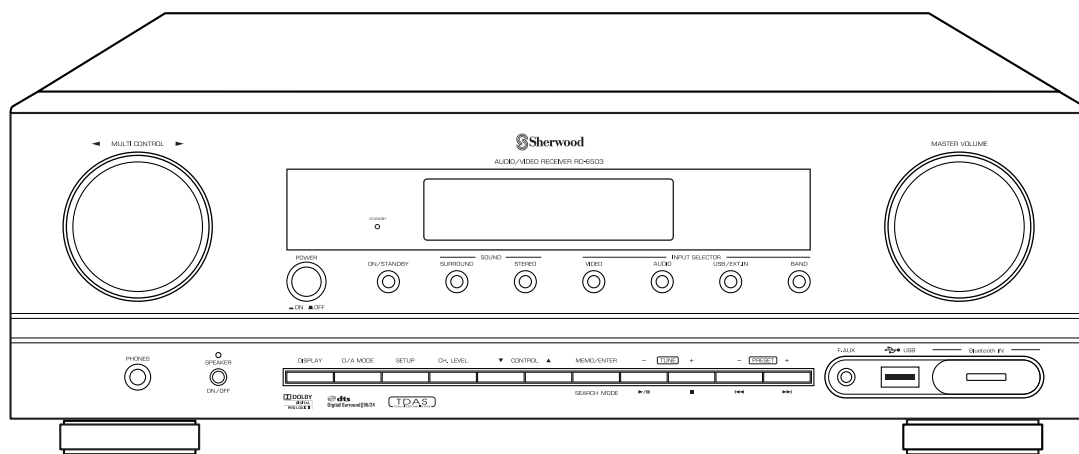


SERVICE MANUAL

RD-6503

AUDIO/VIDEO RECEIVER



■ CONTENTS ■

SAFETY PRECAUTIONS	1	TROUBLESHOOTING	15
SPECIFICATIONS	2	MECHANICAL PARTS LIST	18
TUNER SECTION	6	EXPLODED VIEW	19
BLOCK DIAGRAM	8	ELECTRICAL PARTS LIST	20
WIRING DIAGRAM	9	IC'S FUNCTIONAL BLOCK DIAGRAMS	26
CIRCUIT DESCRIPTION	10	PRINTED CIRCUIT BOARDS	34
ALIGNMENT PROCEDURES	14	SCHEMATIC DIAGRAMS	40



SAFETY PRECAUTIONS

WARNING

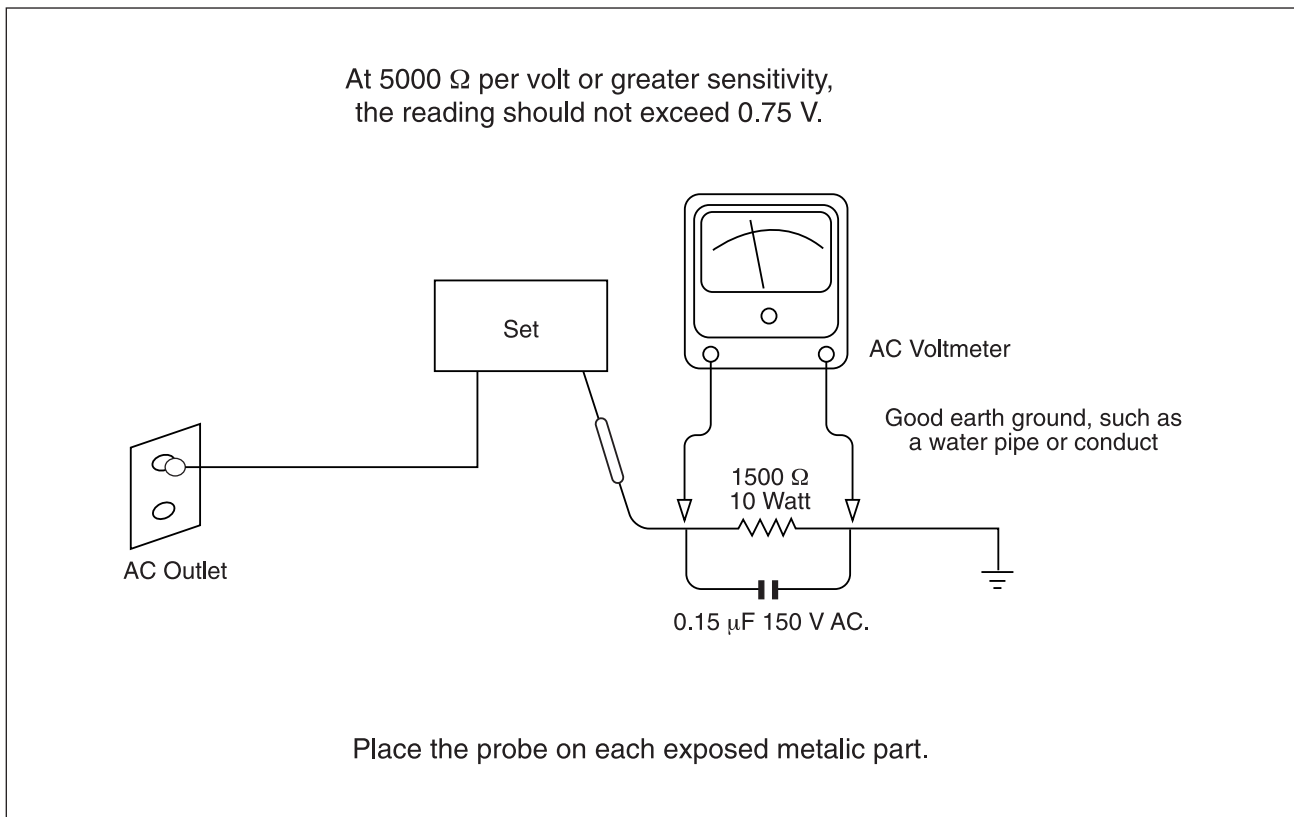
Before servicing this unit, familiarize yourself with the following precautions:

1. Many electrical and mechanical parts in this chassis have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements: electrical components having such features are identified by ⚠ in the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the exposed

metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate danger of electrical shock. Plug the AC line cord directly into a 120 V AC outlet(USA Version) or 230 V AC outlet(EU Version). (Do not use a line isolation transformer during this check.) Be sure your AC voltmeter has a sensitivity of $5000\ \Omega$ per volt or greater. Then connect a $1500\ \Omega$ 10 watt resistor, paralleled by a $0.15\ \mu\text{F}$ 150 V AC capacitor, between a known good earth ground(such as a water pipe, or conduit) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of a $1500\ \Omega$ resistor and a $0.15\ \mu\text{F}$ capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



SPECIFICATION

Measuring methods are based on IHF and IEC standard 268-3

Measurements conditions, unless otherwise noted :

Output resistive load = (6) ohms /Both channel driven.

