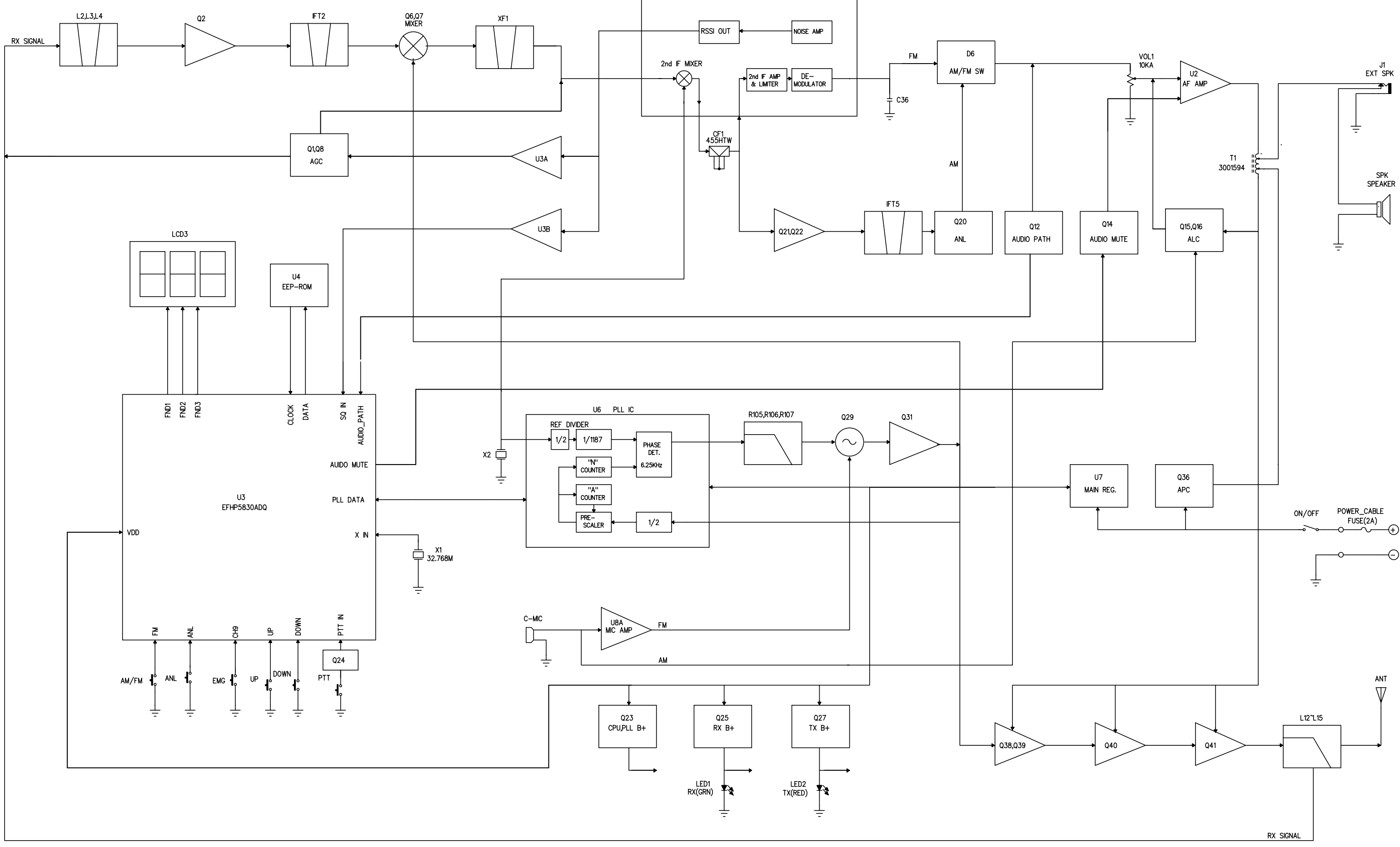
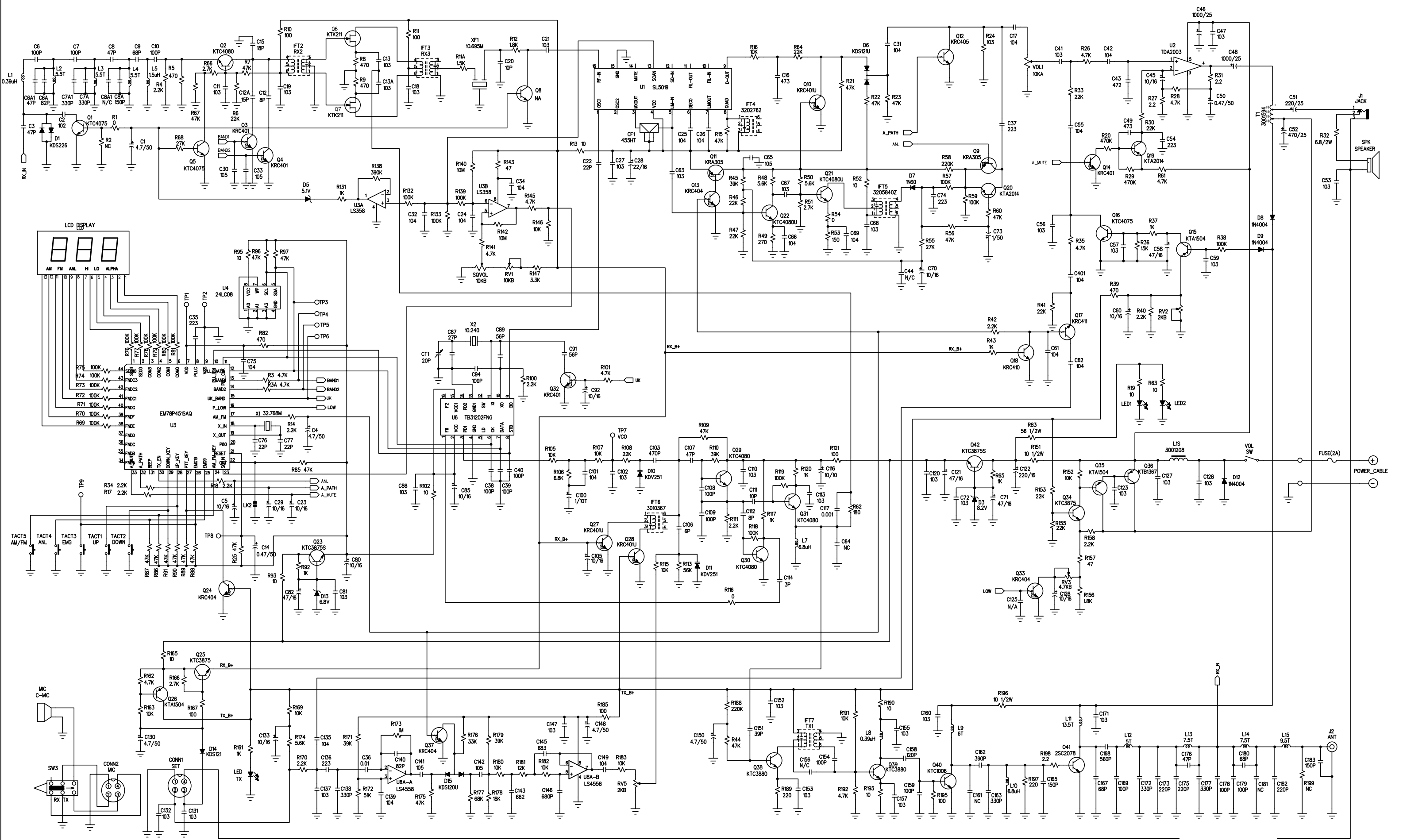
