

Chapter

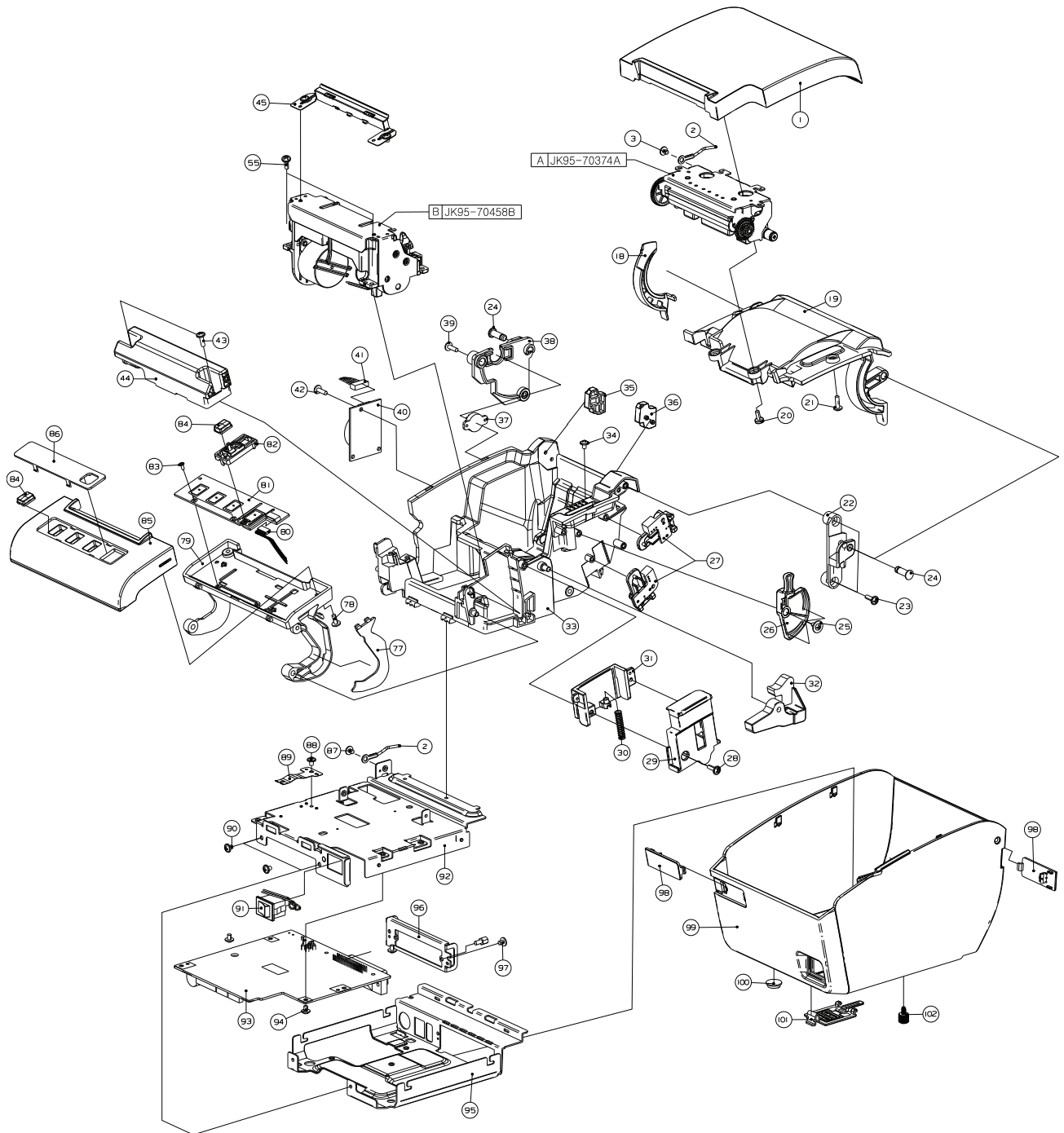
8

Exploded Views and Parts List

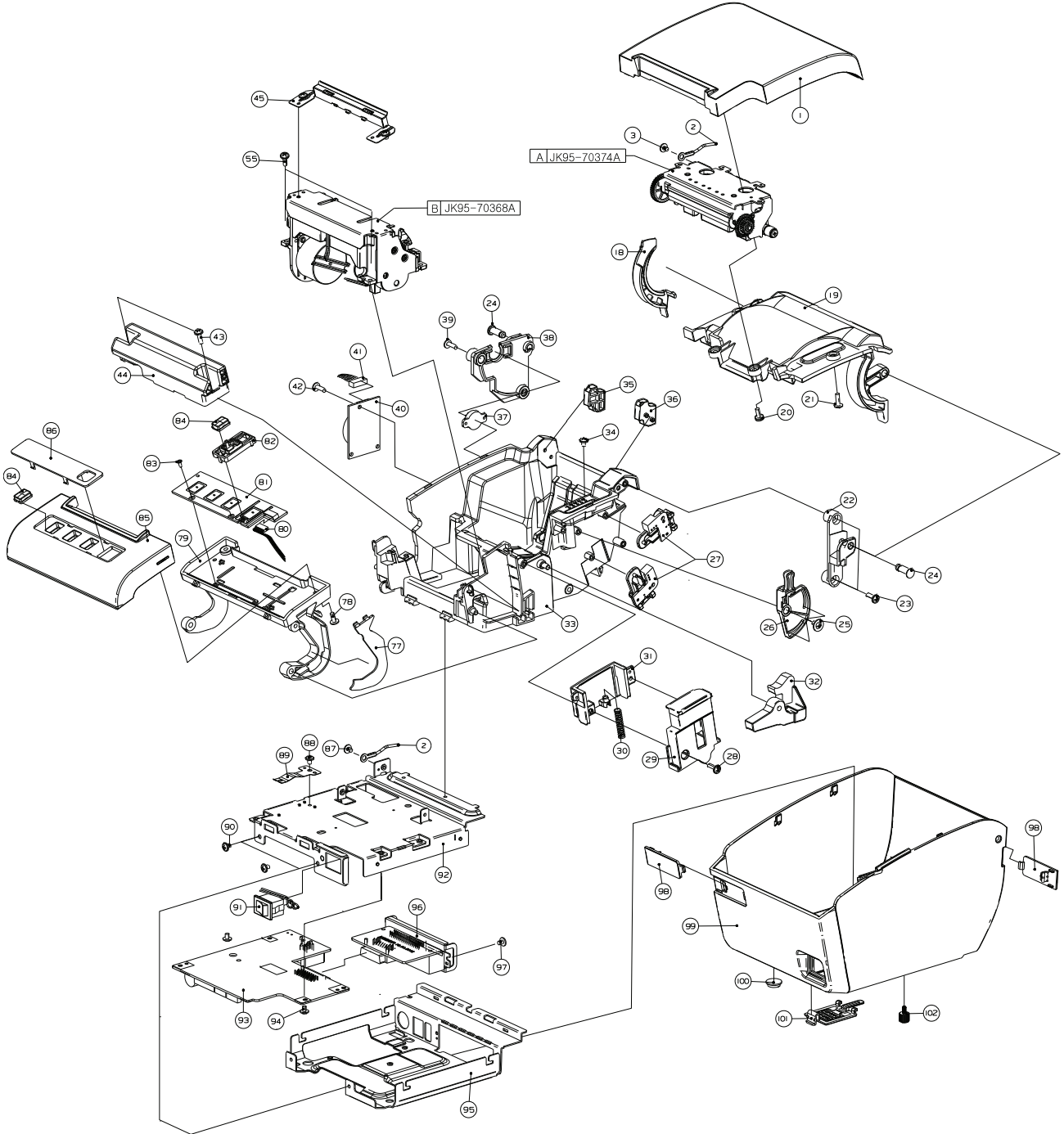
- 8.1 Exploded View(ELLIX30 LED TYPE)
- 8.2 Exploded View(ELLIX40 LED TYPE)
- 8.3 Exploded View(ELLIX40 LCD TYPE)
- 8.4 Exploded View(Mechanism)
- 8.5 Parts List
- 8.6 Lubrication Points