Tone Direct ON/Other SW's : OFF

Power figures should be kept minimum 10min. between 15 and 35°C

Filter : IHF-A filter R/O = Rated Output

Power supply : 230V/50Hz (D/G), 240V/50Hz (E), 220V/60Hz (K)

1. FRONT AMP SECTION

* SPKR LEVEL:ALL 0dB * SPK SIZE:LLLY

* EXT. IN * TONE OFF

NO.	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	EXT.IN	1kHz	R/O	mV	200 ± 40	200 ± 50
2	TOTAL HARMONIC DISTORTION (STEREO IN)	EXT.IN	40kHz	R/O-3dB	%	≤0.08	≤0.12
			1kHz	R/O-3dB	%	≤0.08	≤0.12
			20kHz	R/O-3dB	%	≤0.12	≤0.2
3	CONTINUOUS AVERAGE POWER at 0.2% THD (STEREO IN)	EXT.IN	40kHz	(6) ohms	W	90	85
			1kHz			100	95
			20kHz			90	85
4	S/N RATIO, INPUT SHORT IHF-A FILTER	EXT.IN	1kHz	R/O	dB	≥ 90	≥ 85
5	FREQUENCY RESPONSE (-3dB)	EXT.IN		1W/1kHz Ref.	Hz ~ kHz	10 ~ 55	10 ~ 50

2. CENTER AMP SECTION

* SPKR LEVEL:ALL 0dB * SPK SIZE:LLLY

* EXT. IN * TONE OFF

NO.	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	EXT.IN	1kHz	R/O	mV	200 ± 40	200 ± 50
2	TOTAL HARMONIC DISTORTION	EXT.IN	40kHz	R/O-3dB	%	≤0.08	≤0.12
			1kHz	R/O-3dB	%	≤0.08	≤0.12
			20kHz	R/O-3dB	%	≤0.12	≤0.2
3	CONTINUOUS AVERAGE POWER at 0.2% THD	EXT.IN	40kHz	(6) ohms	W	90	85
			1kHz			100	95
			20kHz			90	85
4	S/N RATIO, INPUT SHORT IHF-A FILTER	EXT.IN	1kHz	R/O	dB	≥ 90	≥ 85
5	FREQUENCY RESPONSE (-3dB)	EXT.IN		1W/1kHz Ref.	Hz ~ kHz	10 ~ 55	10 ~ 50

3. SURROUND AMP SECTION

* SPKR LEVEL:ALL 0dB * SPK SIZE:LLLY

* EXT. IN * TONE OFF

NO.	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	EXT.IN	1kHz	R/O	mV	200 ± 40	200 ± 50
2	TOTAL HARMONIC DISTORTION (STEREO IN)	EXT.IN	40kHz	R/O-3dB	%	≤0.08	≤0.12
			1kHz	R/O-3dB	%	≤0.08	≤0.12
			20kHz	R/O-3dB	%	≤0.12	≤0.2
3	CONTINUOUS AVERAGE POWER at 0.2% THD (STEREO IN)	EXT.IN	40kHz	(6) ohms	W	90	85
			1kHz			100	95
			20kHz			90	85
4	S/N RATIO, INPUT SHORT IHF-A FILTER	EXT.IN	1kHz	R/O	dB	≥ 90	≥ 85
5	FREQUENCY RESPONSE (-3dB)	EXT.IN		1W/1kHz Ref.	Hz ~ kHz	10 ~ 55	10 ~ 50

4. SUBWOOFER SECTION

* SPKR LEVEL:ALL 0dB * SPK SIZE:LLLY

* EXT. IN * TONE OFF

NO.	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	PRE OUTPUT LEVEL	SUB-CH(200mV)	30Hz	VOL max.	V	1.7±0.5	1.7±1.0

5. STEREO SECTION

* SPKR LEVEL:ALL 0dB * SPK SIZE:LLLY

* CD FUNCTION

* TONE OFF(TONE DIRECT)

NO.	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	CD	1kHz	R/O	mV	200±40	200±50
2	CHANNEL BALANCE	CD	1kHz	R/O TO -40dB	dB	±2	±3
3	RESIDUAL NOISE	CD		VOL min.	mV	≤ 3.0	≤ 5.0
				VOL max.	mV		
4	TOTAL HARMONIC DISTORTION	CD	40Hz	R/O-3dB	%	≤ 0.08	≤ 0.12
			1kHz	"	%	≤ 0.08	≤ 0.12
			20KHz	"	%	≤ 0.12	≤ 0.2
5	CONTINUOUS AVERAGE POWER at 0.2% THD	CD	(40)Hz	(6)ohms	W	90	85
			1kHz	"	W	100	95
			(20)KHz	"	W	90	85
6	S/N RATIO,IHF-A FILTER	CD	1kHz	R/O	dB	≥ 90	≥ 85
7	CHANNEL SEPARATION	CD	100Hz	R/O-3dB	dB	≥ 55	≥ 50
			1kHz	"	dB	≥ 65	≥ 55
			10kHz	"	dB	≥ 50	≥ 45
8	FUNCTION CROSSTALK	CD → TAPE	1 kHz	"	dB	≥ 55	≥ 50
			10 kHz	"	dB	≥ 45	≥ 40
9	FREQUENCY RESPONSE (-3dB)	CD		1W	Hz ~ kHz	10 ~ 55	10 ~ 50
10	TONE CONTROL/±(10)dB (TONE DIRECT OFF)	MAX	100Hz	1W	dB	+12(±2)	+12(±3)
		MIN	100Hz	"	dB	-12(±2)	-12(±3)
		MAX	10kHz	"	dB	+12(±2)	+12(±3)
		MIN	10kHz	"	dB	-12(±2)	-12(±3)
11	HEADPHONE OUTPUT (H/P=64ohm)	CD	1kHz	R/O	V	3.0±0.3	3.0±0.5

6. IDLE VOLTAGE

* SPKR LEVEL:ALL 0dB * SPK SIZE:LLLY

* EXT. IN

* TONE OFF(TONE DIRECT), * VOL : 60

* TEST B'D : AMP

* TEST POINT : R221(FL,FR,SL,SR,C) BOTH SIDES VOLTAGE(DC).