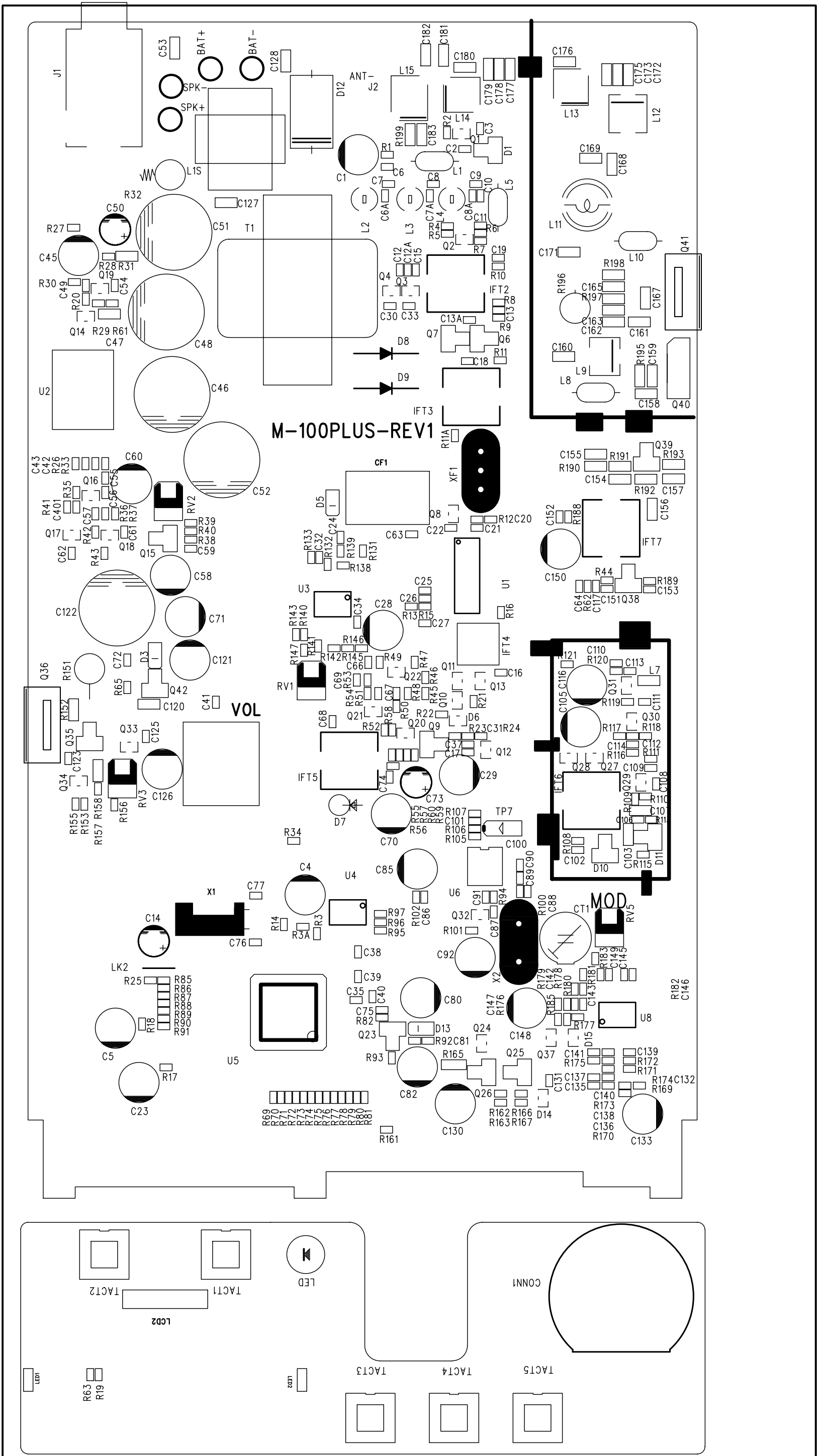