8. Exploded Views and Parts List

8.1 Exploded View(ELLIX30 LED TYPE)

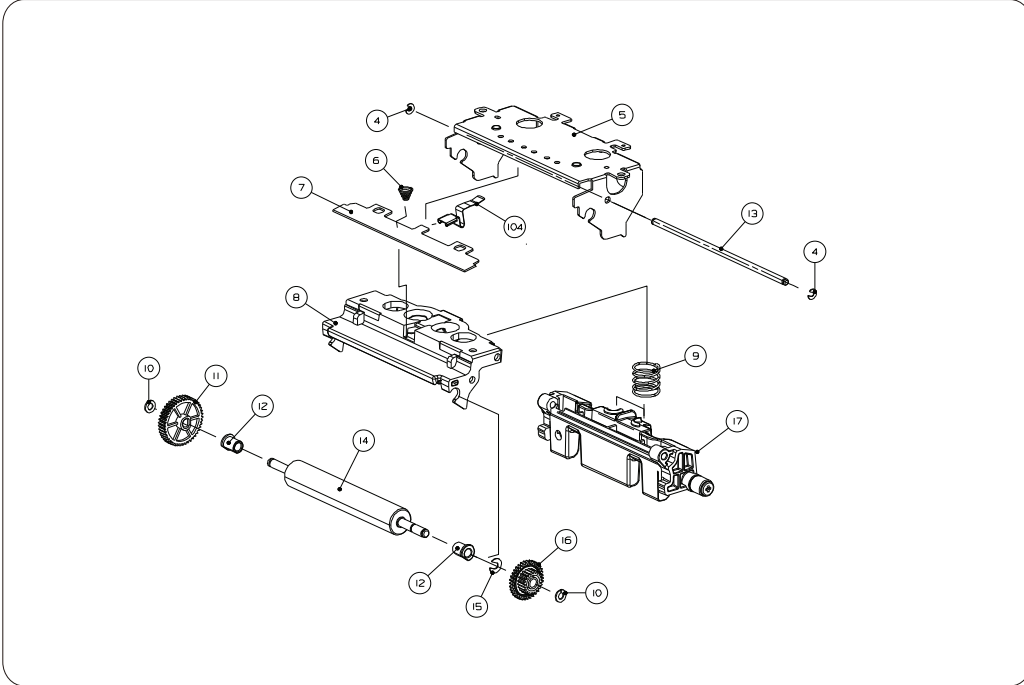


8.2 Exploded View (ELLIX40 LED TYPE)

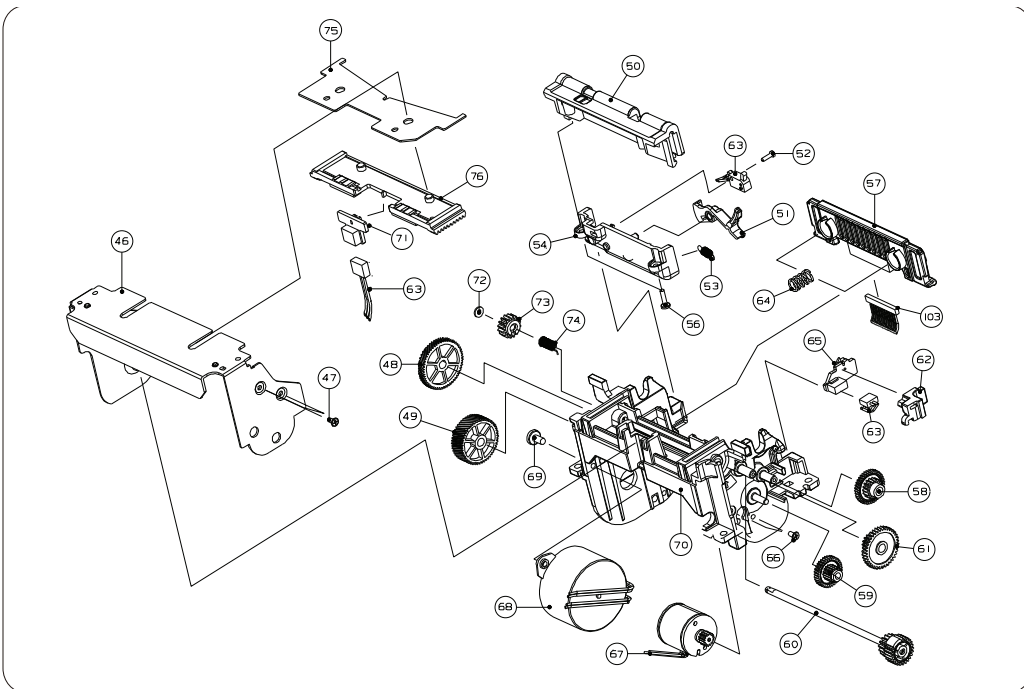


8.4 Exploded View (Mechanism)

8.4.1 ROLLER ASSY(JK95-70374A)



8.4.2 PRINTER ASSY(JK95-70458B/JK95-70368A)



8. Exploded Views and Parts List

8.5 Parts List

No.	Code No.	Description	Specification	Q'ty	Remark	Serviceable
1	JK72-20567A	PMO-COVER OPEN	HIPS, IVORY	1		Y
	JK72-20567B	PMO-COVER OPEN	HIPS, BLACK	1		Y
2	JK39-40891A	HARNESS-GND:AUTOCUT	G/Y,UL1015#18,320mm	1		Y
3	S600300008A	SCREW-TAPTITE	PWH,M3,L6	1		Y
4	S604400007A	E-RING Φ 2	Φ 2	2		Y
5	JK70-20196A	IPR-COVER ROLLER	SUS T1.0	1		Y
6	JK70-30030A	SPRING-FIXED BLADE	SUS	3		Y
7	JK70-20199A	IPR-FIXED BLADE	-	1		Y
8	JK72-20496A	PMO-FRAME ROLLER	PC, BLACK	1		Y
9	JK70-30032A	SPRING-BRKT LOCK	-	2		Y
10	S603100005A	POLY WASHER	ID Φ 3.2,OD Φ 6,T0.5,RED	2		Y
11	JK72-20171A	PMO-GEAR ROLLER	POM, BLACK	1		Y
12	JK70-70089A	ICT-BUSHING	-	2		Y
13	JK70-70059A	ICT-SHAFT HINGE	SUS	1		Y
14	JK73-11039A	PLATEN-ROLLER	SILICONE RUBBER, BLACK	1		Y
15	S604400005A	E-RING Φ 3	Φ 3	1		Y
16	JK72-20506A	PMO-GEAR REDUCTION 21-35	POM, BLACK	1		Y
17	JK95-70739A	ASSY BRKT LOCK	-	1		Y
18	JK72-20588A	PMO-CAP HINGE	ABS, BLACK	1		Y
19	JK72-20568A	PMO-COVER HINGE	PC+ABS, BLACK	1		Y
20	S600100054A	SCREW-MACHINE	BH,+,M3,L8,NYLON PATCH,WHITE	2		Y
21	S600300020A	SCREW-TAPTITE	BH,+,M3,L10,BK	2		Y
22	JK72-20572A	PMO-HOLDER HINGE R	PC, BLACK	1		Y
23	S600200005A	SCREW-TAPPING	PWH,+,2,M3,L10,ZPC(YEL),SM	2		Y
24	JK70-70062A	ICT-PIN HINGE	-	2		Y
25	S600200023A	SCREW-TAPPING	PWH,+,M3,L6 W Φ 10	3		Y
26	JK72-20571A	PMO-KNOB NEAR END	POM, BLACK	1		Y
27	JK92-01754A	PBA SUB	NEAR P_END,SMD	2		Y
28	S600200005A	SCREW-TAPPING	PWH,+,2,M3,L10,ZPC(YEL),SM	2		Y

8.5 Parts List - continue

No.	Code No.	Description	Specification	Q`ty	Remark	Serviceable
29	JK72-20585A	PMO-COVER BUTTON	HIPS, IVORY	1		Y
	JK72-20585B	PMO-COVER BUTTON	HIPS, BLACK	1		Y
30	JK70-30034A	SPRING-BUTTON	SUS	1		Y
31	JK72-20586A	PMO-GUIDE BUTTON	PC, BLACK	1		Y
32	JK72-20587A	PMO-LEVER OPEN	PC, BLACK	1		Y
33	JK72-20569A	PMO-PAPER SUPPLY	ABS, BLACK	1		Y
34	S600300008A	SCREW-TAPTITE	PWH,+,M3,L6	2		Y
35	JK72-20168A	PMO-GUIDE PAPER_L	PC+ABS, BLACK	1		Y
36	JK72-20169A	PMO-GUIDE PAPER_R	PC+ABS, BLACK	1		Y
37	JK75-20144A	OPEN DAMPER	NIFCO, DPG03	1		Y
38	JK72-20573A	PMO-HOLDER HINGE L	PC, BLACK	1		Y
39	S600200005A	SCREW-TAPPING	PWH,+,2,M3,L10,ZPC(YEL),SM	2		Y
40	JK92-01401A	PBA SUB	MELODY	1		N
41	JK39-40673A	HARNESS-MELODY	RJ-11,110mm,TUBE	1		N
42	S600200005A	SCREW-TAPPING	PWH,+,2,M3,L10,ZPC(YEL),SM	3		N
43	S600200005A	SCREW-TAPPING	PWH,+,2,M3,L10,ZPC(YEL),SM	2		Y
44	JK72-20576A	PMO-COVER DUMMY	HIPS, BLACK	1		Y
45	JK95-70460B	ASSY MANUAL CUTTER	-	1		Y
46	JK70-20197A	IPR-COVER FRAME	SUS T1.0	1		Y
47	S600100021A	SCREW-MACHINE	RH,+,M2,L4,ZPC(WHITE)	4		Y
48	JK72-20173A	PMO-GEAR REDUCTION27_57	POM, BLACK	1		Y
49	JK72-20172A	PMO-GEAR IDLE_52	POM, BLACK	1		Y
50	JK72-20498A	PMO-GUIDE PAPER	PC, BLACK	1		Y
51	JK72-20499A	PMO-LEVER SENSOR	POM, BLACK	1		Y
52	S600200035A	SCREW-TAPPING	BH,+,M1.7X8,BLACK	1		Y
53	JK70-30033A	SPRING-SENSOR LEVER	SUS	1		Y
54	JK72-20500A	PMO-HOLDER SENSOR	ABS, BLACK	1		Y
55	S600200005A	SCREW-TAPPING	PWH,+,2,M3,L10,ZPC(YEL),SM	2		Y
56	S600200035A	SCREW-TAPPING	BH,+,M1.7X8,BLACK	2		Y
57	JK95-70459B	ASSY TPH	-	1		Y

8. Exploded Views and Parts List

8.5 Parts List - continue

No.	Code No.	Description	Specification	Q'ty	Remark	Serviceable
58	JK72-20505A	PMO-GEAR REDUCTION 17-39	POM, BLACK	1		Y
59	JK72-20504A	PMO-GEAR REDUCTION 17-35	POM, BLACK	1		Y
60	JK95-70369A	ASSY CUTTER GEAR	-	1		Y
61	JK72-20507A	PMO-GEAR REDUCTION 17-38	POM, BLACK	1		Y
62	JK72-20501A	PMO-HOLDER COVER SENSOR	ABS, BLACK	1		Y
63	JK95-70372A	ASSY-SENSOR WIRE	-	1		Y
64	JK70-30029A	SPRING-TPH	SWPB	2		Y
65	JK92-01755C	PBA SUB	COVER,ARRAY,SVC	1		Y
66	S600100053A	SCREW-MACHINE	RH,+,M2,L4,WHITE,HI_LOCK	2		Y
67	S310100011A	UNIT MOTOR ASSY	PI20, PAPER CUTTING	1		Y
68	S310100011B	UNIT STEP MOTOR	PI35, FEED MOTOR	1	ELLIX30	Y
	S310100005A	UNIT STEP MOTOR	PI42, FEED MOTRO	1	ELLIX40	Y
69	S600100018A	SCREW-MACHINE	BH,+,M3,L6,BLK	2		Y
70	JK70-20194A	IPR-FRAME MAIN	-	1		Y
71	JK92-01755B	PBA SUB:PBA SUB	ACUT HOME,ARRAY,SVC	1		Y
72	S603100014A	POLY WASHER	IDΦ2.1,ODΦ5,T0.5,BLUE	1		Y
73	JK72-20509A	PMO-GEAR RACK	POM, BLACK	1		Y
74	JK70-30031A	SPRING-MOVABLE BLADE	SUS	1		Y
75	JK70-20198A	IPR-MOVABLE BLADE	-	1		Y
76	JK72-20497A	PMO-RACK GEAR CUTTER	POM, BLACK	1		Y
77	JK72-20589A	PMO-CAP HOLDER	ABS, BLACK	1		Y
78	S600200006A	SCREW-TAPPING	PWH,+,2,M3,L8,WHITE	2		Y
79	JK72-20580A	PMO-HOLDER DISPLAY	PC+ABS, BLACK	1		Y
80	JK39-40888A	HARNESS-LED	6P, 200mm,AT TAPE	1		Y
	JK39-40887A	HARNESS-LCD	15P, 250mm,AT TAPE	1	ELLIX40	Y
81	JK92-01757A	PBA SUB	LED&SWITCH,ARRAY	1		Y
	JK92-10005A	PBA SUB	LCD&SWITCH,ARRAY	1	ELLIX40	Y
82	JK72-20583A	PMO-HOLDER BUTTON	PC+ABS, BLACK	1		Y
83	S600300030A	SCREW-DELTA PT	RH,+,M2,L5,BLACK	2		Y
84	JK72-20582A	PMO-CAP LED	PMMA, MILK	4		Y
85	JK72-20584A	PMO-COVER LED	HIPS, IVORY	1		Y

8.5 Parts List - continue

No.	Code No.	Description	Specification	Q'ty	Remark	Serviceable
85	JK72-20584B	PMO-COVER LED	HIPS, BLACK	1	ELLIX40	Y
	JK72-20581A	PMO-COVER LCD	HIPS, IVORY	1		Y
	JK72-20581B	PMO-COVER LCD	HIPS, BLACK	1		Y
86	JK72-20590A	PMO-WINDOW LED	ABS/ FILM, BLACK	1	ELLIX30	Y
	JK72-20590C	PMO-WINDOW LED	ABS/ FILM , IVORY	1		Y
	JK72-20590B	PMO-WINDOW LED	ABS/ FILM, BLACK	1	ELLIX40	Y
	JK72-20590D	PMO-WINDOW LED	ABS/ FILM, IVORY	1		Y
	JK72-20591A	PMO-WINDOW LCD	ABS/ FILM, BLACK	1		Y
	JK72-20591B	PMO-WINDOW LCD	ABS/ FILM, IVORY	1		Y
87	S600300008A	SCREW-TAPTITE	PWH,+,S,M3,L6,WHITE	1		Y
88	S600300008A	SCREW-TAPTITE	PWH,+,S,M3,L6,WHITE	1		Y
89	JK70-20235A	IPR PLATE GROUND PRT	-	1		Y
90	S600300008A	SCREW-TAPTITE	PWH,+,S,M3,L6,WHITE	2		Y
91	JK39-40688C	HARNESS-POWER S/W	NEWNET,2P,270mm,HF606	1		Y
92	JK70-20233A	IPR BRKT PCB UPPER	SECC,T1.0	1		Y
93	JK92-10007A	PBA MAIN	RS232,DSUB9,ARRAY	1	ELLIX30	Y
	JK92-01759B	PBA MAIN	RS232,DSUB25,ARRAY	1		Y
	JK92-01759C	PBA MAIN	PARALLEL,ARRAY	1		Y
	JK92-10091A	PBA MAIN	ETHERNETII&RS232 COMBO	1		Y
	JK92-10006A	PBA MAIN	LCD,ARRAY	1	ELLIX40	Y
	JK92-01758B	PBA MAIN	LED,ARRAY	1		Y
94	S600300008A	SCREW-TAPTITE	PWH,+,S,M3,L6,WHITE	4		Y
95	JK70-20234A	IPR BRKT PCB LOWER	SECC,T1.0	1		Y
96	JK70-20043A	IPR-BRKT PARALLER	SECC,T1.0	1	ELLIX30	N
	JK70-20043B	IPR-BRKT RS-232C	SECC,T1.0	1		N
	JK70-20043D	IPR-BRKT WIREL1ESS	SECC,T1.0	1		N
	JK92-01350A	PBA SUB-I/F	IEEE-1284,ELLIX 20,STD	1	ELLIX40	N
	JK92-01358A	PBA SUB-I/F	SERIAL COMBO,ELLIX20,KOR	1		N