NO.	CHANNEL	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	FL	-	-	R221FL	mV	2.7±0.3	2.7±0.5
2	FR	-	-	R221FR	mV	2.7±0.3	2.7±0.5
3	SL	-	-	R221SL	mV	2.7±0.3	2.7±0.5
4	SR	-	-	R221SR	mV	2.7±0.3	2.7±0.5
5	C	-	-	R221C	mV	2.7±0.3	2.7±0.5

7. DOLBY DIGITAL INPUT SECTION

* INPUT : COAXIAL (CD DIGITAL)

* SURROUND MODE : DOLBY DIGITAL

* VOLUME POSISTION : 62dB

* AT SPEAKER OUT Disc : LD VER 1.0

NO.	DESCRIPTION	INPUT	FREQ.	CHAP	UNIT	NOMINAL	LIMIT
1	OUT PUT LEVEL Disc All CH 0dB SPK MODE:LLLY	FRONT	1KHz	8,12	V	9.5±1	9.5±2
		CENTER	1KHz	10	V	9.5±1	9.5±2
		SURR	1KHz	14,16	V	9.5±1	9.5±2
		S/W	30Hz	18	V	1.0±0.3	1.0±0.4
2	T.H.D Disc 0dB LPF(20KHz) SPK MODE:LLLY	FRONT	1KHz	38	%	≤ 0.3	≤ 0.5
		CENTER	1KHz	38	%	≤ 0.3	≤ 0.5
		SURR	1KHz	38	%	≤ 0.3	≤ 0.5
		S/W	30Hz	18	%	≤ 0.25	≤ 0.3
3	S/N LPF(20KHz) JIS-A FILTER,Disc -20dB SPK MODE:LLLY	FRONT	1KHz	6	dB	≥ 65	≥ 60
		CENTER	1KHz	6	dB	≥ 65	≥ 60
		SURR	1KHz	6	dB	≥ 65	≥ 60
		S/W	30Hz	18	dB	≥ 65	≥ 60
4	DYNAMIC RANGE	FRONT	1KHz	38	dB	-11±1	-11±2
		CENTER	1KHz	38	dB	-11±1	-11±2
		SURR	1KHz	38	dB	-11±1	-11±2
		S/W	30Hz	18	dB	0±1	0±2
5	DIALOG FRONT NORMALIZATION			43	dB	-10±0.5	-10±1
		CENTER		43	dB	-10±0.5	-10±1
		SURR		43	dB	-10±0.5	-10±1
		S/W		43	dB	-10±0.5	-10±1

NO.	DESCRIPTION	INPUT	FREQ.	CHAP	UNIT	NOMINAL	LIMIT
6	OUTPUT CONFIG 1 SPK MODE : SSSY Ref : 1KHz 0dB	FRONT	1KHz	38(ref) 20	dB	-17±1	-17±3
		CENTER	1KHz	38(ref) 20	dB	-17±1	-17±3
		SURR	1KHz	38(ref) 20	dB	-17±1	-17±3
	Ref : 30Hz 0dB	S/W	30Hz	18(ref) 22	dB	6.0±1	6.0±2
7	OUTPUT CONFIG 2 SPK MODE : LSSN	FRONT	1KHz	38(ref) 18	dB	5.5±1	5.5±2
8	DOWNMIXING TEST SPK MODE : LSSY	CENTER	1KHz	10(ref) C → NO	dB	-3±0.5	-3±1
		SURR.L	1KHz	14 LS → NO	dB	-3±0.5	-3±1
		SURR.R	1KHz	16 RS → NO	dB	-3±0.5	-3±1
		FRONT	1KHz	6(ref) ST : ON	dB	7.5±1	7.5±2

8. DTS INPUT SECTION

* INPUT : COAXIAL, CD DIGITAL

* SURROUND MODE : DTS SURROUND

* VOLUME POSISTION : 62dB

* AT PRE OUT SPK MIDE : LLLY

DTS TEST Disc (TRACK : 9, 10, 11, 12, 13, 14, 15)

NO.	DESCRIPTION	INPUT	FREQ.	TRACK	UNIT	NOMINAL	LIMIT
1	OUT PUT LEVEL Disc : DTS 0dB LLLY	FRONT	1KHz	10,11	V	9.5±1	9.5±2
		CENTER	1KHz	14	V	9.5±1	9.5±2
		SURR	1KHz	12,13	V	9.5±1	9.5±2
		S/W	30Hz	15	V	1.0±0.3	1.0±0.4
2	THD Disc : DTS 0dB LPF (20kHz) LLLY	FRONT	1KHz	10,11	%	≤0.3	≤0.5
		CENTER	1KHz	14	%	≤0.3	≤0.5
		SURR	1KHz	12,13	%	≤0.3	≤0.5
		S/W	30Hz	15	%	≤0.3	≤0.5
3	S/N Disc 0dB, JIS "A" LPF (20kHz) LLLY	FRONT	1KHz	10,11	dB	≥65	≥60
		CENTER	1KHz	14	dB	≥65	≥60
		SURR	1KHz	12,13	dB	≥65	≥60
		S/W	30Hz	15	dB	≥65	≥60

TUNER SECTION

Measuring methods in conformity with IEC standard 315

Measurements condition FM : Ref. frequency = (98.1MHz), Audio frequency = 1kHz

Reference level = 1mV on (75ohms) Deviation :

Filter = B.P.F at STEREO and MONO

Test Point : TP1 = 90.1MHz, TP2 = 98.1MHz, TP3 = 106.1MHz (100kHz STEP, K / 50kHz, D-E-RDS)

MOD = 40kHz(MONO) / 40kHz $\pm$ 7.5kHz(STEREO)

FM SECTION

NO.	DESCRIPTION		UNIT	NOMINAL	LIMIT
1	TUNING COVER RANGE	LOW ~ HIGH	MHz	87.5~108	
	STEP (K) (D/E/RDS)	AUTO/MANUAL	kHz	100/100	
				50/50	
2	USABLE SENSITIVITY S/N = 30dB	TP 1	dBu	≤ 12	≤ 15
		TP 2	dBu	≤ 12	≤ 15
		TP 3	dBu	≤ 12	≤ 15
3	AUTO STOP LEVEL		dBu	25 ± 6	25 ± 8
4	S/N RATIO IHF "A"	MONO	dBu	≥ 55	≥ 50
		STEREO	dBu	≥ 50	≥ 45
5	T.H.D	MONO 1kHz	%	≤ 0.7	≤ 1.2
		STEREO 1kHz	%	≤ 1.0	≤ 1.5
6	OVER LOAD DISTORTION(120dBu, 75kHz)	MONO	dB	≤ 2	≤ 3
7	STEREO SRPARTION	250Hz	dBu	≥ 30	≥ 25
	(NAIN 53.5%, PILOT 10%)	1kHz	dBu	≥ 30	≥ 25
	EXT 19kHz FILTER	6.3kHz	dBu	≥ 20	≥ 15
8	FREQUENCY RESPONSE(50us, -3dB)	TP 2	Hz	60 ~ 8k	7 ~ 7k
9	IF REJECTION	TP 1	dB	≥ 75	≥ 70
10	IMAGE REJECTION	TP 3	dB	≥ 75	≥ 70
11	AM SUPPRESSION(AT AM 30% 1kHz)		dB	≥ 40	≥ 35
12	OUPUT LEVEL(MONO)	MONO	mVrms	280 ± 50	280 ± 100
13	RDS SENSITIVITY	TP 2	dB f	≤ 30	≤ 35