# INTEK M - 100 PLUS





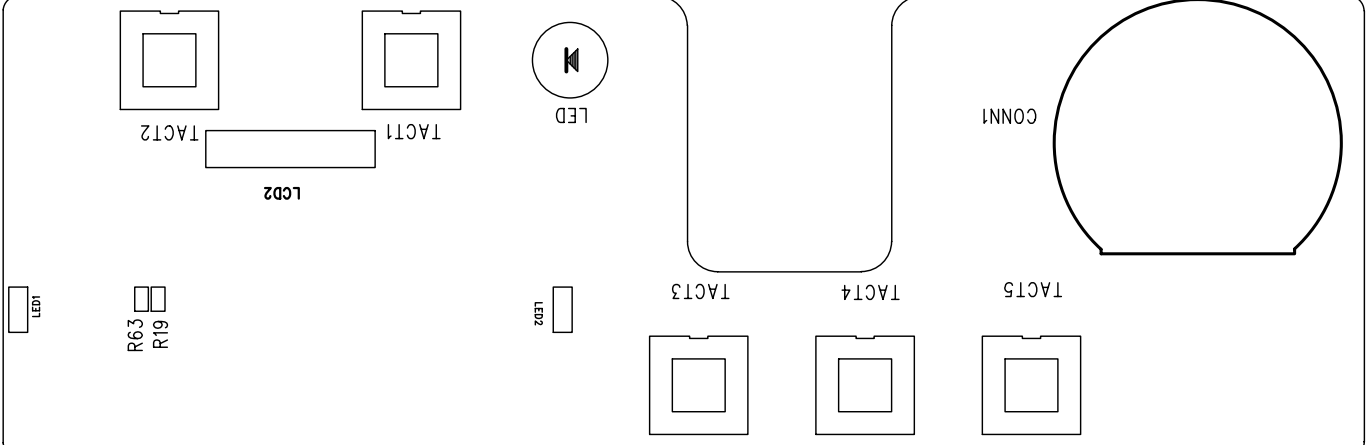
INTEK SRL				
TITLE: M-100 PLUS SCHEMATIC				
DRAWN	CHECKED	CHECKED	APPROVAL	SHEET
		J.H.YANG	HW.LEE	1 OF 1
				REV.
		16.SEP.2008	16.SEP.2008	0