8. Exploded Views and Parts List

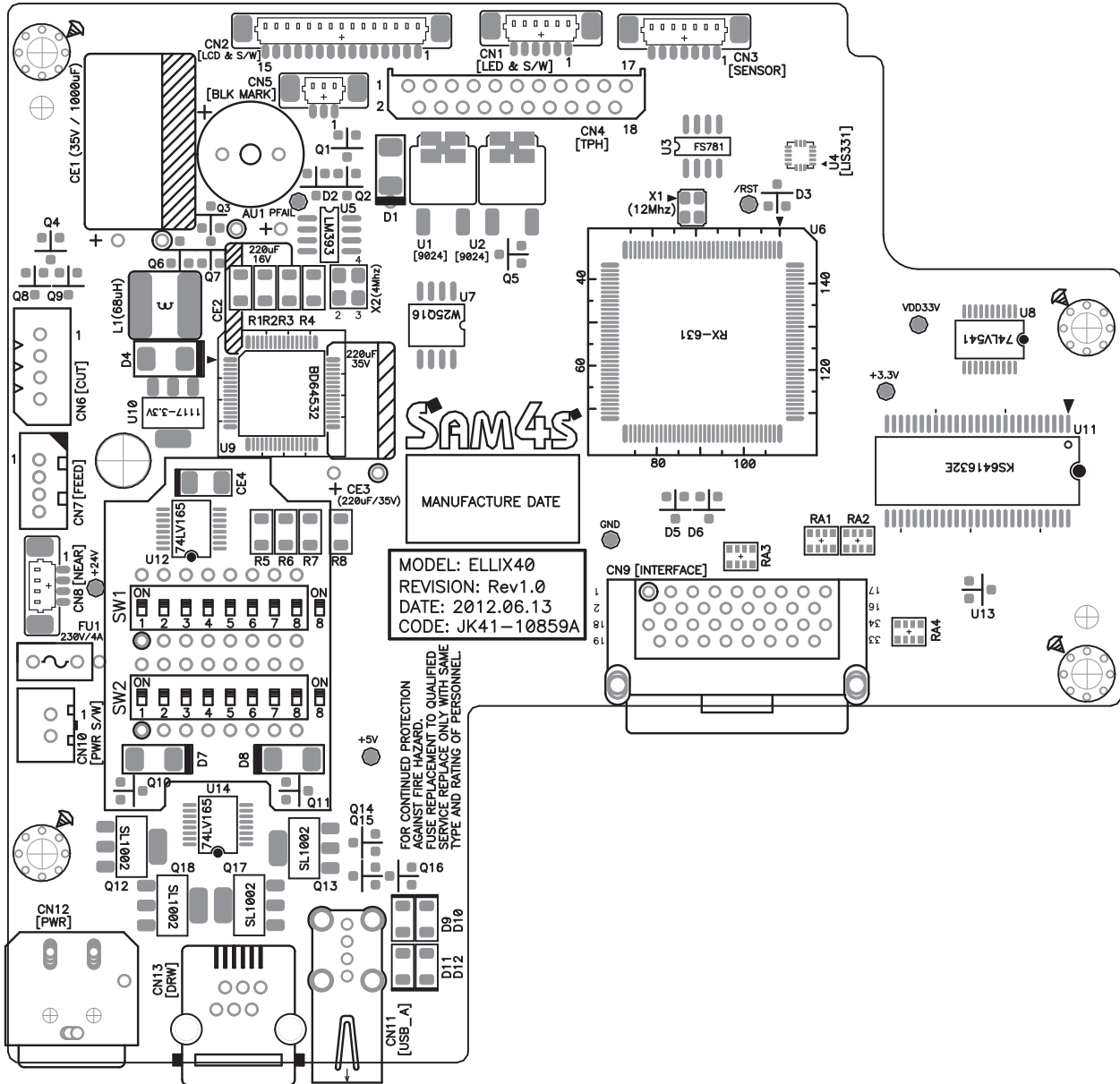
8.5 Parts List - continue

No.	Code No.	Description	Specification	Q'ty	Remark	Serviceable
96	JK92-10004A	PBA SUB-I/F	WLAN,ELLIX40,STD	1	ELLIX40	N
	JK92-01710A	PBA SUB-I/F	ETHERNET-II,ELLIX20II,STD	1		N
	JK92-01351B	PBA SUB-I/F	RS-232C,ELLIX 20,DIP SW	1		N
	JK70-20043E	IPR-BRKT BLANK	SECC,T1.0	1		N
97	S600300008A	SCREW-TAPTITE	PWH,+S,M3,L6,WHITE	2		Y
98	JK72-20577A	PMO-COVER BRAND	PC+ABS, BLACK	2		Y
99	JK72-20575A	PMO-CASE LOWER	HIPS, IVORY	1		Y
	JK72-20575B	PMO-CASE LOWER	HIPS, BLACK	1		Y
100	JK73-10004A	FOOT-RUBBER	-	2		Y
101	JK72-20579A	PMO-COVER DIP SW	ABS, IVORY	1		Y
	JK72-20579B	PMO-COVER DIP SW	ABS, BLACK	1		Y
102	S600100037A	SCREW-MACHINE	HAND:M3,L4,HT2,HD8	1		Y
103	JK39-40554A	CBF SIGNAL-PRINTER FFC	21P,120MM	1		Y
104	JK70-20243A	IPR-PLATE GND BLADE	-	1		Y
A	JK95-70374A	ASSY PRINTER ROLLER	-	1		Y
B	JK95-70458B	ASSY PRINTER MAIN:ELLIX30	-	1	ELLIX30	Y
	JK95-70368A	ASSY PRINTER MAIN:ELLIX40	-	1	ELLIX40	Y

9. PCB Layout and Part List

9.1 ELLIX40 Main PCB

9.1.1 Layout



9.1.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-10006A	PBA MAIN:ELLIX40,LCD,ARRAY	1	ASS'Y	Y
JK92-01758B	PBA MAIN:ELLIX40,LED,ARRAY			
S2401000132	C-AL:1000uF,35V,RADIAL,φ12.5*20L,RoHS	1	CE1	Y
S2401000855	C-AL:220uF,20%,35V,RADIAL,Ø8×11.5L	1	CE3	Y
S2401000860	C-AL:220uF,20%,16V,TP,6.3x11mm	1	CE2	Y
S3002001027	BUZZER-PIEZO:85dB,1.5V,24mA,2.048KHz,BK	1	AU1	Y
S3601000420	FUSE:250V,4A,SS-5	1	FU1	Y
S3708001390	CONNECTOR-FPC:21P,1R,1.25mm,ST,WHITE,	1	CN4	Y
S3711000961	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGH	1	CN6	Y
S3711003410	CONNECTOR-HEADER:BOX,4P,1R,2mm,STRAIGHT,	1	CN7	Y
S3711004100	WAFER;BOX-HEADER,1R,2P,2.5mm,ST,WHITE,	1	CN10	Y
S3712000048	CONNECTOR-USB HOST:USB A TYPE,DIP,AN	1	CN11	Y
S3712000073	CONN-STACKING:ELI 30,RA34P,0.8mm,AN,DDK	1	CN9	Y
S3722001034	JACK-MODULAR:6P/6C,-,-,ANGLE,-,-,GRAY,AU	1	CN13	Y
S3722001036	JACK-DC POWER:3P,CJ214N-3	1	CN12	Y
S3407000182	SW;DIP,16P,DIP,ST	2	SW1,SW2	Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	4	D2,D3,D5,D6	Y
S0402001189	DIODE-RECTIFIER:S1G-E3,M4,400V	3	D1,D7,D8	Y
S0404001051	DIODE-SCHOTTKY:SK14,40V,1A,DO-214AA,	1	D4	Y
S0501000279	TR-SMALL SIGNAL:KSA1182Y,PNP,150mW,SOT23	4	Q3,Q7,Q14,Q15	Y
S0501000457	TR-SMALL SIGNAL:MMBT2222A,NPN,350MW,SOT-	7	Q1,Q2,Q5,Q6,Q10,Q11, Q16	Y
S0502000400	TR-POWER;SL1002,NPN,3A,10W,SOT-23	4	Q12,Q13,Q17,Q18	Y
S0505000145	POWER MOSFET:SFR9024TF,D-PAK,-60V,-7.8A	2	U1,U2	Y
S0801000633	IC-CMOS;SN74LV165,SHIFT,TSOP	2	U12,U14	Y
S0801001123	IC-CMOS LOGIC:74LVC541AP,BUFFER,TSSOP20P	1	U8	Y
S0903001181	IC-CPU:R5F5631ECDFB,LQFP144P	1	U6	Y
S1003001238	IC-MOTOR DRIVER:BD64532EKV,TSSOP,64P	1	U9	Y
S1106001231	IC-SDRAM:4Mx16BIT,54P,K4S641632N-LC60	1	U11	Y
S1107001150	IC-FLASH:W25Q64BVSSIG,SERIAL FLASH,64Mb	1	U7	Y
S1202000164	IC-VOLTAGE COMPARATOR:KA393,SOP,8P,1.27m	1	U5	Y

9. PCB Layout and Part List

9.1.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S1203000500	IC-RESET;AME8500AEETAE29Z,SOT-23,3P	1	U13	Y
S1203001772	IC-REGULATOR;SE1117-3.3V,SOT-223,4P	1	U10	Y
S0904001282	IC-CONTROLLER;LIS331DLH,LGA ,16P,MOTION	1	U4	Y
S1205001771	IC-CLOCK GENERATOR;CYIFS781BSXCT,SOIC,8P	1	U3	Y
S2008000001	R-CHIP:0 OHM,5%,1/10W,1608	4	R41,R76~R78	N
S2008000005	R-CHIP:33 OHM,5%,1/10W,1608	2	R97,R98	N
S2008000008	R-CHIP:100 OHM,5%,1/10W,1608	23	R9,R11~R13,R23,R26,R28, R83,R89,R99,R102~R113, R136	N
S2008000012	R-CHIP:200 OHM,5%,1/10W,1608	3	R24,R42,R43	N
S2008000016	R-CHIP:300 OHM,5%,1/10W,1608	3	R21,R67,R147	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	11	R17,R18,R25,R39,R63,R65, R126,R137,R139,R144,R146	N
S2008000027	R-CHIP:1.2KOHM,5%,1/10W,1608	1	R57	N
S2008000028	R-CHIP:1.5KOHM,1%,1/10W,1608,1%	3	R52,R84,R143	N
S2008000034	R-CHIP:3.3KOHM,5%,1/10W,1608	1	R30	N
S2008000037	R-CHIP:4.7KOHM,1%,1/10W,1608,1%	7	R29,R31,R45,R48,R58,R73, R101	N
S2008000040	R-CHIP:6.2KOHM,5%,1/10W,1608	1	R93	N
S2008000044	R-CHIP:10KOHM,1%,1/10W,1608,1%	50	R10,R14~R16,R20,R22,R27, R32,R33,R38,R49,R59,R60, R61,R62,R66,R74,R75,R79, R80,R81,R85~R88,R95,R96, R100,R114~R122,R127~R13 5,R138,R140,R145,R148	N
S2008000045	R-CHIP:12KOHM,1%,1/10W,1608,1%	1	R50	N
S2008000046	R-CHIP:15KOHM,5%,1/10W,1608	4	R35,R82,R141,R142	N
S2008000047	R-CHIP:18KOHM,1%,1/10W,1608,1%	2	R55,R56	N
S2008000048	R-CHIP:20KOHM,5%,1/10W,1608	2	R36,R37	N
S2008000054	R-CHIP:36KOHM,1%,1/10W,1608,1%	6	R51,R53,R54,R123,R124,R1 25	N