AM SECTION

Measurements condition AM - MW : Radio. frequency = 1000/999kHz, Audio frequency = 400Hz

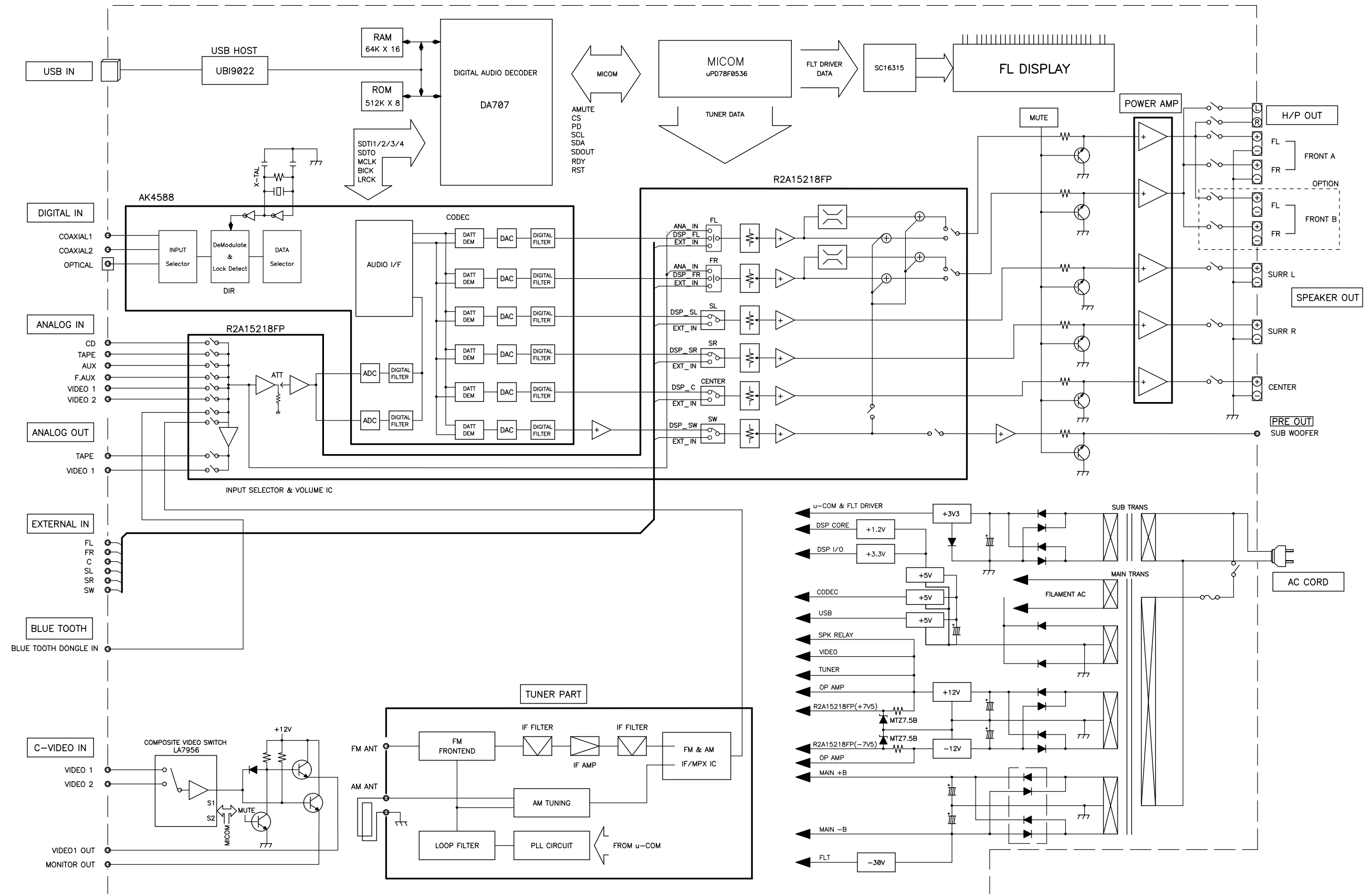
Reference level = (74dBu/m), (50)ohms Modulation = (30)%

Test Point : MW TP 1 = (594)kHz , TP 2 = (999)kHz , TP 3 = (1404)kHz

NO.	DESCRIPTION		UNIT	NOMINAL	LIMIT
1	TUNING COVER RANGE	LOW~HIGH MW	kHz	522 ~ 1611	
	STEP	AUTO/MANUAL	kHz	9 / 9	
2	USABLE SENSITIVITY S/N = 20dB	TP 1	dBu/m	≤ 63	≤ 65
		TP 2	dBu/m	≤ 63	≤ 65
		TP 3	dBu/m	≤ 63	≤ 65
3	S/N RATIO 100dBu/m, 30% MOD	TP 2	dB	≥ 35	≥ 30
4	T.H.D 74dBu/m, 30% MOD	TP 2	%	≤ 2	≤ 3
5	OVER LOAD DISTORTION 100dBu/m, 80% MOD	TP 2	%	≤ 3	≤ 5
6	FREQUENCY RESPONSE (at 74dBu/m, 400Hz) - NO FILTER	AT-6dB	Hz	80 ~ 2K	100 ~ 1.8K
7	SELECTIVITY AT SN : 20dB, ± 9 kHz	TP 2	dB	≥ 23	≥ 20
8	AGC FIGURE OF MERIT (at 100dBu/m)	TP 2	dB	≥ 50	≥ 40
9	IMAGE REJECTION	TP 3	dB	≥ 28	≥ 25
10	WHISTLE MODULATION (74dBu/m, 900kHz)	2IF	dB	≤ 10	≤ 15
11	TUNED LEVEL 999kHz		dBu/m	55 ± 10	55 ± 15
12	AUTO STOP LEVEL	999kHz	dBu/m	55 ± 10	55 ± 15
13	OUTPUT LEVEL 74dBu/m, 30% MOD		mVrms	180 ± 60	180 ± 100