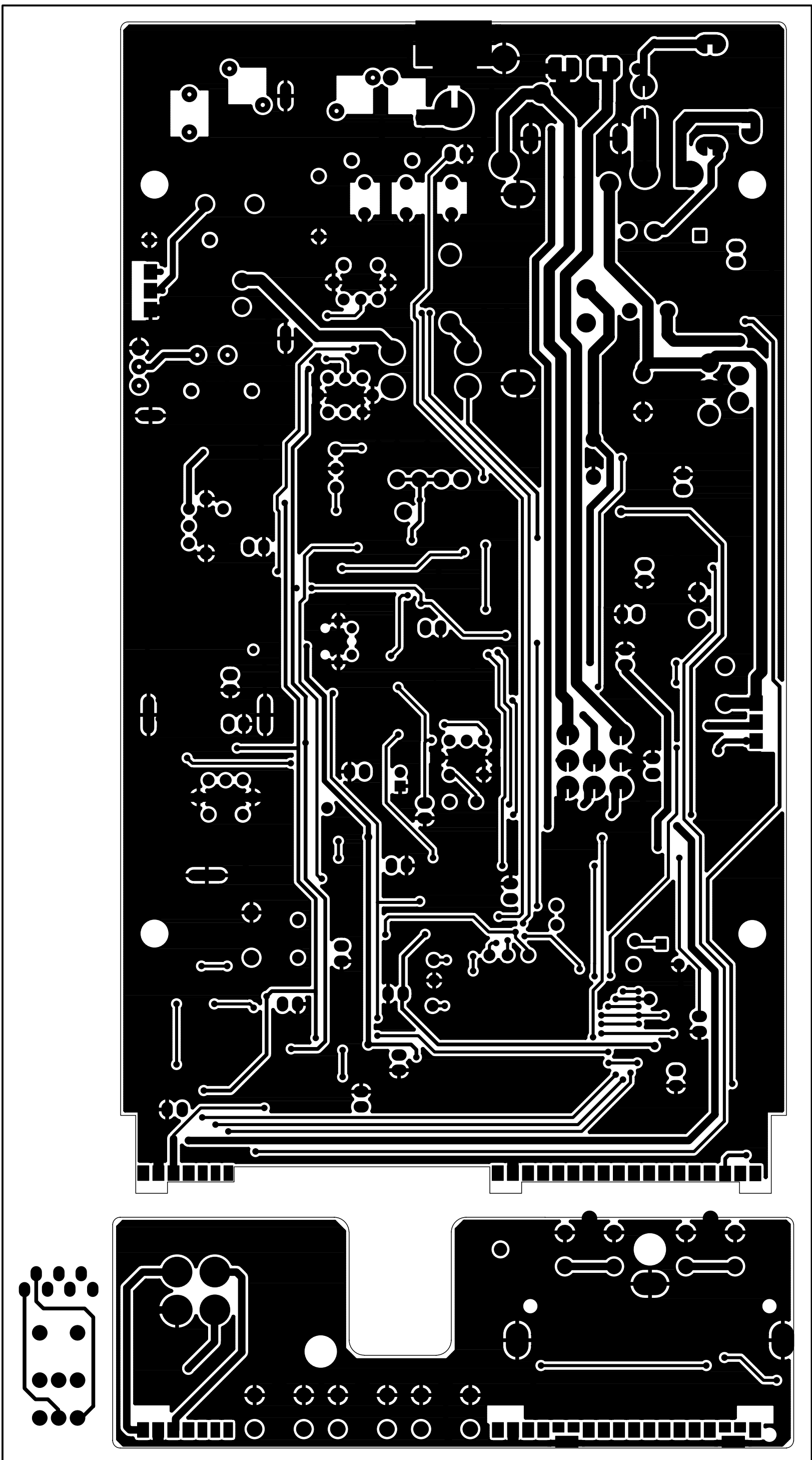


M-100PLUS-REV1

MOD

VOL

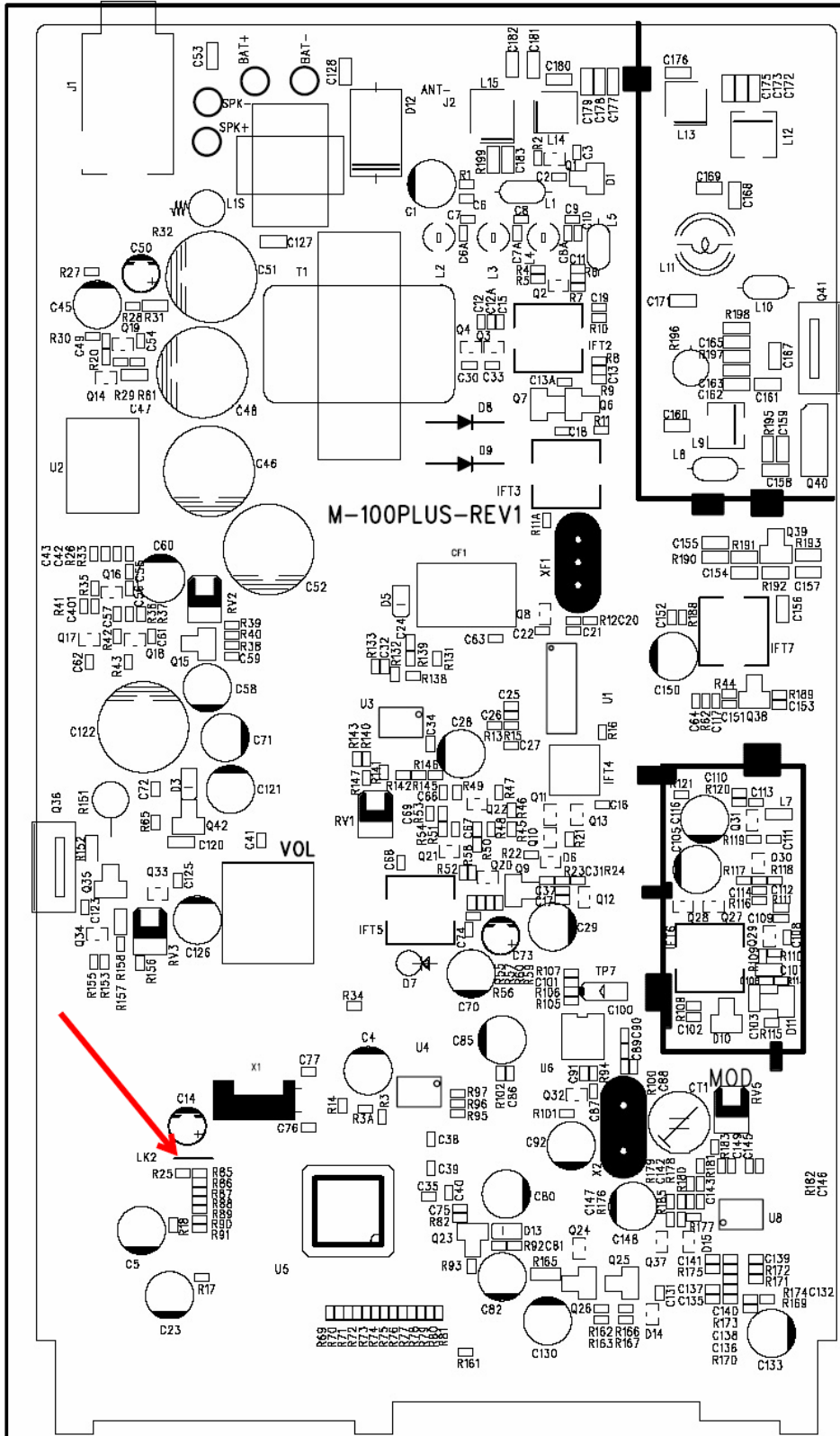




# M-100 PLUS Export

LK2 OPTION SHORT = European Bands only

LK2 OPTION OPEN = European Bands + International Bands



**INTEK M-120 PLUS / INTEK M-100 PLUS  
MAIN BANDS - FREQUENCY RANGE TABLE**

**EUROPEAN BANDS**

CHANNELS / MODE / POWER	FREQ. RANGE	BAND ID
40CH AM / FM 4W	26.965 - 27.405	E1
36CH AM / FM 4W	26.855 - 27.265	I2
80CH FM 4W	26.565 - 27.405	DE
12 CH AM 1W	27.005 - 27.135	
40CH FM 4W	26.965 - 27.405	D2
12CH AM 1W	27.005 - 27.135	
40CH FM 4W / 40CH AM 1W	26.965 - 27.405	EU
40CH FM 4W	26.965 - 27.405	CE
40CH FM 4W	27.60125 - 27.99125	UK
40CH FM 4W	26.965 - 27.405	
40CH AM / FM 4W	26.960 - 27.400	PL
40CH AM 1W/ FM 4W	26.960 - 27.400	PD

**INTERNATIONAL BANDS**

CHANNELS / MODE / POWER	FREQ. RANGE	BAND ID
450CH AM / FM 4W	25.615 - 30.105	RU
450CH AM / FM 4W	25.610 - 30.100	PO
120CH AM / FM 4W	26.515 - 27,855	S

M-100 PLUS	M-120 PLUS	DISPLAY (LED)
YES	YES	E1
YES	YES	I2
YES	YES	dE
YES	YES	d2
YES	YES	EU
YES	YES	CE
YES	YES	U
YES	YES	PL
YES	YES	Pd

Remarks
ITALY/SPAIN
ITALY
GERMANY
EUROPE / FRANCE
CEPT
UK FREQUENCIES
CEPT FREQUENCIES
POLAND FREQUENCIES
POLAND FREQ. 1W AM