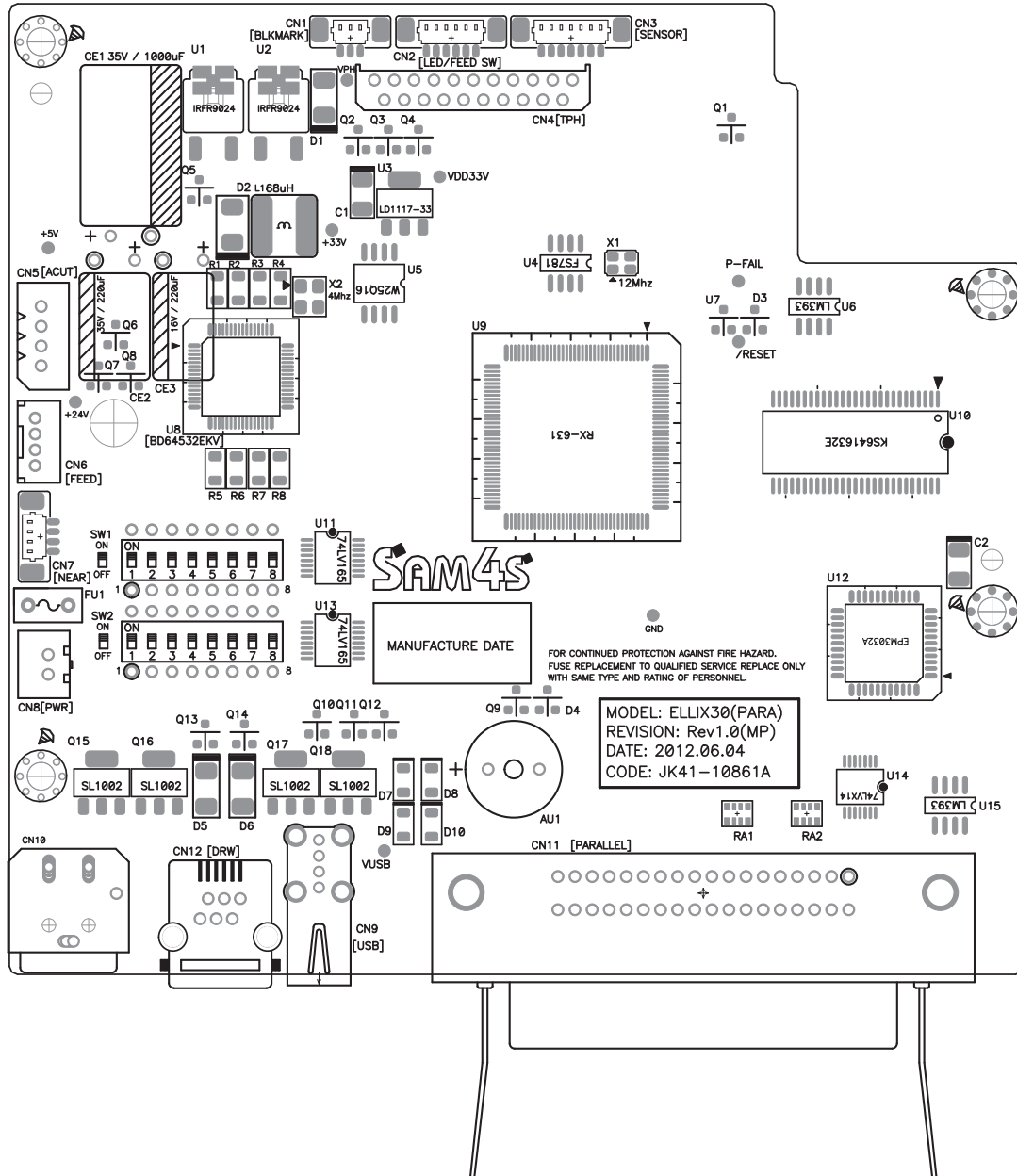
9.1.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S2008000065	R-CHIP:150KOHM,1%,1/10W,1608,1%	2	R34,R40	N
S2010000003	R-CHIP:1.1OHM,1%,1/4W,3216	4	R5~R8	Y
S2010000005	R-CHIP:2.2OHM,1%,1/4W,3216	4	R1~R4	Y
S2011001093	R-NETWORK:100ohm,5%,1/16W,L,CHIP,8P,TP	4	RA1~RA4	Y
S2203000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,	4	C4,C42,C43,C51	N
S2204000004	C-CERAMIC,CHIP:22pF,5%,50V,1608	2	C12,C16	N
S2204000010	C-CERAMIC,CHIP:100pF,5%,50V,1608	6	C28,C35,C36,C54,C55,C56	N
S2204000017	C-CERAMIC,CHIP:820pF,5%,50V,1608	1	C8	N
S2204000023	C-CERAMIC,CHIP:10nF,10%,50V,X7R,1608	1	C10	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	46	C1~C3,C5~C7,C9,C11,C13~ C15,C18,C19,C22~C27,C29~ C34,C37~C41,C44~C50,C52, C53,C57~C63	N
S2204000029	C-CERAMIC,CHIP:1uF,+80-20%,16V,Y5V,1608	3	C17,C20,C21	N
S2205000002	C-TANTAL:10uF,16V,3528	1	CE4	Y
S2801003397	CRYSTAL-SMD:12MHz, 30ppm, 12pF	1	X1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	1	L2	N
S3711004118	WAFER;BOX-HEADER,1R, 3P,1.25mm,SMD	1	CN5	Y
S3711004119	WAFER;BOX-HEADER,1R, 4P,1.25mm,SMD,IVY	1	CN8	Y
S3711004121	WAFER;BOX-HEADER,1R, 6P,1.25mm,SMD	1	CN1	Y
S3711004122	WAFER;BOX-HEADER,1R, 7P,1.25mm,SMD	1	CN3	Y
S3711004130	WAFER;BOX-HEADER,1R,15P,1.25mm,ST,SMD	1	CN2	Y
JK27-60104A	L-COIL:IND-680M,68uH,SMD,SM7850 POR	1	L1	Y
JK41-10859A	PCB-MAIN:ELLIX40,FR-4,2L,T1.6	1	PCB	N

9. PCB Layout and Part List

9.2 ELLIX30 Parallel Main PCB

9.2.1 Layout



9.2.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01759C	PBA MAIN: ELLIX30,PARALLEL,ARRAY	1	ASS'Y	Y
S2401000132	C-AL:1000uF,35V,RADIAL,φ12.5*20L,RoHS	1	CE1	Y
S2401000855	C-AL:220uF,20%,35V,RADIAL,Ø8×11.5L	1	CE2	Y
S2401000860	C-AL:220uF,20%,16V,TP,6.3x11mm	1	CE3	Y
S3002001027	BUZZER-PIEZO:85dB,1.5V,24mA,2.048KHz,BK	1	AU1	Y
S3407000182	SWITCH-DIP:8 KNOB,KSD08H,DIP,ST,16P	2	SW1,SW2	Y
S3601000420	FUSE:250V,4A,SS-5	1	FU1	Y
S3701002001	CONNECTOR-PARALLEL:36P,2R,FEMALE,AN,DIP	1	CN11	Y
S3708001390	CONNECTOR-FPC:21P,1R,1.25mm,ST,WHITE,	1	CN4	Y
S3711000961	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGH	1	CN5	Y
S3711004100	WAFER;BOX-HEADER,1R,2P,2.5mm,ST,WHITE,	1	CN8	Y
S3712000048	CONNECTOR-USB HOST:USB A TYPE,DIP,AN	1	CN9	Y
S3712000108	CON-BOX:4P.2mm,1R,ST,20010WS-04	1	CN6	Y
S3722001034	JACK-MODULAR:6P/6C,-,-,ANGLE,-,-,GRAY,AU	1	CN12	Y
S3722001036	JACK-DC POWER:3P,CJ214N-3	1	CN10	Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	2	D3,D4	Y
S0402001189	DIODE-RECTIFIER:S1G-E3,M4,400V	3	D1,D5,D6	Y
S0404001051	DIODE-SCHOTTKY:SK14,40V,1A,DO-214AA,	1	D2	Y
S0501000279	TR-SMALL SIGNAL:KSA1182Y,PNP,150mW,SOT23	4	Q2,Q3,Q10,Q11	Y
S0501000457	TR-SMALL SIGNAL:MMBT2222A,NPN,350MW,SOT-	7	Q1,Q4,Q5,Q9,Q12~Q14	Y
S0502000400	TR-POWER;SL 1002,NPN,3A,10W,SOT-23	4	Q15~Q18	Y
S0505000145	POWER MOSFET:SFR9024TF,D-PAK,-60V,-7.8A	2	U1,U2	Y
S0801000633	IC-CMOS LOGIC:74LV165,SHIFT REGISTER,16P	2	U11,U13	Y
S0801001110	IC-CMOS;74LV14A,INVERTER,TSOP,14P	1	U14	Y
S0903001181	IC-CPU:R5F5631ECDFB,LQFP144P	1	U9	Y
S1003001238	IC-MOTOR DRIVER:BD64532EKV,TSSOP,64P	1	U8	Y
S1103000001	IC-CPLD;EPM3032ATC44-10,TQFP,44P	1	U12	Y
S1106001231	IC-SDRAM:4Mx16BIT,54P,K4S641632N-LC60	1	U10	Y
S1202000164	IC-VOLTAGE COMPARATOR:KA393,SOP,8P,1.27m	2	U6,U15	Y
S1203000500	IC-RESET;AME8500AEETAE29Z,SOT-23,3P	1	U7	Y
S1203001772	IC-REGULATOR:SE1117-3.3V,SOT-223,4P	1	U3	Y

9. PCB Layout and Part List

9.2.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S2008000001	R-CHIP:0 OHM,5%,1/10W,1608	1	R19	N
S2008000005	R-CHIP:33 OHM,5%,1/10W,1608	2	R82,R83	N
S2008000008	R-CHIP:100 OHM,5%,1/10W,1608	12	R11,R15,R22,R23,R39,R45,R52,R55,R84,R86,R117,R139	N
S2008000012	R-CHIP:200 OHM,5%,1/10W,1608	2	R114,R115	N
S2008000016	R-CHIP:300 OHM,5%,1/10W,1608	3	R10,R27,R106	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	8	R9,R25,R28,R104,R108,R109,R111,R121	N
S2008000027	R-CHIP:1.2KOHM,5%,1/10W,1608	1	R60	N
S2008000028	R-CHIP:1.5KOHM,1%,1/10W,1608,1%	2	R54,R57	N
S2008000031	R-CHIP:2.2KOHM,5%,1/10W,1608	2	R120,R138	N
S2008000037	R-CHIP:4.7KOHM,1%,1/10W,1608,1%	23	R29,R38,R43,R72,R73,R74,R113,R119,R122~R136	N
S2008000040	R-CHIP:6.2KOHM,5%,1/10W,1608	1	R53	N
S2008000044	R-CHIP:10KOHM,1%,1/10W,1608,1%	43	R12,R14,R16,R21,R24,R26,R30,R33,R36,R37,R47,R48,R59,R67,R76~R81 R85,R87~R103,R105,R107,R110,R112,R116	N
S2008000045	R-CHIP:12KOHM,1%,1/10W,1608,1%	1	R31	N
S2008000046	R-CHIP:15KOHM,5%,1/10W,1608	4	R35,R56,R58,R75	N
S2008000047	R-CHIP:18KOHM,1%,1/10W,1608,1%	2	R49,R50	N
S2008000048	R-CHIP:20KOHM,5%,1/10W,1608	2	R17,R18	N
S2008000054	R-CHIP:36KOHM,1%,1/10W,1608,1%	1	R32	N
S2008000063	R-CHIP:100KOHM,5%,1/10W,1608	1	R137	N
S2008000065	R-CHIP:150KOHM,1%,1/10W,1608,1%	2	R20,R34	N
S2008000074	R-CHIP:1MOHM,5%,1/10W,1608	1	R44	N
S2010000004	R-CHIP:1.3OHM,1%,1/4W,3216	4	R5~R8	Y
S2010000005	R-CHIP:2.2OHM,1%,1/4W,3216	4	R1~R4	Y
S2011001093	R-NETWORK:100ohm,5%,1/16W,L,CHIP,8P,TP	2	RA1,RA2	Y
S2203000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,	4	C5,C25,C33,C34	N

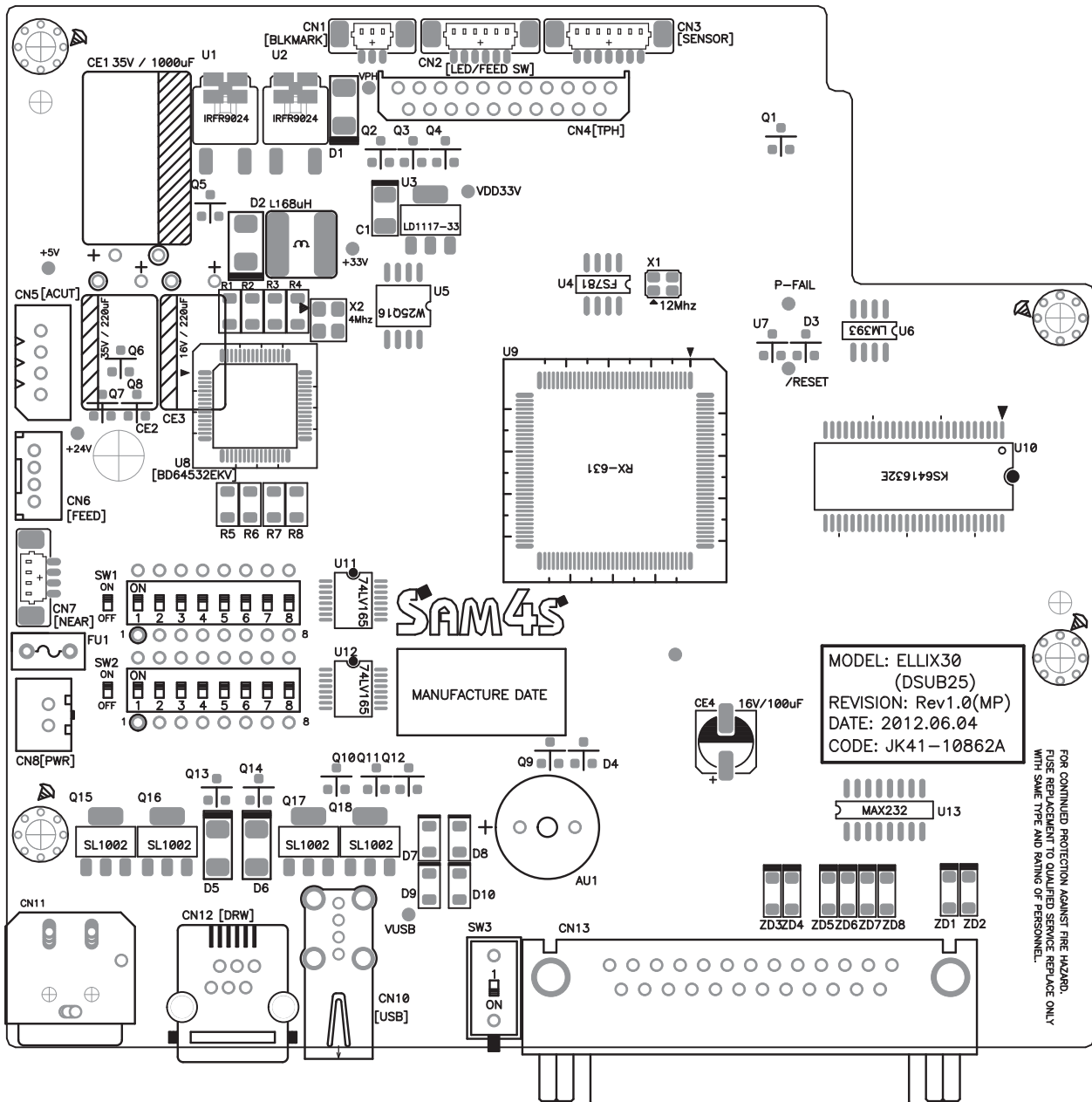
9.2.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S2204000004	C-CERAMIC,CHIP:22pF,5%,50V,1608	19	C12,C13,C54~C66,C70~C73	N
S2204000010	C-CERAMIC,CHIP:100pF,5%,50V,1608	5	C18,C24,C32,C36,C44	N
S2204000023	C-CERAMIC,CHIP:10nF,10%,50V,X7R,1608	1	C10	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,1608	37	C3,C4,C6~C9,C11,C16,C19~ C21,C26~C30,C31,C35,C37~ C43,C45~C53,C67~C69	N
S2204000029	C-CERAMIC,CHIP:1uF,+80-20%,16V,Y5V,1608	2	C22,C23	N
S2205000002	C-TANTAL:10uF,16V,3528	2	C1,C2	Y
S2801003397	CRYSTAL-SMD:12MHz, 30ppm, 12pF	1	X1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	1	L3	N
S3711004118	WAFER;BOX-HEADER,1R, 3P,1.25mm,SMD	1	CN1	Y
S3711004119	WAFER;BOX-HEADER,1R, 4P,1.25mm,SMD,IVY	1	CN7	Y
S3711004121	WAFER;BOX-HEADER,1R, 6P,1.25mm,SMD	1	CN2	Y
S3711004122	WAFER;BOX-HEADER,1R, 7P,1.25mm,SMD	1	CN3	Y
JK27-60104A	L-COIL:IND-680M,68uH,SMD,SM7850 POR	1	L1	Y
JK41-10861A	PCB-MAIN:ELLIX30,PARALLEL,FR-4,2L,T1.6	1	PCB	N