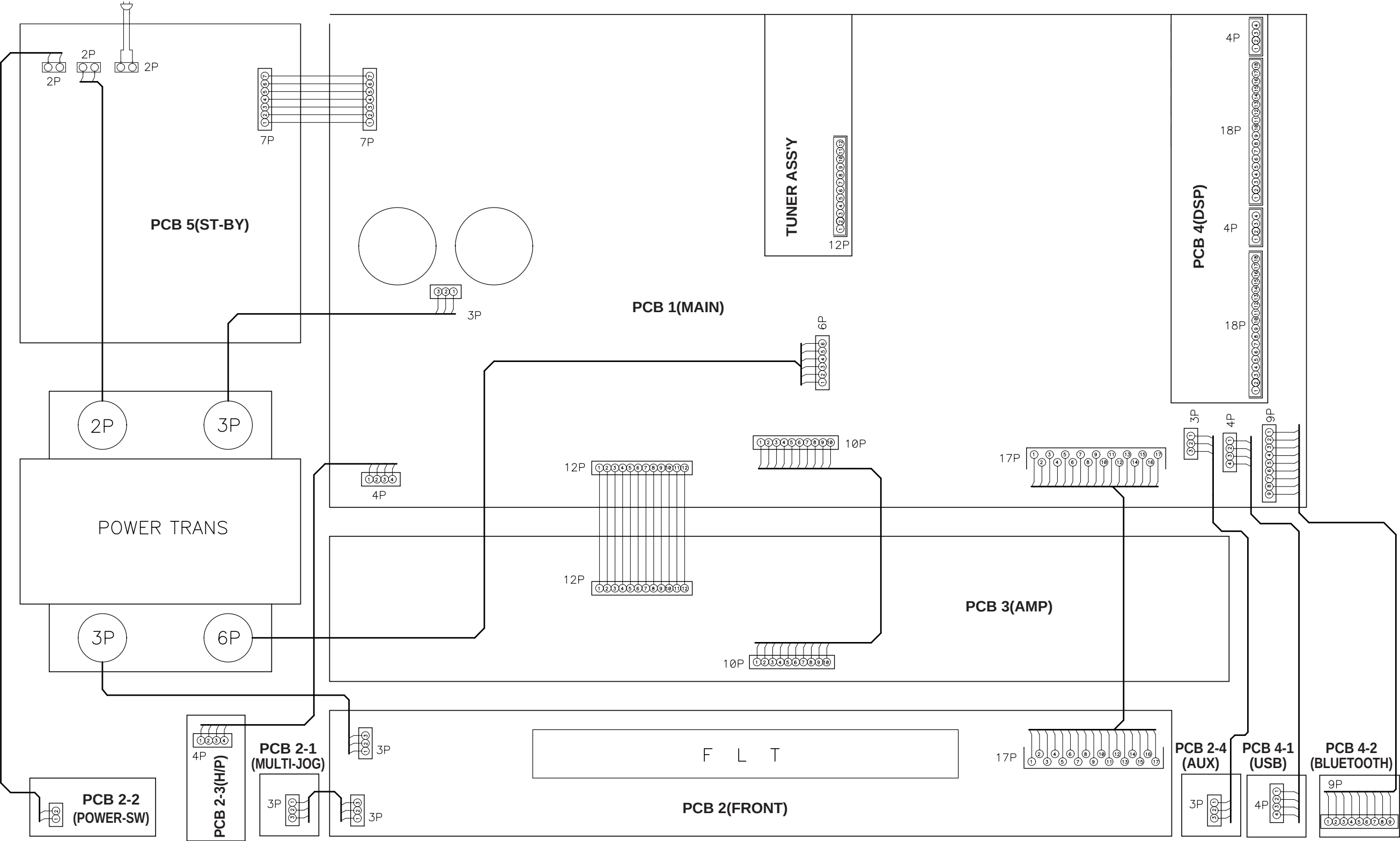
BLOCK DIAGRAM

Model No.: RD-6503



WIRING DIAGRAM

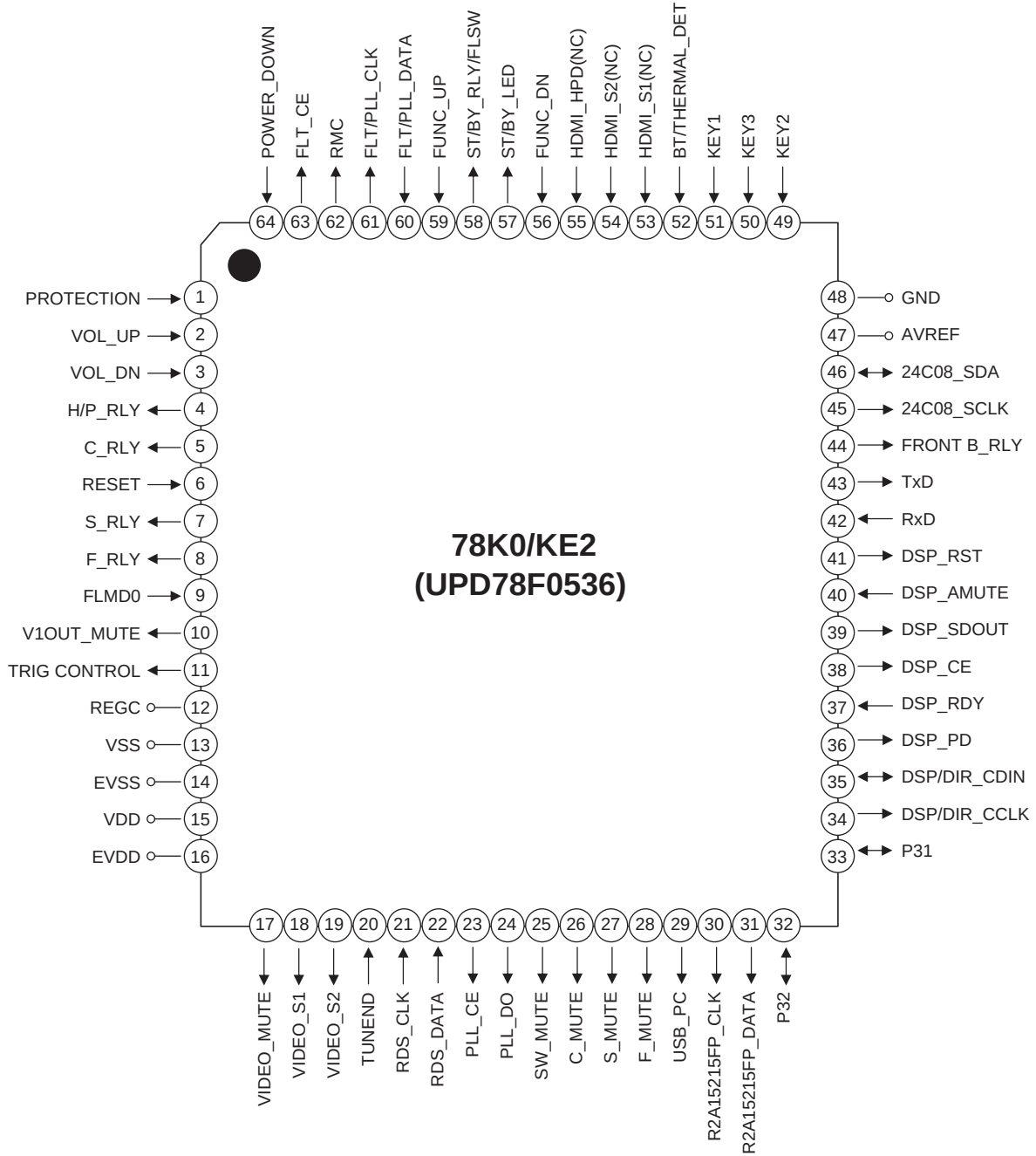
Model No.: RD-6503



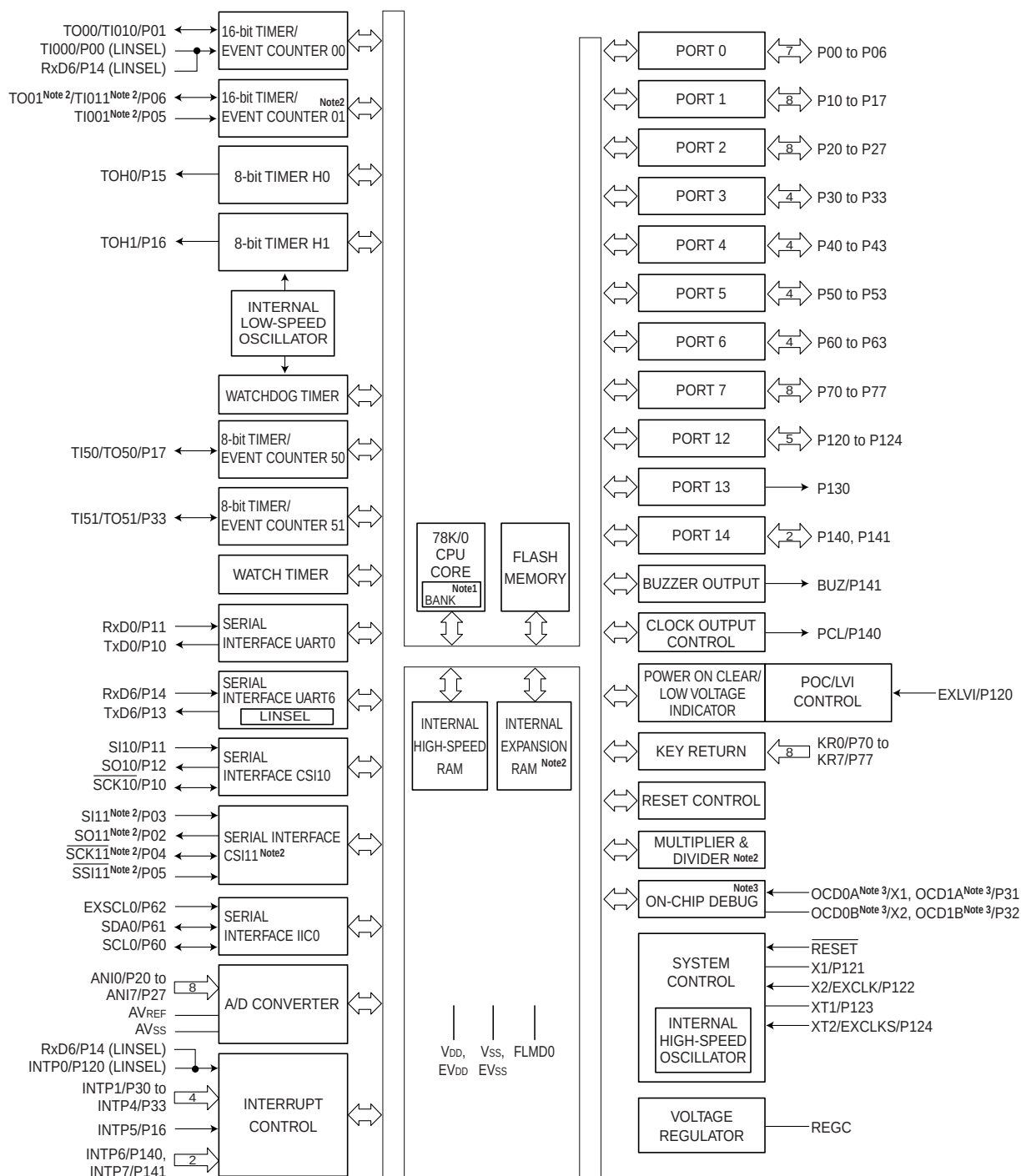
CIRCUIT DESCRIPTION

UPD78F0536GK : IC101

1. Pin Description



2. Block Diagram



- Notes
1. Available only in the μ PD78F0536, 78F0537, and 78F0537D.
 2. Available only in the μ PD78F0534, 78F0535, 78F0536, 78F0537, and 78F0537D.
 3. Available only in the μ PD78F0537D.

3. Pin Functions

No.	Pin Name	Pin Symbol	I/O	Pin Description
1	P120/INTP0/EXLVI	PROTECTION	I	Input for protection
2	P43	VOL_UP	I	Input for volume up
3	P42	VOL_DN	I	Input for volume down
4	P41	H/P_RLY	O	Output for headphone relay
5	P40	C_RLY	O	Output for center speaker relay
6	RESET	RESET	I	Input for u-com reset
7	P124/XT2/EXCLKS	S_RLY	O	Output for surround speaker relay
8	P123/XT1	F_RLY	O	Output for front speaker relay
9	IC/FLMD0	FLMD0	O	Port for flash mode setting
10	P122/X2/EXCLK	V1 OUT_MUTE	O	Output for VIDEO1 OUT MUTE
11	P121/X1	TRIG CONTROL	O	Output for DC TRIGGER ON/OFF
12	REGC			Connect to ground via 0.47uF/50V E.Cap
13	VSS	VSS		Ground
14	EVSS	EVSS		Ground
15	VDD	VDD		3V3