M-100 PLUS	M-120 PLUS	DISPLAY (LED)
YES	YES	rU
YES	YES	PO
YES	YES	S

Remarks
RUSSIA FREQUENCIES
POLAND FREQUENCIES
120 CHANNELS

M-100PLUS

NO	PART NO. or NAME	DESCRIPTION	REFERENCE No.	QTY/Unit	MAKER
<b>MAIN PCB AUTO ASSY</b>					
	0 5% 1/10W 0402	CHIP RESISTOR	R1,16,54	3	
	10 5% 1/10W 0402	CHIP RESISTOR	R13,52,82,93,95,102,165	7	YAGEO
	100 5% 1/10W 0402	CHIP RESISTOR	R10,11,121,167,185	5	YAGEO
	1K 5% 1/10W 0402	CHIP RESISTOR	R37,43,65,92,117,120,131,161	7	YAGEO
	10K 5% 1/10W 0402	CHIP RESISTOR	R16,105,107,115,146,152,163,169,180,182,183	11	YAGEO
	100K 5% 1/10W 0402	CHIP RESISTOR	R38,57,59,69,70,71,72,73,74,75,76,77,78,79,80,81,118,119,132,133,139	21	YAGEO
	10M 5% 1/10W 0402	CHIP RESISTOR	R140,142	2	YAGEO
	12K 5% 1/10W 0402	CHIP RESISTOR	R181	1	YAGEO
	150 5% 1/10W 0402	CHIP RESISTOR	R53	1	YAGEO
	1.5K 5% 1/10W 0402	CHIP RESISTOR	R11A	1	YAGEO
	15K 5% 1/10W 0402	CHIP RESISTOR	R36,50	2	YAGEO
	180 5% 1/10W 0402	CHIP RESISTOR	R62	1	YAGEO
	1.8K 5% 1/10W 0402	CHIP RESISTOR	R12,156,178	3	YAGEO
	2.2 5% 1/10W 0402	CHIP RESISTOR	R27	1	YAGEO
	220 5% 1/10W 0402	CHIP RESISTOR	R189	1	YAGEO
	2.2K 5% 1/10W 0402	CHIP RESISTOR	R4,14,18,35,40,42,100,111,170	9	YAGEO
	22K 5% 1/10W 0402	CHIP RESISTOR	R30,33,41,46,47,64,108,153,155	9	YAGEO
	270 5% 1/10W 0402	CHIP RESISTOR	R49	1	YAGEO
	2.7K 5% 1/10W 0402	CHIP RESISTOR	R51,66,166	3	YAGEO
	27K 5% 1/10W 0402	CHIP RESISTOR	R6,55,68	3	YAGEO
	220K 5% 1/10W 0402	CHIP RESISTOR	R17,34,58,188	4	YAGEO
	33K 5% 1/10W 0402	CHIP RESISTOR	R176	1	YAGEO
	39K 5% 1/10W 0402	CHIP RESISTOR	R45,171,179	3	YAGEO
	390K 5% 1/10W 0402	CHIP RESISTOR	R138	1	YAGEO
	47 5% 1/10W 0402	CHIP RESISTOR	R143,157	2	YAGEO
	470 5% 1/10W 0402	CHIP RESISTOR	R5,8,9,39	4	YAGEO
	4.7K 5% 1/10W 0402	CHIP RESISTOR	R3,3A,26,28,61,101,141,145,162	9	YAGEO
	47K 5% 1/10W 0402	CHIP RESISTOR	R7,15,21,22,23,25,44,56,60,67,85,86,87,88,89,90,91,96,97,109,175	21	YAGEO
	470K 5% 1/10W 0402	CHIP RESISTOR	R20,29	2	YAGEO
	51K 5% 1/10W 0402	CHIP RESISTOR	R172	1	YAGEO
	5.6K 5% 1/10W 0402	CHIP RESISTOR	R48,174	2	YAGEO
	56K 5% 1/10W 0402	CHIP RESISTOR	R113	1	YAGEO
	6.8K 5% 1/10W 0402	CHIP RESISTOR	R106	1	YAGEO
	68K 5% 1/10W 0402	CHIP RESISTOR	R177	1	YAGEO
	10 5% 1/10W 0603	CHIP RESISTOR	R190,193	1	YAGEO
	100 5% 1/10W 0603	CHIP RESISTOR	R195	2	YAGEO
	10K 5% 1/10W 0603	CHIP RESISTOR	R191	1	YAGEO
	180 5% 1/10W 0603	CHIP RESISTOR		0	YAGEO
	2.2 5% 1/10W 0603	CHIP RESISTOR	R31,198	2	YAGEO
	220 5% 1/10W 0603	CHIP RESISTOR	R197	1	YAGEO
	2.2K 5% 1/10W 0603	CHIP RESISTOR	R158	1	YAGEO
	4.7K 5% 1/10W 0603	CHIP RESISTOR	R192	1	YAGEO
	PVZ3A103A01R00	POTENTIOMETER	RV1	1	MURATA
	PVZ3A502A01R00	POTENTIOMETER	RV2,RV3,RV5	3	MURATA
	GRM15 COG 030D 50V (0402)	CHIP CERAMIC	C114	1	MURATA
	GRM15 COG 060D 50V (0402)	CHIP CERAMIC	C106	1	MURATA
	GRM15 COG 080D 50V (0402)	CHIP CERAMIC	C12,112	2	MURATA
	GRM15 COG 100D 50V (0402)	CHIP CERAMIC	C20,111	2	MURATA
	GRM15 COG 180J 50V (0402)	CHIP CERAMIC	C15	1	MURATA
	GRM15 COG 150J 50V (0402)	CHIP CERAMIC	C12A	1	MURATA
	GRM15 COG 220J 50V (0402)	CHIP CERAMIC	C22,76,77	3	MURATA
	GRM15 COG 270J 50V (0402)	CHIP CERAMIC	C87	1	MURATA
	GRM15 COG 390J 50V (0402)	CHIP CERAMIC	C151	1	MURATA
	GRM15 COG 470J 50V (0402)	CHIP CERAMIC	C3,8,6A1,107	4	MURATA
	GRM15 COG 560J 50V (0402)	CHIP CERAMIC	C89,91	2	MURATA
	GRM15 COG 680J 50V (0402)	CHIP CERAMIC	C9	1	MURATA
	GRM15 COG 820J 50V (0402)	CHIP CERAMIC	C6A,140	2	MURATA
	GRM15 COG 101J 50V (0402)	CHIP CERAMIC	C6,7,10,38,39,40,94,108,109	9	MURATA
	GRM15 COG 151J 50V (0402)	CHIP CERAMIC	C7A,C7A1,C8A	3	MURATA
	GRM15 COG 331K 50V (0402)	CHIP CERAMIC	C138	1	MURATA
	GRM15 X7R 471K 50V (0402)	CHIP CERAMIC	C103	1	MURATA
	GRM15 X7R 681K 50V (0402)	CHIP CERAMIC	C146	1	MURATA
	GRM15 X7R 102K 25V (0402)	CHIP CERAMIC	C2,117	2	MURATA
	GRM15 X7R 472K 25V (0402)	CHIP CERAMIC	C43	1	MURATA
	GRM15 X7R 682K 25V (0402)	CHIP CERAMIC	C143	1	MURATA
	GRM15 X7R 103K 25V (0402)	CHIP CERAMIC	C11,13,C13A,16,18,19,21,27,36,41,56,57,59,63,67,68,72,81,86,102,110,113,123,131,132,137,147,152,153,R24	29	MURATA
	GRM15 X7R 223K 16V (0402)	CHIP CERAMIC	C35,37,54,74,136	5	MURATA
	GRM15 X7R473K 16V (0402)	CHIP CERAMIC	C16,49	2	MURATA
	GRM15 X7R 683K 16V (0402)	CHIP CERAMIC	C145	1	MURATA
	GRM15 X5R 104K 10V (0402)	CHIP CERAMIC	C17,24,25,26,31,32,34,42,55,61,62,66,69,75,101,135,139,149,401	19	MURATA
	GRM15 Y5V 105Z 6.3V(0402)	CHIP CERAMIC	C30,33,65,141,142	5	MURATA

