406 R407 R408 R410 R412 R413 R414 R415 R416 R417 R418 R419 R420 R421 R422 R423 R424 R425 R427 R428 R429 R430 R432 R434 R35 R436 R437 R438 R439 R440 R441 R442 R443 R444 R445 R451 R452 R453 R454 R466 R514 R603 R604 R605 R606 R607 R608 R609 R610 R614 R653 R678 R690 R691 R702 R703 R704 R711 R712 R713 R714 R715 R716 R717 R719 R720 R722 C702 C714 R723 R724 R731 R734 R735 R736 R737 R738 R739
77	RES. CHIP 0 ohm +-5%(J) 1/10W (1608)	WR06X000PTL	7	7	R257 R688 R689 R728 R730 R755 R756
78	RES. CHIP 10 ohm +-5%(J) 1/3W (3225)	WR10X100JTL	2	2	R833 R834
79	RES. CHIP 100 ohm +-5%(J) 1/16W (1005)	WR04X101JTL	39	39	R100 R622 R623 R624 R625 R626 R627 R628 R629 R630 R631 R632 R633 R634 R635 R636 R637 R638 R639 R640 R641 R642
80	RES. CHIP 330 ohm +-5%(J) 1/16W (1005)	WR04X331JTL	1	1	R449
81	RES. CHIP 680 ohm +-5%(J) 1/16W (1005)	WR04X681JTL	2	2	R601 R602
82	RES. CHIP 1K ohm +-5%(J) 1/16W (1005)	WR04X102JTL	12	12	R308 R309 R403 R426 R743 R754 R810 R868 R869 R870 R871 R872
83	RES. CHIP 1K ohm +-5%(J) 1/16W (1608)	WR06X102JTL	1	1	R939
	RES. CHIP 1.8K ohm +-5%(J) 1/16W (1608)	WR06X182JTL	1	1	R940
	RES. CHIP 2.2K ohm +-5%(J) 1/16W (1005)	WR04X222JTL	5	5	R312 R313 R600 R732 R855
86	RES. CHIP 2.7K ohm +-5%(J) 1/16W (1005)	WR04X272JTL	2	2	R862 R863
87	RES. CHIP 4.7K ohm +-5%(J) 1/16W (1005)	WR04X472JTL	13	13	R310 R311 R350 R354 R802 R815 R837 R909 R910 R943 R944
88	RES. CHIP 5.6K ohm +-5%(J) 1/16W (1005)	WR04X562JTL	2	2	R838 R856