16	EVDD	EVDD		3V3
17	P60/SCLO	VIDEO_MUTE	O	Output for video mute
18	P61/SDA0	VIDEO_S1/HDMI_S2	O	Output for video/HDMI function IC switching
19	P62/EXSCL0	VIDEO_S2/HDMI_S1	O	Output for video/HDMI function IC switching
20	P63	TUNED	I	Input for tuner "TUNED" condition (L is active)
21	P33/TI51/TO51/INTP4	RDS_CLK	I	Clock signal input from tuner pack
22	P77/KR7	RDS_DATA	I	Input for RDS data from tuner pack
23	P76/KR6	PLL_CE	O	Chip select output for tuner pack
24	P75/KR5	PLL_DO	O	Data output for tuner pack
25	P74/KR4	SW_MUTE	O	Output for subwoofer channel mute
26	P73/KR3	C_MUTE	O	Output for center channel mute
27	P72/KR2	S_MUTE	O	Output for surround channel mute
28	P71/KR1	F_MUTE	O	Output for front channel mute
29	P70/KR0	USB_PC	O	Output for IC108(REGULATOR) ON/OFF
30	P06/TI011/TO01	R2A1521FP_CLK	O	Clock signal output for R2A1521FP
31	P05/TI001/SSI11	R2A1521FP_DATA	O	Output for R2A1521FP control data
32	P32/INTP3	P32		Port for flash upgrade
33	P31/INTP2	P31		Port for flash upgrade
34	P50	DSP/DIR_CCLK	O	Clock signal output for DIR/DSP
35	P51	DSP/DIR_CDIN	I/O	Input & output for DIR/DSP control data
36	P52	DSP_RESET	O	Output for DSP reset