9. PCB Layout and Part List

9.3 ELLIX30 RS232(DSUB25) Main PCB

9.3.1 Layout



9.3.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01759B	PBA MAIN:ELLIX30,RS232,DSUB25,ARRAY	1	ASS'Y	Y
S2401000132	C-AL:1000uF,35V,RADIAL,φ12.5*20L,RoHS	1	CE1	Y
S2401000855	C-AL:220uF,20%,35V,RADIAL,Ø8×11.5L	1	CE2	Y
S2401000860	C-AL:220uF,20%,16V,TP,6.3x11mm	1	CE3	Y
S3002001027	BUZZER-PIEZO:85dB,1.5V,24mA,2.048KHz,BK	1	AU1	Y
S3407000182	SWITCH-DIP:8 KNOB,KSD08H,DIP,ST,16P	2	SW1,SW2	Y
S3407000185	SWITCH-DIP:1 KNOB,YD-01ZAT,DIP,AN,2P	1	SW3	Y
S3601000420	FUSE:250V,4A,SS-5	1	FU1	Y
S3701000155	CONNECTOR-DSUB:25P,2R,FEMALE,AN,neltron	1	CN13	Y
S3708001390	CONNECTOR-FPC:21P,1R,1.25mm,ST,WHITE,	1	CN4	Y
S3711000961	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGH	1	CN5	Y
S3711004100	WAFER;BOX-HEADER,1R,2P,2.5mm,ST,WHITE,	1	CN8	Y
S3712000048	CONNECTOR-USB HOST:USB A TYPE,DIP,AN	1	CN10	Y
S3712000108	CON-BOX:4P.2mm,1R,ST,20010WS-04	1	CN6	Y
S3722001034	JACK-MODULAR:6P/6C,-,-,ANGLE,-,-,GRAY,AU	1	CN12	Y
S3722001036	JACK-DC POWER:3P,CJ214N-3	1	CN11	Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	2	D3,D4	Y
S0402001189	DIODE-RECTIFIER:S1G-E3,M4,400V	3	D1,D5,D6	Y
S0403000756	DIODE-ZENER:BZT52C18,18V,500mW,SOD-123	8	ZD1~ZD8	Y
S0404001051	DIODE-SCHOTTKY:SK14,40V,1A,DO-214AA,	1	D2	Y
S0501000279	TR-SMALL SIGNAL:KSA1182Y,PNP,150mW,SOT23	4	Q2,Q3,Q10,Q11	Y
S0501000457	TR-SMALL SIGNAL:MMBT2222A,NPN,350MW,SOT-	7	Q1,Q4,Q5,Q9,Q12~Q14	Y
S0502000400	TR-POWER;SL1002,NPN,3A,10W,SOT-23	4	Q15~Q18	Y
S0505000145	POWER MOSFET:SFR9024TF,D-PAK,-60V,-7.8A	2	U1,U2	Y
S0801000633	IC-CMOS LOGIC:74LV165,SHIFT REGISTER,16P	2	U11,U12	Y
S0903001181	IC-CPU:R5F5631ECDFB,LQFP144P	1	U9	Y
S1003001238	IC-MOTOR DRIVER:BD64532EKV,TSSOP,64P	1	U8	Y
S1006000133	IC-DRIVER/RECEIVER:232,SOIC,MAX232D E4	1	U13	Y
S1106001231	IC-SDRAM:4Mx16BIT,54P,K4S641632N-LC60	1	U10	Y
S1202000164	IC-VOLTAGE COMPARATOR:KA393,SOP,8P,1.27m	1	U6	Y
S1203000500	IC-RESET;AME8500AEETAE29Z,SOT-23,3P	1	U7	Y

9. PCB Layout and Part List

9.3.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S1203001772	IC-REGULATOR:SE1117-3.3V,SOT-223,4P	1	U3	Y
S2008000001	R-CHIP:0 OHM,5%,1/10W,1608	1	R19	N
S2008000005	R-CHIP:33 OHM,5%,1/10W,1608	2	R82,R83	N
S2008000008	R-CHIP:100 OHM,5%,1/10W,1608	11	R11,R15,R22,R23,R39, R45,R52,R55,R84,R86, R118	N
S2008000012	R-CHIP:200 OHM,5%,1/10W,1608	2	R114,R115	N
S2008000016	R-CHIP:300 OHM,5%,1/10W,1608	3	R10,R27,R106	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	7	R9,R25,R28,R104,R108 ,R109,R111	N
S2008000027	R-CHIP:1.2KOHM,5%,1/10W,1608	1	R60	N
S2008000028	R-CHIP:1.5KOHM,1%,1/10W,1608,1%	2	R54,R57	N
S2008000037	R-CHIP:4.7KOHM,1%,1/10W,1608,1%	7	R29,R38,R43,R72~R74, R113	N
S2008000040	R-CHIP:6.2KOHM,5%,1/10W,1608	1	R53	N
S2008000044	R-CHIP:10KOHM,1%,1/10W,1608,1%	43	R12,R14,R16,R21,R24, R26,R30,R33,R36,R37, R47,R48,R59,R67,R76, ~R81,R85,R87~R103,R 105,R107,R110,R112, R117	N
S2008000045	R-CHIP:12KOHM,1%,1/10W,1608,1%	1	R31	N
S2008000046	R-CHIP:15KOHM,5%,1/10W,1608	4	R35,R56,R58,R75	N
S2008000047	R-CHIP:18KOHM,1%,1/10W,1608,1%	2	R49,R50	N
S2008000048	R-CHIP:20KOHM,5%,1/10W,1608	2	R17,R18	N
S2008000054	R-CHIP:36KOHM,1%,1/10W,1608,1%	1	R32	N
S2008000065	R-CHIP:150KOHM,1%,1/10W,1608,1%	2	R20,R34	N
S2008000074	R-CHIP:1MOHM,5%,1/10W,1608	1	R44	N
S2010000004	R-CHIP:1.3OHM,1%,1/4W,3216	4	R5~R8	Y
S2010000005	R-CHIP:2.2OHM,1%,1/4W,3216	4	R1~R4	Y
S2203000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,	4	C4,C24,C32,C33	N

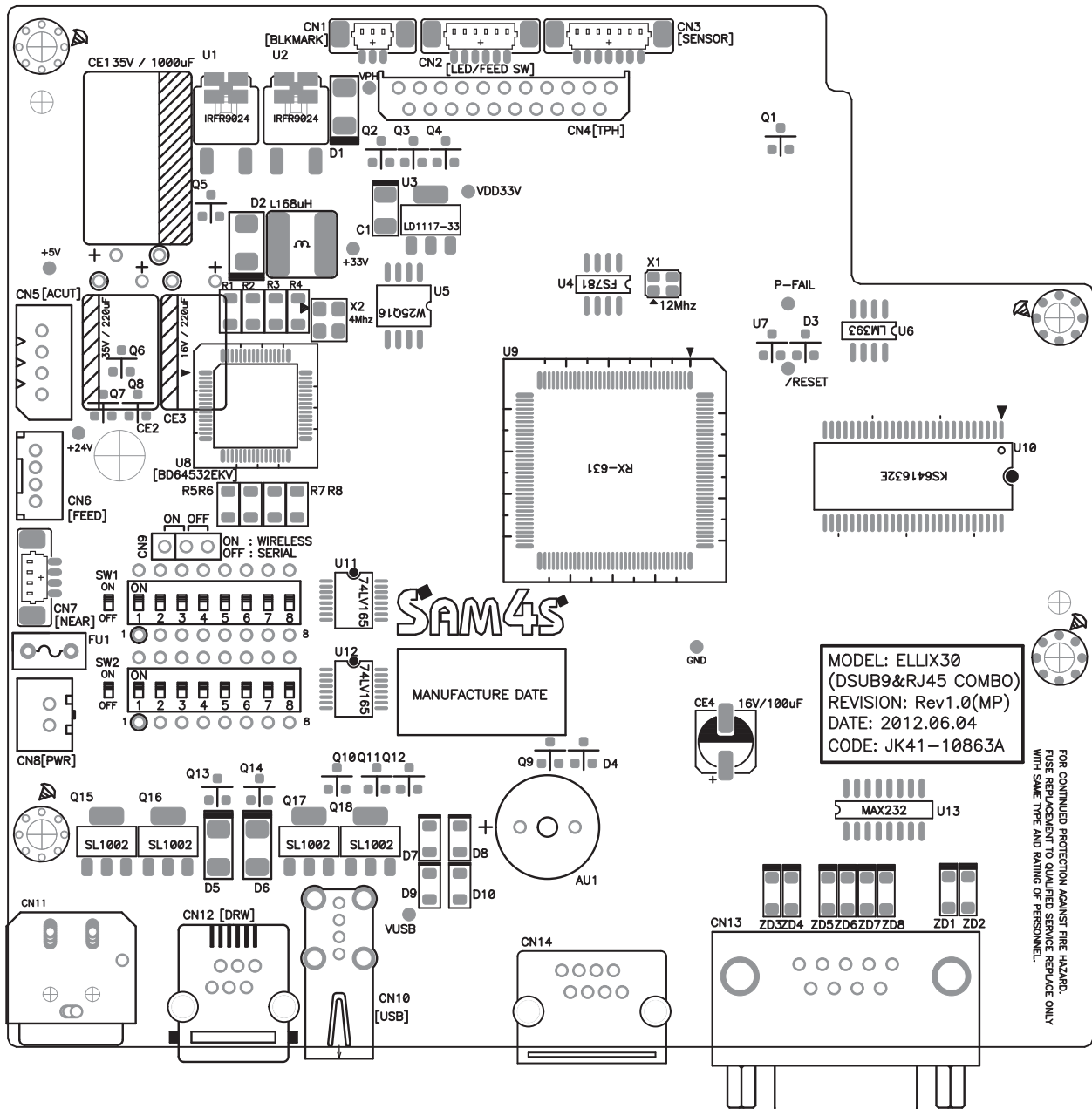
9.3.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S2204000004	C-CERAMIC,CHIP:22pF,5%,50V,1608	2	C11,C12	N
S2204000010	C-CERAMIC,CHIP:100pF,5%,50V,1608	5	C17,C23,C31,C35,C43	N
S2204000015	C-CERAMIC,CHIP:470pF,5%,50V,1608	4	C53,C54,C58,C59	N
S2204000023	C-CERAMIC,CHIP:10nF,10%,50V,X7R,1608	1	C9	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	38	C2,C3,C5~C8,C10,C15, C18~C20,C25~C30,C34 ,C36~C42,C44~C52, C55~C57,C64	N
S2204000029	C-CERAMIC,CHIP:1uF,+80-20%,16V,Y5V,1608	6	C21,C22,C60,C61~C63	N
S2205000002	C-TANTAL:10uF,16V,3528	1	C1	Y
S2402000168	C-AL,SMD:100uF,20%,16V,F60,Ø6.3×5.7L	1	CE4	Y
S2801003397	CRYSTAL-SMD:12MHz, 30ppm, 12pF	1	X1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	6	L3~L8	N
S3711004118	WAFER;BOX-HEADER,1R, 3P,1.25mm,SMD	1	CN1	Y
S3711004119	WAFER;BOX-HEADER,1R, 4P,1.25mm,SMD,IVY	1	CN7	Y
S3711004121	WAFER;BOX-HEADER,1R, 6P,1.25mm,SMD	1	CN2	Y
S3711004122	WAFER;BOX-HEADER,1R, 7P,1.25mm,SMD	1	CN3	Y
JK27-60104A	L-COIL:IND-680M,68uH,SMD,SM7850 POR	1	L1	Y
JK41-10862A	PCB-MAIN:ELLIX30,RS232,DSUB25,FR-4,2L,T	1	PCB	N