	GRM18 COG 470J 50V (0603)	CHIP CERAMIC	C176	1	MURATA
	GRM18 COG 680J 50V (0603)	CHIP CERAMIC	C167,180	2	MURATA
	GRM18 COG 101J 50V (0603)	CHIP CERAMIC	C154,159,169,178,179	5	MURATA
	GRM18 COG 121J 50V (0603)	CHIP CERAMIC	C158	1	MURATA
	GRM18 COG 151J 50V (0603)	CHIP CERAMIC	C165	2	MURATA
	GRM18 COG 221K 50V (0603)	CHIP CERAMIC	C173,175,182	3	MURATA
	GRM18 COG 331K 50V (0603)	CHIP CERAMIC	C163,172,177	3	MURATA
	GRM18 COG 391K 50V (0603)	CHIP CERAMIC	C162	1	MURATA
	GRM18 COG 561K 50V (0603)	CHIP CERAMIC	C168	1	MURATA
	GRM18 X7R 103K 50V (0603)	CHIP CERAMIC	C47,53,120,127,128,155,157,160,171	9	MURATA
	0.47UF 10V(A)	CHIP TANTAL	C100	1	NEC
	KRC401(USM)	TRANSISTOR	Q3,4,10,14,27,28	6	KEC
	KRC404(USM)	TRANSISTOR	Q13,24,33,37	4	KEC
	KRC410(USM)	TRANSISTOR	Q18	1	KEC
	KRC411(USM)	TRANSISTOR	Q17	1	KEC
	KRC412(USM)	TRANSISTOR	Q12	1	KEC
	KTA1504S(SOT-23)	TRANSISTOR	Q15,26,35	3	KEC
	KTA2014(USM)	TRANSISTOR	Q19,20	2	KEC
	KTC3875(SOT23)	TRANSISTOR	Q23,25,34,42	4	KEC
	KTC3880S(SOT-23)	TRANSISTOR	Q38,39	2	KEC
	KTC4075(USM)	TRANSISTOR	Q1,5,16	3	KEC
	KTC4080(USM)	TRANSISTOR	Q2,21,22,29,30,31	6	KEC
	KRA305(USM)	TRANSISTOR	Q9,11	2	KEC
	KDZ5.1V-Y(USC)	DIODE ZENER	D5	1	KEC
	KDZ6.8V-Y(USC)	DIODE ZENER	D13	1	KEC
	KDZ8.2V-Y(USC)	DIODE ZENER	D3	1	KEC
	KDS226(SOT-23)	DIODE	D1	1	KEC
	KDV251(SOT-23)	DIODE VARICAP	D10,D11	2	KEC
	KDS120(USM)	DIODE	D15	1	KEC
	KDS121(USM)	DIODE	D6,D14,	2	KEC
	eFH5830H 44pin BONDING	I.C CPU	U3	1	ELAN
	I.C PLL TB31202FN SOP(TOSHIBA)	I.C PLL	U6	1	TOSHIBA
	24LC08	I.C EEPROM	U4	1	ELAN
	SL5019(SOP-16)	I.C IF	U1	1	AUK
	LS358F(SOP-8)	I.C OP AMP	U3A	1	LIGHTNING
	LS4558F(SOP-8)	I.C OP AMP	U8A	1	LIGHTNING
	128X165X1.6T FR4 DUBLE SIDE GOLD	PCB MAIN	MAIN PCB	1	
	<b>MAIN PCB MANUAL ASSY</b>				
	10 5% 1/2W	FILM RESISTOR	R151	1	ANY
	56 5% 1/2W	FILM RESISTOR	R83	1	ANY
	4.7 5% 2W	FILM RESISTOR	R32	1	ANY
	0.47UF 50V 20% 5X11	ELECT CAPACITOR	C14,50	2	RUBYSUN
	1UF 50V 20% 5X11	ELECT CAPACITOR	C73	1	RUBYSUN
	10UF 16V 20% 5X11	ELECT CAPACITOR	C5,23,29,45,60,70,80,85,92,105,116,126,133	13	RUBYSUN
	100UF 16V 20% 5X11	ELECT CAPACITOR		2	RUBYSUN
	22UF 16V 20% 5X11	ELECT CAPACITOR	C28	1	RUBYSUN
	220UF 25V 20% 8X12	ELECT CAPACITOR	C122	1	RUBYSUN
	47UF 16V 20% 5X11	ELECT CAPACITOR	C58,71,82,121	5	RUBYSUN
	4.7UF 50V 20% 5X11	ELECT CAPACITOR	C1,4,130,148,150	6	RUBYSUN
	470UF 25V 20% 10X12	ELECT CAPACITOR	C52	1	RUBYSUN
	1000UF 25V 20% 10X20	ELECT CAPACITOR	C46,48	2	RUBYSUN
	2SC2314(T0-126)	TRANSISTOR	Q40	1	SANYO
	RX2 27MHz	IFT COIL	IFT2	1	FINE
	RX3 10.7MHz	IFT COIL	IFT3	1	FINE
	RX4 FM 455KHz	IFT COIL	IFT4	1	FINE
	RX5 AM 455KHz	IFT COIL	IFT5	1	FINE
	TX1 27MHz	IFT COIL	IFT7	1	FINE
	3010367 VCO	IFT COIL	IFT6	1	FINE
	0.45X2.3RX5.5T(C) WITH CORE(F)	SPRING COIL	L2,3,4	3	FINE
	0.80X2.5RX7T	SPRING COIL	L9	1	FINE
	0.60X5.0RX13.5T(310-4071)	SPRING COIL	L11	1	FINE
	0.80X6.0RX5T	SPRING COIL	L12	1	FINE
	0.55X3.4RX7.5T	SPRING COIL	L13,14	2	FINE
	0.55X3.4RX9.5T	SPRING COIL	L15	1	FINE
	3001363	CHOCK COIL	L1S	1	FINE
	3001594	TRANSFORMER	T1	1	FINE
	0.39UH:LAL03TBR39M	INDUCTOR(AX)	L1,8	1	
	1.5UH LAL03TB1R5K	INDUCTOR(AX)	L5	2	
	6.8UH LAL03TB6R8K	INDUCTOR(AX)	L7,10	2	
	10.240MHZ 32PF:30PPM	CRYSTAL HC-49/S	X2	1	DTRON
	32.768KHz CYLINDER 3mm	CRYSTAL CYLINDER	X1	1	DTRON
	10L08A (UM1-3IL 2POLE)	CRYSTAL FILTER	XF1	1	DTRON
	LTW33-455HT	CERAMIC FILTER	CF1	1	CQ
	20PF 6DIA CVN	TRIMMER DIP	CT1	1	SAMWOO
	SKJS-3518	PHONE JACK	J1	1	SE KWANG
	1N60(DIP)	DIODE GE	D7	1	
	1N4004T/R 400V 1A	DIODE RECTIFIER	D8,9,12	3	ANY
	<b>SUB PCB ASSY</b>				
	SKTS-1102A-2	TACT SWITCH	TACT1----TACT5	5	SE KWANG
		LCD DISPLAY	LCD	1	MART GOOD