No.	Pin Name	Pin Symbol	I/O	Pin Description
37	P53	DSP_RDY	I	Input for DSP enable
38	P30/INTP1	DSP_CE	O	Chip select output for NJW1153
39	P17/TI50/TO05	DSP_ABOOT	O	Output for DSP Auto boot
40	P16/TOH1/INTP5	DSP_INTREQ	I	Interrupt signal output to DSP
41	P15/TOH0	DIR_PDN	O	Output for DIR power down
42	P14/RXD6	RxD	I	Input for flash upgrade
43	P13/TXD6	TxD	O	Output for flash upgrade
44	P12/SO10	Front B RLY	O	Output for SPK B ON/OFF
45	P11/SI10/RXD0	24C08_SCLK	O	Clock signal output for 24C08
46	P10/SCK10/TXD0	24C08_SDA	I/O	Input & output for 24C08 control data
47	AVREF	AVREF		3V3
48	AVSS	AVSS		GROUND
49	P27/ANI7	KEY2	I	Input for KEY2 scan
50	P26/ANI6	KEY3	I	Input for KEY3 scan
51	P25/ANI5	KEY1	I	Input for KEY1 scan
52	P24/ANI4	BT/THERMAL_DET	I	BLUETOOTH DETECT
53	P23/ANI3	HDMI_HPD	O	Output for HDMI HPD(NOT USED)
54	P22/ANI2	HDMI_S2	O	Output for HDMI S2 CONTROL(NOT USED)
55	P21/ANI1	HDMI_S2	O	Output for HDMI S1 CONTROL(NOT USED)
56	P20/ANI0	FUNC_DN	I	Input for function encoder down
57	P130	ST/BY_LED	O	Output for standby led
58	P04/SCK11	ST/BY_RLY	O	Output for standby relay
59	P03/SI11	FUNC_UP	I	Input for function encoder up
60	P02/SO11	FLT/PLL_DATA	O	Output for FLT/PLL control data
61	P01/TI010/TO00	FLT/PLL_CLK	O	Clock signal output for FLT/PLL
62	P00/TI000	RMC	I	Input for remocon data
63	P141/BUZ/INTP7	FLT_CE	O	Chip select output for FLT
64	P140/PCL/INTP6	POWER_DOWN	I	Input for power down

ALIGNMENT PROCEDURES

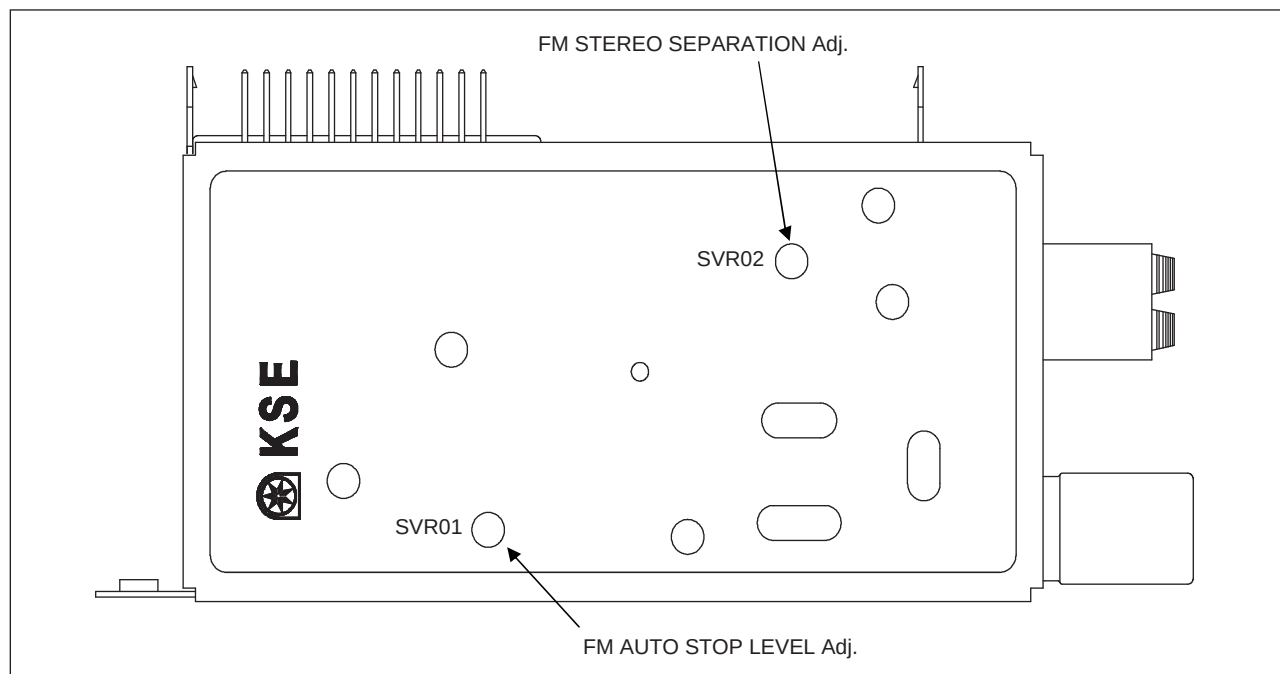
1. Electrical specification

NO.	ITEMS	SPECIFICATION	
		M W	F M
1-1	Local OSC	Above the receiving Frequency	
1-2	Frequency cover range	522 ~1620kHz	87.5 ~ 108.0MHz
1-3	Standard supply voltage	12.0(±0.5V)	
1-4	FM Antenna input Impedance	75 ohm	
1-5	AM Loop Antenna	9.5uH (1kHz) : S0160BL-25	

2. Electrical Characteristics

NO	TEST ITEMS	TEST CONDITION	T.P.	T.L.	MOD.	Specification	UNIT	Adjustment
				dBu	kHz,%			
FM	AF Output Level	47Ωk Load	98.1	60	40	280±100	mV	Non Adjust
	Auto Stop Level		98.1	--		25 ±6	dBu	SVR01
	Stereo Separation	1kHz	98.1	60		25 min	dB	SVR02
MW	AF Output Level	47Ωk Load	999	74	30	180 ±60	mV	Non Adjust
	Auto Stop Level		999	--	30	55 ±15	dBu	Non Adjust