9. PCB Layout and Part List

9.4 ELLIX30 RS232(DSUB9&RJ45 COMBO) Main PCB

9.4.1 Layout



9.4.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-10007A	PBA MAIN:ELLIX30,RS232,DSUB9,ARRAY	1	ASS'Y	Y
S2401000132	C-AL:1000uF,35V,RADIAL,φ12.5*20L,RoHS	1	CE1	Y
S2401000855	C-AL:220uF,20%,35V,RADIAL,Ø8×11.5L	1	CE2	Y
S2401000860	C-AL:220uF,20%,16V,TP,6.3x11mm	1	CE3	Y
S3002001027	BUZZER-PIEZO:85dB,1.5V,24mA,2.048KHz,BK	1	AU1	Y
S3407000182	SWITCH-DIP:8 KNOB,KSD08H,DIP,ST,16P	2	SW1,SW2	Y
S3601000420	FUSE:250V,4A,SS-5	1	FU1	Y
S3701000232	CONNECTOR-DSUB:9P,2R,FEMALE,ANGLE,AUF	1	CN13	Y
S3708001390	CONNECTOR-FPC:21P,1R,1.25mm,ST,WHITE,	1	CN4	Y
S3710000111	CONNECTOR-SHUNT:2P,1R,2.54mm,JMHHA01,	1	CN9	Y
S3711000961	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGH	1	CN5	Y
S3711001475	CONNECTOR-HEADER:NOWALL,3P,1R,2.54mm,STR	1	CN9	Y
S3711004100	WAFER;BOX-HEADER,1R,2P,2.5mm,ST,WHITE,	1	CN8	Y
S3712000048	CONNECTOR-USB HOST:USB A TYPE,DIP,AN	1	CN10	Y
S3712000108	CON-BOX:4P,2mm,1R,ST,20010WS-04	1	CN6	Y
S3722000212	JACK-MODULAR:8P/8C,-,N,ANGLE,-,N,GRY,AU5	1	CN14	Y
S3722001034	JACK-MODULAR:6P/6C,-,N,ANGLE,-,N,GRAY,AU	1	CN12	Y
S3722001036	JACK-DC POWER:3P,CJ214N-3	1	CN11	Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	2	D3,D4	Y
S0402001189	DIODE-RECTIFIER:S1G-E3,M4,400V	3	D1,D5,D6	Y
S0403000756	DIODE-ZENER:BZT52C18,18V,500mW,SOD-123	8	ZD1~ZD8	Y
S0404001051	DIODE-SCHOTTKY:SK14,40V,1A,DO-214AA,	1	D2	Y
S0501000279	TR-SMALL SIGNAL:KSA1182Y,PNP,150mW,SOT23	4	Q2,Q3,Q10,Q11	Y
S0501000457	TR-SMALL SIGNAL:MMBT2222A,NPN,350MW,SOT-	7	Q1,Q4,Q5,Q9,Q12~Q14	Y
S0502000400	TR-POWER;SL1002,NPN,3A,10W,SOT-23	4	Q15~Q18	Y
S0505000145	POWER MOSFET:SFR9024TF,D-PAK,-60V,-7.8A	2	U1,U2	Y
S0801000633	IC-CMOS LOGIC:74LV165,SHIFT REGISTER,16P	2	U11,U12	Y
S0903001181	IC-CPU:R5F5631ECDFB,LQFP144P	1	U9	Y
S1003001238	IC-MOTOR DRIVER:BD64532EKV,TSSOP,64P	1	U8	Y
S1006000133	IC-DRIVER/RECEIVER:232,SOIC,MAX232D E4	1	U13	Y
S1106001231	IC-SDRAM:4Mx16BIT,54P,K4S641632N-LC60	1	U10	Y

9. PCB Layout and Part List

9.4.2 Parts List - continue

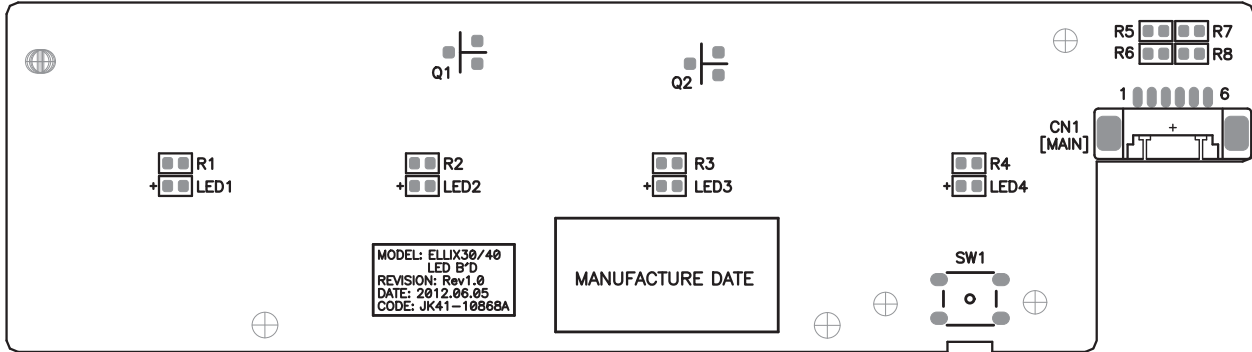
Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S1202000164	IC-VOLTAGE COMPARATOR:KA393,SOP,8P,1.27m	1	U6	Y
S1203000500	IC-RESET;AME8500AEETAE29Z,SOT-23,3P	1	U7	Y
S1203001772	IC-REGULATOR:SE1117-3.3V,SOT-223,4P	1	U3	Y
S2008000001	R-CHIP:0 OHM,5%,1/10W,1608	1	R19	N
S2008000005	R-CHIP:33 OHM,5%,1/10W,1608	2	R82,R83	N
S2008000008	R-CHIP:100 OHM,5%,1/10W,1608	11	R11,R15,R22,R23,R39, R45,R52,R55,R84,R86, R118	N
S2008000012	R-CHIP:200 OHM,5%,1/10W,1608	2	R114,R115	N
S2008000016	R-CHIP:300 OHM,5%,1/10W,1608	3	R10,R27,R106	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	7	R9,R25,R28,R104,R108 ,R109,R111	N
S2008000027	R-CHIP:1.2KOHM,5%,1/10W,1608	1	R60	N
S2008000028	R-CHIP:1.5KOHM,1%,1/10W,1608,1%	2	R54,R57	N
S2008000037	R-CHIP:4.7KOHM,1%,1/10W,1608,1%	7	R29,R38,R43,R72,R73, R74,R113	N
S2008000040	R-CHIP:6.2KOHM,5%,1/10W,1608	1	R53	N
S2008000044	R-CHIP:10KOHM,1%,1/10W,1608,1%	43	R12,R14,R16,R21,R24, R26,R30,R33,R36,R37, R47,R48,R59,R67,R76~ R81,R85,R87~R103, R105,R107,R110,R112, R117	N
S2008000045	R-CHIP:12KOHM,1%,1/10W,1608,1%	1	R31	N
S2008000046	R-CHIP:15KOHM,5%,1/10W,1608	4	R35,R56,R58,R75	N
S2008000047	R-CHIP:18KOHM,1%,1/10W,1608,1%	2	R49,R50	N
S2008000048	R-CHIP:20KOHM,5%,1/10W,1608	2	R17,R18	N
S2008000054	R-CHIP:36KOHM,1%,1/10W,1608,1%	1	R32	N
S2008000065	R-CHIP:150KOHM,1%,1/10W,1608,1%	2	R20,R34	N
S2008000074	R-CHIP:1MOHM,5%,1/10W,1608	1	R44	N
S2010000004	R-CHIP:1.3OHM,1%,1/4W,3216	4	R5~R8	Y

9.4.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S201000005	R-CHIP:2.2OHM,1%,1/4W,3216	4	R1~R4	Y
S2203000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,	4	C4,C24,C32,C33	N
S2204000004	C-CERAMIC,CHIP:22pF,5%,50V,1608	2	C11,C12	N
S2204000010	C-CERAMIC,CHIP:100pF,5%,50V,1608	5	C17,C23,C31,C35,C43	N
S2204000015	C-CERAMIC,CHIP:470pF,5%,50V,1608	4	C53,C54,C58,C59	N
S2204000023	C-CERAMIC,CHIP:10nF,10%,50V,X7R,1608	1	C9	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	38	C2,C3,C5~C8,C10,C15, C18~C20,C25~C30,C34 ,C36~C42,C44~C52, C55~C57,C64	N
S2204000029	C-CERAMIC,CHIP:1uF,+80-20%,16V,Y5V,1608	6	C21,C22,C60~C63	N
S2205000002	C-TANTAL:10uF,16V,3528	1	C1	Y
S2402000168	C-AL,SMD:100uF,20%,16V,F60,Ø6.3×5.7L	1	CE4	Y
S2801003397	CRYSTAL-SMD:12MHz, 30ppm, 12pF	1	X1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	6	L3~L8	N
S3711004118	WAFER;BOX-HEADER,1R, 3P,1.25mm,SMD	1	CN1	Y
S3711004119	WAFER;BOX-HEADER,1R, 4P,1.25mm,SMD,IVY	1	CN7	Y
S3711004121	WAFER;BOX-HEADER,1R, 6P,1.25mm,SMD	1	CN2	Y
S3711004122	WAFER;BOX-HEADER,1R, 7P,1.25mm,SMD	1	CN3	Y
JK27-60104A	L-COIL:IND-680M,68uH,SMD,SM7850 POR	1	L1	Y
JK41-10863A	PCB-MAIN:ELLIX30,RS232,DSUB9,FR-4,2L,T1	1	PCB	N

9.6 ELLIX30/40 LED PCB

9.6.1 Layout



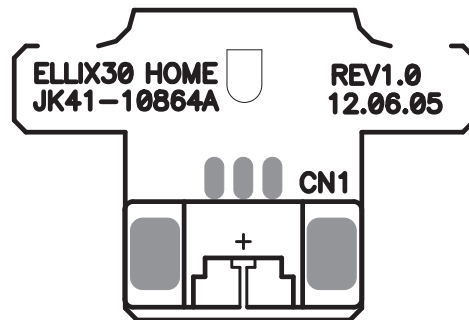
9.6.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01757A	PBA SUB:ELLIX30,LED&SWITCH,ARRAY	1	ASS'Y	Y
JK39-40888A	HARNESS-LED:ELLIX30, 6P, 200mm,AT TAPE	1	LED TO MAIN	Y
S0501000457	TR-SMALL SIGNAL:MMBT2222A,NPN,350MW,SOT-	2	Q1,Q2	Y
S0602000003	LED:SP0603B-BH-20G-20mA,BLUE,1608,SMD	2	LED1,LED4	Y
S0602000004	LED:SP0603B-RD-20G-20mA,RED,1608,SMD	2	LED2,LED3	Y
S2008000012	R-CHIP:200 OHM,5%,1/10W,1608	4	R1~R4	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	2	R6,R8	N
S2008000044	R-CHIP:10KOHM,1%,1/10W,1608,1%	2	R5,R7	N
S3404000212	SWITCH-TACT:1187G-3,4P,SMD,ST,Knob 1.5mm	1	SW1	Y
S3711004136	WAFER;BOX:1R,6P,1.25mm,AN,IVR,12505WR-06	1	CN1	Y
JK41-10868A	PCB-SUB:LED&SWITCH,ELLIX30,FR-4,2L,T1.6	1	PCB	N

9. PCB Layout and Part List

9.7 ACUT HOME SENSOR PCB

9.7.1 Layout

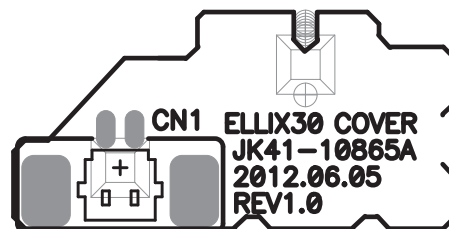


9.7.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01755B	PBA SUB:ELLIX30/40,ACUT HOME,ARRAY,SVC	1	ASS'Y	Y
JK39-40890A	HARNESS-SENSOR:ELLIX30,7P,150mm,AT	1	SENSOR TO MAIN	Y
S0604000162	PHOTO-INTERRUPTER:GP1S092HCPI,SMD,4P	1	U1	Y
S3711004133	WAFER;BOX:1R,3P,1.25mm,AN,IVR,12505WR-03	1	CN1	Y
JK41-10864A	PCB-SUB:CUTTER HOME,ELLIX30,FR-4,2L,T1.6	1	PCB	N