No	ITEM (DESCRIPTION)	MAKER P/N	Q'ty	Total	Refernce Number
					R202 R205 R209 R217 R218 R219 R221 R222 R243 R244
					R245 R273 R274 R275 R304 R305 R306 R307 R314 R317 R321
89	RES. CHIP 10K ohm +-5%(J) 1/16W (1005)	WR04X103JTL	58	58	R324 R325 R326 R335 R336 R337 R339 R340 R341 R346 R356
					R446
					R447 R448 R705 R706 R708 R709 R710 R800 R816 R817 R839
90	RES. CHIP 12K ohm +-5%(J) 1/16W (1005)	WR04X123JTL	1	1	R883
91	RES. CHIP 20K ohm +-5%(J) 1/16W (1005)	WR04X203JTL	1	1	R450
92	RES. CHIP 22K ohm +-5%(J) 1/16W (1005)	WR04X223JTL	4	4	R853 R854 R892 R893
	RES. CHIP 30K ohm +-5%(J) 1/16W (1005)	WR04X303JTL	1	1	R867
	RES. CHIP 56K ohm +-5%(J) 1/10W (1608)	WR06X563JTL	4	4	R684 R685 R686 R687
	RES. CHIP 47K ohm +-5%(J) 1/16W (1005)	WR04X473JTL	8	8	R104 R105 R108 R109 R351 R840 R945 R963
96	RES. CHIP 47K ohm +-5%(J) 1/10W (1608)	WR06X473JTL	5	5	R900 R901 R902 R912 R916
97	RES. CHIP 100K ohm +-5%(J) 1/16W (1005)	WR04X104JTL	15	15	R323 R613 R679 R680 R681 R682 R683 R701 R919 R920 R927 R928 R934 R947 R953
98	RES. CHIP 200K ohm +-5%(J) 1/16W (1005)	WR04X204JTL	1	1	R903
-	RES. CHIP 1M ohm +-5%(J) 1/10W (1608)	WR06X105JTL	2	2	R835 R836
	RES. CHIP 44.2 ohm +-1%(F) 1/16W (1005)	WR04X44R2FTL	2	_	R235 R237
	RES. CHIP 240 ohm +-1%(F) 1/16W (1005)	WR04X2400FTL	1	1	R101
102	RES. CHIP 1.2K ohm +-1%(F) 1/16W (1005)	WR04X1201FTL	1	1	R233
103	RES. CHIP 10K ohm +-1%(F) 1/16W (1005)	WR04X1002FTL	6	6	R242 R805 R814 R845 R896 R906
104	RES. CHIP 30K ohm +-1%(F) 1/16W (1005)	WR04X3002FTL	1	1	R895
105	RES. CHIP 13K ohm +-1%(F) 1/10W (1608)	WR06X1302FTL	1	1	R908
106	RES. CHIP 49.9K ohm +-1%(F) 1/16W (1005)	WR04X4992FTL	1	1	R905
107	RES. CHIP 82K ohm +-1%(F) 1/16W (1005)	WR04X8202FTL	2	2	R241 R844
108	RES. CHIP 182K ohm +-1%(F) 1/16W (1005)	WR04X1823FTL	1	1	R932
109	RES. CHIP 412K ohm +-1%(F) 1/16W (1005)	WR04X4123FTL	1	1	R930
110	RES. CHIP 475K ohm +-1%(F) 1/10W (1608)	WR06X4753FTL	1	1	R907
111	RES. CHIP 604K ohm +-1%(F) 1/16W (1005)	WR04X6043FTL	2	2	R922 R924
	RES. CHIP 634K ohm +-1%(F) 1/16W (1005)	WR04X6343FTL	2	2	R921 R923
	RES. CHIP 806K ohm +-1%(F) 1/16W (1005)	WR04X8063FTL	2	2	R929 R931
	RES. CHIP 1M ohm +-1%(F) 1/16W (1005)	WR04X1004FTL	1	1	R238
115	RES. CHIP 0 ohm +-5%(J) 1/4W (3216)	WR12X000PTL	8	8	R621 R647 R677 R889 R935 R936 R937 R938
			59		R200 R201 R203 R204 R206 R207 R208 R220 R223 R224 R227
					R228 R234 R236 R239 R240 R246 R258 R259 R267 R300
116	RES. CHIP (1005)	NC		59	R302 R303 R318 R338 R347 R348 R353 R360 R361 R411
	TILES. OTHIR (1993)				R433 R465 R467 R611 R612 R700 R707 R718 R721 R749 R750
					R801 R812 R831 R832 R875 R882 R884 R891 R894 R933 R946
	, ,				RQS0
-	RES. CHIP (1608)	NC	1	1	2000 2010 2070 2077
118	RES. CHIP (3216)	NC	4	4	R620 R646 R676 R957
119	CAP. CERAMIC CHIP (1005)	NC	24	24	C207 C208 C209 C210 C408 C409 C515 C542 C557 C703 C708 C715 C725 C821 C822 C823 C824 C825 C921 C924
			[C927 C931 C934 C937
120	CAP. CERAMIC CHIP (2012)	NC	2	2	C204 C559
121	EMIFIL(Inductor type) Chip Ferrite Bead	BLM15PD121SN1	4	4	FB500 FB502 FB503 FB505
122	Multilayer Chip Varistor	NC	1	1	V701
123	Crystal 32.768KHZ	FC-135	1	1	X202
124	General Purpose Transistor	MMBT2222ALT3G	1	1	Q800
125	Dielectric Chip Antenna	AMAN301512ST01	2	2	ANT700 ANT701
126	HDMI-D 0.4mm Pitch Right Angle SMD Hybrid Type	FD04003	1	1	CONN200
127	Micro SD CARD CONNECTOR	502570-0893	1	1	CONN300
128	Micro USB Receptable	GU073-5P-SD	3	3	CONN400 CONN401 CONN901
129	Wire to Board Receptable 2PIN	53398-0271	2	2	CONN600 CONN601
130	3⊒ DC-JACK	LA-0031(1.3파이 사용)	1	1	J900
131	WAFER	12505WR05	1	1	СОИИ900
132	Side Push Type Switch	SKRTLAE010	2	2	SW800 SW801
133	Shield Can Clip	PTC0704	8	8	
	수삽자재				
1	SUPER CAPACITOR	VEC2R7106QA	2	2	C804 C805
2	Electret Condenser Microphone with wire(50mm)	BGO-415L30-C1033	2	2	
-	•				•

BOM SHEET		OM SHEET	MODEL NAME		ELS-1000		
Dej	part./Name	H/W	COLOR				
	Date	2014.07.25	VERSION				
P	Reference	Rev 00	Total SMT		1		
NO	ı	TEM (DESCRIPTION)	MAKER P/N	Q'ty	Q'ty Total Refernce Number		
	DOCKING B'd						
1	PCB		ELS-1000-CRADLE	1	1		
2	2 EMIFIL(Inductor type) Chip Ferrite Bead		BLM18PG121SN1	1	1	FB100	
3	3 CAP. CERAMIC CHIP 100nF (1005)		EMK105B7104KV-F	1	1	C100	
4	4 TANTAL_CAP 47uF / 10V (3528)-B TYPE		TAJB476K010RNJ	1	1	TA100	
5	5 BATTERY CONNECTOR		C01_7491_A340	1	1	CONN101	
6	6 WAFER		12505WS05	1	1	CONN100	
7	7						

	BOM SHEET		MODEL NAME		ELS-1000		
Dej	oart./Name	H/W	COLOR				
	Date	2014.07.25	VERSION				
P	eference	Rev 00	Total SMT	1		1	
NO	ı	TEM (DESCRIPTION)	MAKER P/N	Q'ty	Q'ty Total Refernce Number		
	DOCKING B'd						
1	1 PCB		ELS-1000-ANDR_GENDER	1	1		
2	2 EMIFIL(Inductor type) Chip Ferrite Bead		BLM18PG121SN1	1	1	FB100	
3	3 CAP. CERAMIC CHIP 100nF (1005)		EMK105B7104KV-F	1	1	C100	
4	4 CAP. CERAMIC CHIP 22uF (2012)		JMK212BJ226MG-T	1	1	C101	
5	5 RES. CHIP 0 ohm +-5%(J) 1/16W (1005)		WR04X000PTL	1	1	R100	
6	6 Micro USB Connector Plug		BR4035-0655-PA	1	1	CONN101	
7	7						