	HT27-21UBC	CHIP LED LAMP	LAMP1,LAMP2	2	HARVATEK
	10 5% 1/10W 0402	CHIP RESISTOR	R63,R19	2	YAGEO
	3mm(RED)	LAMP	LED TX	1	
	N-16-4R(PCB)	MIC CONNECTOR	CONN1	1	HESUNG
	130X30X1.6T DOUBLE SIDE	PCB SUB	FRONT PCB	1	
	<b>FRONT BODY ASSY</b>				
	CH-239(A)	ANT CONNECTOR	J2	1	HEYSUNG
	TDA2003V	I.C AUDIO	U2	1	LIGHTNING
	2SC2078(TO-220AB)	TRANSISTOR	Q41	1	SANYO
	KTB1367(TO-220IS)	TRANSISTOR	Q36	1	KEC
	DUAL VOLUME 10KA/10KB/SW	VOLUME SQ SWITCH	VOL1	1	SE KWANG
	L66AC-8-8A10R ASAHI	SPEAKER	SPK	1	ASAHI
		POWER CORD		1	FINE
	<b>MIC ASSY</b>				
	SKPS-2210C	PUSH SWITCH	SW3	1	SE KWANG
	N-16-4P	MIC PLUG	CONN2	1	HESUNG
	38dB+/-2dB (95X49) 2V/2.2K	MIC CONDENSER	MIC	1	
		CURD CURLED	MIC	1	FINE
	<b>WIRE ASSY</b>				
	1007AWG26(7/0.16)YEL 0.09M 0.5:0.5	WIRE	SPK(+)	1	
	1007AWG26(7/0.16)GRN 0.09M 0.5:0.5	WIRE	SPK(-)	1	
	1007AWG26(7/0.16)YEL 0.09M 0.5:0.5	WIRE	AF VOL1	1	
	1007AWG26(7/0.16)GRN 0.09M 0.5:0.5	WIRE	AF VOL2	1	
	1007AWG26(7/0.16)WHT 0.09M 0.5:0.5	WIRE	SQ VOL 1	1	
	1007AWG26(7/0.16)BRN 0.09M 0.5:0.5	WIRE	SQ VOL 2	1	
	1007AWG26(7/0.16)BLK 0.09M 0.5:0.5	WIRE	AF/SQ GND	1	
	1007AWG24(11/0.16)RED 0.09M0.5:0.5	WIRE	POWER VOL1	1	
	1007AWG24(11/0.16)ORG 0.09M0.5:0.5	WIRE	POWER VOL2	1	