9.8 COVER OPEN SENSOR PCB

9.8.1 Layout

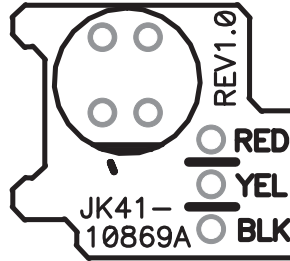


9.8.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01755C	PBA SUB:ELLIX30/40,COVER,ARRAY,SVC	1	ASSY	Y
S3405001016	SWITCH-MICRO:MPU10992MLB3,PUSHSWICH,SMD	1	SW1	Y
S3711004117	WAFER;BOX:1R,2P,1.25mm,ST,12505WS-02	1	CN1	Y
JK41-10868A	PCB-SUB:COVER OPEN,ELLIX30,FR-4,2L,T1.6	1	PCB	N

9.9 BLACK MARK PCB

9.9.1 Layout

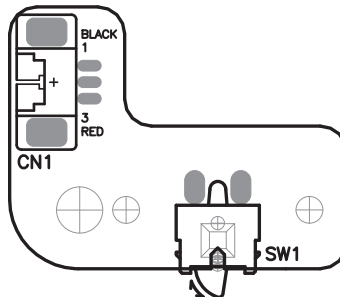


9.9.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-10003A	PBA SUB: ELLIX30/40, BLACK MARK, ARRAY	1	ASSY	Y
S0604000159	REFLECT-SENSOR: SG-2BC, 4P, DA-RANK, KODENSH	1	-	Y
JK39-80001A	HARNESS-BLACK MARK: ELLIX30, 3P, 150mm	1	BLK MARK TO MAIN	Y
JK41-10869A	PCB-SUB: BLACK MARK, ELLIX30, FR-4, 2L, T1.6	1	PCB	N

9.10 P-Near End PCB

9.10.1 Layout



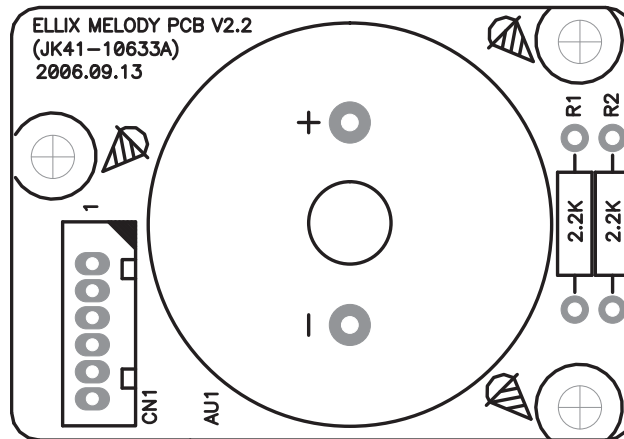
9.10.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01754A	PBA SUB: ELLIX30/40, NEAR P_END, SMD	1	ASS'Y	Y
JK39-40889A	HARNESS-NEAR P_END: ELLIX30, 4P, 460mm, AT	1	NEAREND TO MAIN	Y
S3405001016	SWITCH-MICRO: MPU10992MLB3, PUSH SWICH, SMD	2	SW1	Y
S3711004133	WAFER; BOX: 1R, 3P, 1.25mm, AN, IVR, 12505WR-03	2	CN1	Y
JK41-10577A	PCB-PAPER NEAR END: ELLIX 20, FR-4, 2L, T1.6	2	PCB	N

9. PCB Layout and Part List

9.11 MELODY PCB

9.11.1 Layout

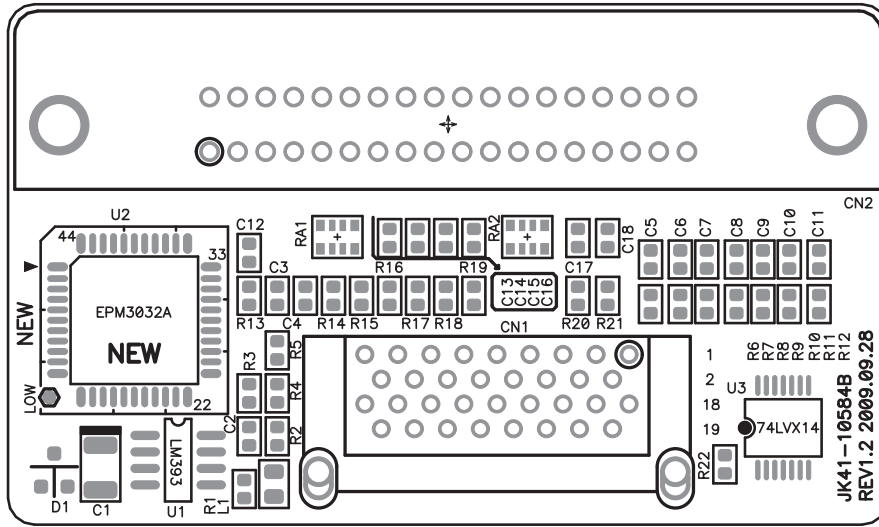


9.11.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01401A	PBA SUB-MELODY: ELLIX10/20, STD	1	ASS'Y	Y
S2001000047	R-CARBON: 2.2KOHM, 5%, 1/4W, AA, TP, 2.4X6.4MM	2	R1, R2	Y
S3003001029	BUZZER-PIEZO; 90dB, 30V, 3mA, 4.6KHz, BK	1	AU1	Y
S3711003422	CONNECTOR-HEADER: BOX, 6P, 1R, 2mm, ST, DIP	1	CN1	Y
JK39-40673A	HARNESS-MELODY: ELLIX20, RJ-11, 110mm, TUBE	1		Y
JK41-10633A	PCB-I/F: MELODY; ELLIX10/20, FR-4, 2L, T1.6mm	1	PCB	N

9.12 IEEE-1284 Parallel Interface PCB

9.12.1 Layout



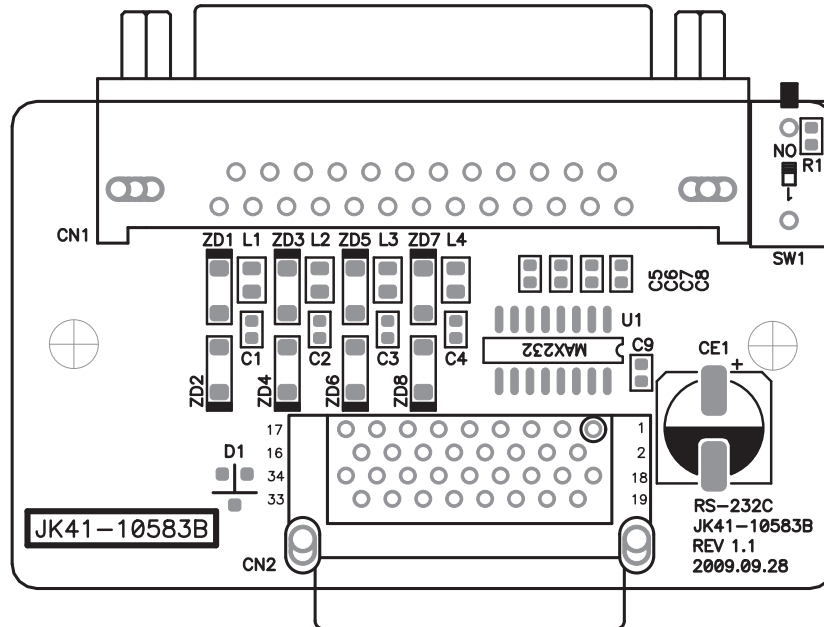
9.12.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01350A	PBA SUB-I/F:IEEE-1284,ELLIX 20,STD	1	ASS'Y	Y
S3701002001	CONNECTOR-PARALLEL:36P,2R,FEMALE,AN,DIP	1	CN1	Y
S3712000071	CONNECTOR-STACKING:RA34P,1.27mm,AN,DDK	1	CN2	Y
JK70-20043A	IPR-BRKT PARALLEL;ELLIX20,SECC,T1.0	1		Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	1	D1	Y
S0801001110	IC-CMOS;74LV14A,INVERTER,TSOP,14P	1	U3	Y
S1103000001	IC-CPLD;EPM3032ATC44-10,TQFP,44P	1	U2	Y
S1202000164	IC-VOLTAGE COMPARATOR:KA393,SOP,8P,1.27m	1	U1	Y
S2008000008	R-CHIP:100 OHM,5%,1/10W,1608	1	R1	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	1	R3	N
S2008000031	R-CHIP:2.2KOHM,5%,1/10W,1608	2	R2,R4	N
S2008000037	R-CHIP:4.7KOHM,1%,1/10W,1608,1%	16	R5~R10,R12~R21	N
S2008000063	R-CHIP:100KOHM,5%,1/10W,1608	1	R11	N
S2011001093	R-NETWORK:100ohm,5%,1/16W,L,CHIP,8P,TP	2	RA1,RA2	Y
S2204000004	C-CERAMIC,CHIP:22pF,5%,50V,1608	17	C2~C18	N
S2205000002	C-TANTAL:10uF,16V,3528	1	C1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	1	L1	N
JK41-10584B	PCB-I/F:PARALLEL,ELLIX 20,FR-4,2L,NEW	1	PCB	N

9. PCB Layout and Part List

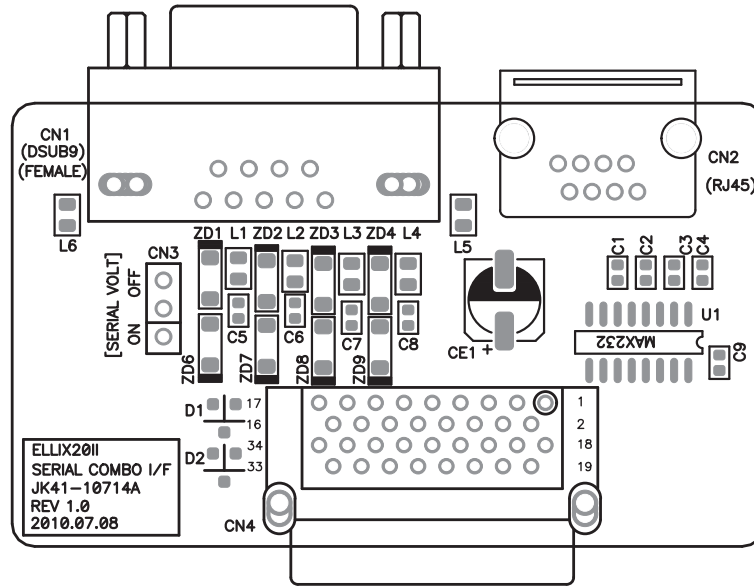
9.13 RS-232C Serial Interface PCB(DSUB25)

9.13.1 Layout



9.13.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01351B	PBA SUB-I/F:RS-232C,ELLIX 20,DIP S/W	1	ASS'Y	Y
S3407000185	SWITCH-DIP:1 KNOB,YD-01ZAT,DIP,AN,2P	1	SW1	Y
S3701000155	CONNECTOR-DSUB:25P,2R,FEMALE,AN,neltron	1	CN1	Y
S3712000071	CONNECTOR-STACKING:RA34P,1.27mm,AN,DDK	1	CN2	Y
JK70-20043B	IPR-BRKT SERIAL;ELLIX20,SECC,T1.0	1		Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	1	D1	Y
S0403000756	DIODE-ZENER:BZT52C18,18V,500mW,SOD-123	8	ZD1~ZD8	Y
S1006000132	IC-DRIVER/RECEIVER:232,SOIC,MAX232E ESE	1	U1	Y
S2204000015	C-CERAMIC,CHIP:470pF,5%,50V,1608	4	C1~C4	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	1	C9	N
S2204000029	C-CERAMIC,CHIP:1uF,+80-20%,16V,Y5V,1608	4	C5~C8	N
S2402000168	C-AL,SMD:100uF,20%,16V,F60,Ø6.3×5.7L	1	CE1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	4	L1~L4	N
JK41-10583B	PCB-I/F:RS-232,ELLIX 20,FR-4,2L,T1.6,NEW	1	PCB	N

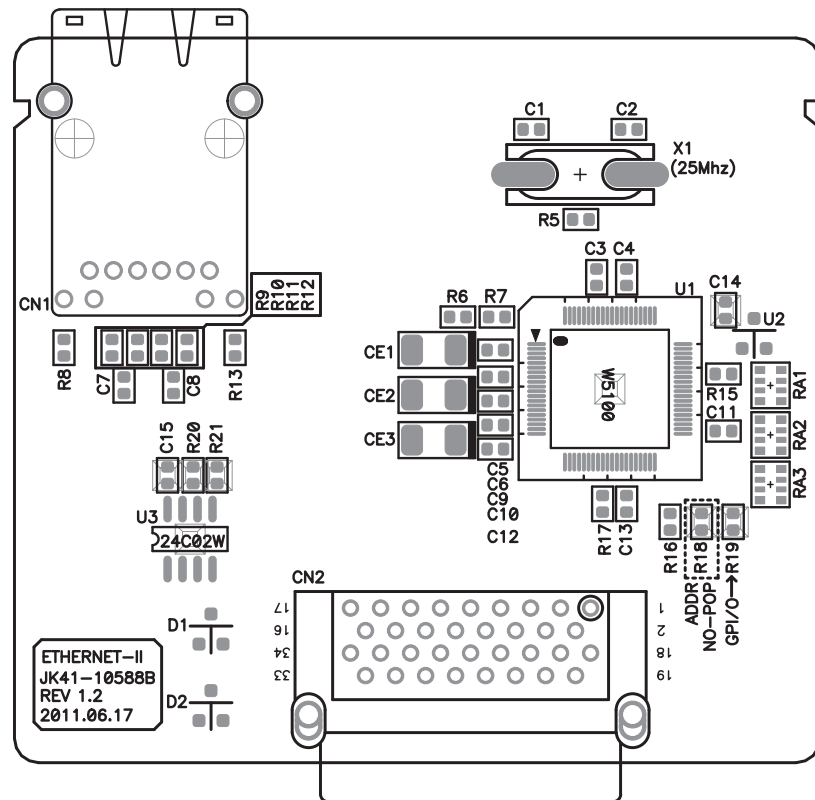
9.14 RS-232C Serial Interface PCB(DSUB9&RJ45 COMBO)
9.14.1 Layout

9.14.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01358A	PBA SUB-I/F:SERIAL COMBO,ELLIX20,KOR	1	ASS'Y	Y
S3701000232	CONNECTOR-DSUB:9P,2R,FEMALE,ANGLE,AUF	1	CN1	Y
S3710000111	CONNECTOR-SHUNT:2P,1R,2.54mm,JMHHA01,	1	CN3	Y
S3711001475	CONNECTOR-HEADER:NOWALL,3P,1R,2.54mm,STR	1	CN3	Y
S3712000071	CONNECTOR-STACKING:RA34P,1.27mm,AN,DDK	1	CN4	Y
S3722000212	JACK-MODULAR:8P/8C,-,N,ANGLE,-,N,GRY,AU5	1	CN2	Y
JK70-20043D	IPR-BRKT WIRELESS;ELLIX20,SECC,T1.0	1		Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	2	D1,D2	Y
S0403000756	DIODE-ZENER:BZT52C18,18V,500mW,SOD-123	8	ZD1~ZD4,ZD6~ZD9	Y
S1006000132	IC-DRIVER/RECEIVER:232,SOIC,MAX232E ESE	1	U1	Y
S2204000015	C-CERAMIC,CHIP:470pF,5%,50V,1608	4	C5~C8	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	1	C9	N
S2204000029	C-CERAMIC,CHIP:1uF,+80-20%,16V,Y5V,1608	4	C1~C4	N
S2402000168	C-AL,SMD:100uF,20%,16V,F60,Ø6.3×5.7L	1	CE1	Y
S3301000317	CORE-FERRITE BEAD:AB,2x1.25x0.9mm,SMD	6	L1~L6	N
JK41-10714A	PCB-I/F:SERIAL COMBO,ELLIX20,FR-4,2L	1	PCB	N

9. PCB Layout and Part List

9.15 ETHERNET II Interface PCB

9.15.1 Layout



9.15.2 Parts List

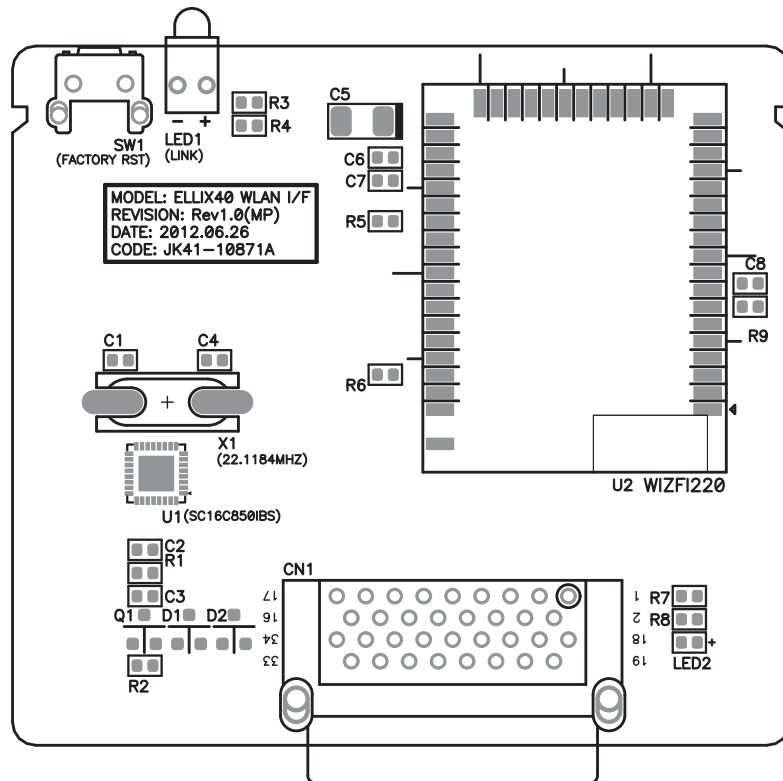
Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01710A	PBA SUB-I/F:ETHERNET-II,ELLIX20II,STD	1	ASS'Y	Y
S3712000071	CONNECTOR-STACKING:RA34P,1.27mm,AN,DDK	1	CN2	Y
S3722001044	JACK-MODULAR:NEX1,12P,LED GRN/YEL,DIP	1	CN1	Y
JK68-40014A	LABEL(P)-SERIAL:ECR,ART PAPER,20X10	1	W5100	Y
JK72-20204A	PMO-COVER ETHERNET	1		Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	2	D1,D2	Y
S0904001281	IC-CONTROLLER:ETHERNET,W5100,LQFP,80P	1	U1	Y
S1104000003	IC-EEPROM:M24C02-W,SOP,8P	1	U3	Y
S1203000500	IC-RESET;AME8500AEETAE29Z,SOT-23,3P	1	U2	Y
S2008000001	R-CHIP:0 OHM,5%,1/10W,1608	1	R19	N

9.15.2 Parts List - continue

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
S2008000016	R-CHIP:300 OHM,5%,1/10W,1608	1	R6	N
S2008000020	R-CHIP:470 OHM,5%,1/10W,1608	2	R8,R13	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	5	R15~R17,R20,R21	N
S2008000045	R-CHIP:12KOHM,1%,1/10W,1608,1%	1	R7	N
S2008000074	R-CHIP:1MOHM,5%,1/10W,1608	1	R5	N
S2008000078	R-CHIP:49.9 OHM,1%,1/10W,1608	4	R9~R12	N
S2011001099	R-NETWORK;1KOHM,5%,1/16W,L,CH	3	RA1~RA3	Y
S2204000003	C-CERAMIC,CHIP:15pF,5%,50V,1608	2	C1,C2	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	13	C3~C15	N
S2205000002	C-TANTAL:10uF,16V,3528	3	CE1~CE3	Y
S2801003389	CRYSTAL-SMD:25MHz,SX-1,20pF	1	X1	Y
JK41-10588B	PCB-IF:ETHERNET-II,ELLIX 20,FR-4,2L,T1.6	1	PCB	N

9.16 WLAN Interface PCB

9.16.1 Layout



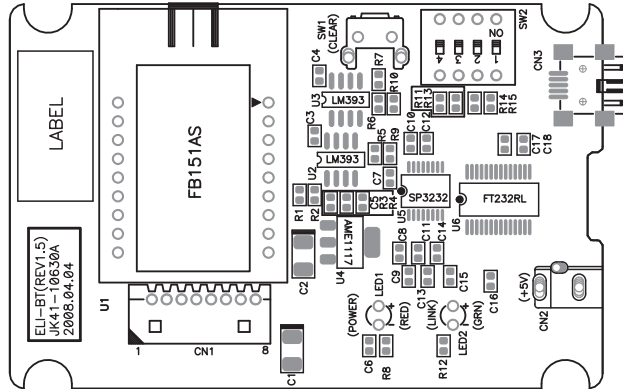
9. PCB Layout and Part List

9.16.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-10004A	PBA SUB-I/F:WLAN,ELLIX40,STD	1	ASS'Y	Y
S0601000277	LED;3PI,2P,DIP,ANGLE,GREEN,BA2-G01	1	LED1	Y
S3404000209	SWITCH-TACT:1102VB,DIP,4P,AN,Knob 5.8mm,	1	SW1	Y
S3712000071	CONNECTOR-STACKING:RA34P,1.27mm,AN,DDK	1	CN1	Y
JK72-20204A	PMO-COVER ETHERNET	1		Y
JK68-40230A	LABEL(R)-INTERFACE WLAN	1	WLAN LABEL	Y
S0401001003	DIODE-SWITCHING:MMBD6050LT1,70V,200mA,22	1	D2	Y
S0501000457	TR-SMALL SIGNAL:MMBT2222A,NPN,350MW,SOT-	1	Q1	Y
S1006000500	IC-CONVERTER;SC16C850,HVQFN,32P	1	U1	Y
S2008000009	R-CHIP:120 OHM,5%,1/10W,1608	1	R3	N
S2008000026	R-CHIP:1KOHM,1%,1/10W,1608,1%	1	R2	N
S2008000044	R-CHIP:10KOHM,1%,1/10W,1608,1%	5	R1,R4,R5,R6,R9	N
S2204000003	C-CERAMIC,CHIP:15pF,5%,50V,1608	2	C1,C4	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	5	C2,C3,C6~C8	N
S2205000002	C-TANTAL:10uF,16V,3528	1	C5	Y
S2801003384	CRYSTAL-SMD:SX-1,22.1184MHZ,30ppm,18pF	1	X1	Y
JK46-00025A	UNIT-WIFI MODULE:ELLIX30,WIFI to UART	1	U2	Y
JK41-10871A	PCB-I/F:WLAN INTERFACE,ELLIX40,FR-4,2L,	1	PCB	N

9.17 BLUETOOTH PCB

9.17.1 Layout



9.17.2 Parts List

Code No.	Description / Specification	Q'TY	Remarks	Serviceable
JK92-01355A	PBA SUB-I/F:BLUETOOTH,ELLIX 20,STD	1	ASS'Y	Y
S0601000270	LED;3PI,P100,DIP,ST,GREEN	1	LED2	Y
S0601000402	LED;3PI,P100,DIP,ST,RED,BRIGHT LED	1	LED1	Y
S3404000209	SWITCH-TACT:1102VB,DIP,4P,AN,Knob 5.8mm,	1	SW1	Y
S3407000180	SWITCH-DIP:4 KNOB,KSP42H,DIP,AN,8P	1	SW2	Y
S3711003428	CONNECTOR-HEADER:BOX,8P,1R,2mm,ANGLE	1	CN1	Y
S3722001039	JACK-DC POWER:ELLIX20,3P,AN,SMALL,	1	CN2	Y
JK46-00003A	UNIT-BLUETOOTH MODULE:ELLIX20,FS151AS,DI	1	U1	Y
S1006000134	IC-DRIVER/RECEIVER:3232,TSSOP,16P,26MIL	1	U5	Y
S1006000262	IC-USB TO SERIAL CONVERTER:FT232RL	1	U6	Y
S1202000164	IC-VOLTAGE COMPARATOR:KA393,SOP,8P,1.27m	2	U2,U3	Y
S1203001770	IC-REGULATOR;AME1117ACGTZ,ADJ,SOT-223,4P	1	U4	Y
S2008000009	R-CHIP:120 OHM,5%,1/10W,1608	3	R4,R8,R12	N
S2008000012	R-CHIP:200 OHM,5%,1/10W,1608	1	R3	N
S2008000037	R-CHIP:4.7KOHM,1%,1/10W,1608,1%	11	R1,R2,R5~R7,R9~R11, R13~R15	N
S2204000015	C-CERAMIC,CHIP:470pF,5%,50V,1608	4	C10,C12,C14,C15	N
S2204000028	C-CERAMIC,CHIP:100nF,+80-20%,25V,Y5V,160	12	C3~C9,C11,C13,C16~C18	N
S2205000002	C-TANTAL:10uF,16V,3528	2	C1,C2	Y
S3712000052	CONNECTOR-MINI USB;5P,1R,AN,SMD	1	CN3	Y
JK41-10630A	PCB-I/F:BLUETOOTH ADAPTOR,FR-4,2L,T1.6mm	1	PCB	N