3. Adjust Point



TROUBLESHOOTING

Symptom	Cause and Remedy	Ref No.
Power On Failure 1. FLT does not light up. 2. ST-BY LED does not light up.	A) AC-Cord check. B) Power Trans (Main/ST-BY) check. C) Fuse's disconnection check. D) Connector's disconnection or disjunction. Change or close insertion of the connector. E) Inferior ST-By switch. F) VFD Driver I.C & Resonator check. 1. VFD Driver I.C VCC(+3.3)V check. 2. VFD Driver clock pulse check.	F (301) CN301,FPC101 SW(700) I.C701 SC16315 I.C701 Pin No13 I.C701 Pin No5
Fuse Disconnection. (Power On)	A) Inferior transformer. B) AMP drive TR out. (POWER TR) C) AMP drive TR out. (POWER TR) D) voltage check. 1. B+ (47)V, B- (47) V	Q206(FL, FR, C, SL, SR) Q205 (FL, FR, C, SL, SR)
Key Disorder.	A) Key's being pushed check. B) Key signal input components inferior. C) Key PORT check. D) μ -COM I.C inferior. 1. μ -COM IC VCC +3.3V check.	I.C101 Pin No. (49,50,51) I.C101 Pin No. (15,16,47)
Power Off in 2~3 sec. after Power On.	A) Regulator I.C out. 1. Signal IN/OUT check. B) Drive transistor out. (POWER TR) C) Protection circuit check. 1. Output DC check. 2. μ -COM I.C protection terminal check. D) Connector's disconnection or disjunction E) SLEEP MODE cancellation.	I.C 300 (LM1117S_3.3V) Q205 (FL, FR, C, SL, SR) Q206(FL, FR, C, SL, SR) u-COM Pin No. (1) CP (111)
Bump Sound (During input-select switch's change.)	A) FRONT Mute transistor's out and inferior. μ -Com front mute control PORT check. B) CENTER Mute transistor's out and inferior. μ -Com center mute control PORT check. C) SURROUND Mute transistor's out and inferior. μ -Com surround mute control PORT check.	Q (105) IC101 Pin No. (28) Q (107) IC101 Pin No. (26) Q (109) IC101 Pin No. (27)

Symptom	Cause and Remedy	Ref No.
Sounds from Speaker when Headphone's connected.	A) NOT Supported Headphone Detect. Push the Speaker On/Off Button(Speaker off).	
Bass / Treble Control Failure.	A) Volume IC check. 1. Resister/Capacitor correction figure check.(Bass) 2. Resister/Capacitor correction figure check.(Treble)	I.C109 I.C109 PIN No. (26,27,32,33) I.C109 PIN No. (28,34)
AMP Sound Dead. 1. "LEFT" Channel dead. 2. "RIGHT" Channel dead. 3. "CENTER" Channel dead. 4. "REAR" Channel dead.	A) Signal Mute TR's inferior. B) Connector disconnection & disjunction. Change or close insertion of the connector. C) Speaker wire's disjunction. Close insertion of the speaker wire. D) Volume IC check. 1. I.C voltage check (+7.5)V, (-7.5)V 2. I.C control data check. 3. I.C signal IN/OUT check.	Q 105,107,109 CP (111) I.C No. (109) I.C Pin No. (30,52) I.C PIN No. (49,50)
AC-3/DTS Failure. (DSP Sound Mode)	A) I.C Regulator check. DSP I/O + (3.3)V,DSP CORE + (1.2)V CODEC + (5)V,CODEC + (3.3)V B) DIR check. 1. OSC check. 2. BICK, LRCK, RDATA Check. 3. Micom Interface Port Check. C) DSP Check. 1. LRCK Check. 2. Micom Interface Port Check. 3. SDATA 1, 2, 3,4 Check. D) D/A Check. 1. LRCK/BCK/SDATA check. 2. Signal out check.	REG101,REG102 I.C No. (112), REG100 I.C103 X-TAL (100) I.C Pin No. (15) (16) (14) I.C Pin No. (21,22,31) I.C No. (102) I.C Pin No. (12) I.C Pin No.(3,4,14,105,107,108,110,111) I.C Pin No. (117,116,115,113) I.C No. (103) I.C Pin No. (17,18,19) I.C Pin No. (49,47,45,43,41,39,37,35)
Video Output Dead.	A) Video Regulator voltage check. 1. DC voltage check. + (12)V B) Micom control data check. C) Video Mute(MONTOR,V1 OUT) port check.(IC101)	I.C No. (106) I.C Pin No. (2,3) I.C Pin No. (17,10)
Remote Controller Failure.	A) Battery check. B) RMC I.C & Resonator inferior. 1. μ -COM I.C B+(3.3)V check. 2. REMOCON data check.	I.C NO. (101) / I.C Pin No. (62)

Symptom	Cause and Remedy	Ref No.
FM Failure.	A) FM MUTE adjustment inferior. B) FRONT-END inferior. C) FM DET COIL inferior. D) PLL&MPX IC check. 1. PLL&MPX I.C B+(5)V,B+(3.3)V check. 2. PLL control data check. (Data/CE/Clock) E) TUNER B+ voltage inferior. F) μ -COM I.C & Resonator inferior. 1. μ -COM I.C B+(3.3)V check. 2. Micom control data check.	I.C NO. (1) / I.C Pin No. (8,21) I.C No. (101) I.C Pin No. (20,23,24,60,61)
AM Failure.	A) PLL&MPX IC check. 1. PLL&MPX I.C B+(5)V,B+(3.3)V check. 2. PLL control data check (Data/CE/Clock) B) TUNER B+ voltage inferior. C) AM OSC COIL inferior. D) μ -COM I.C & Resonator inferior. 1. μ -COM I.C B+(3.3)V check. 2. Micom control data check.	I.C NO. (1) / I.C Pin No. (8,21) I.C No. (101) I.C Pin No. (20,23,24,60,61)
Stereo Effect Failure. Stereo does not light up.	A) FM DET COIL Inferior. B) PLL&MPX IC check. 1. PLL&MPX I.C B+(5)V,B+(3.3)V check. 2. MPX control data check. C) μ -COM I.C & Resonator inferior. 1. μ -COM IC B+(3.3)V check 2. Micom control data check.	I.C No. (101) I.C Pin No. (20,23,24,60,61)
Tuner Sound Dead. 1. "L / R" Channel dead. 2. "LEFT" Channel dead. 3. "RIGHT" Channel dead.	A) Connector's disconnection or disjunction. Change or Close insertion of the connector. B) FM DET COIL inferior. C) AM IFT COIL inferior. D) PLL&MPX IC check. 1. Signal IN/OUT terminal. 2. I.C driving voltage check. (+5V,+3V3)	I.C NO. (1) / I.C Pin No. (8,21)

MECHANICAL PARTS LIST

Model No.: RD-6503

♣ Parts without Parts No. are not supplied.

Parts without version mentioned are common ones.

⦿ D/G → EUROPE(230V/50Hz), E → AUSTRALIA(240V/50Hz), K → KOREA(220V/60Hz)

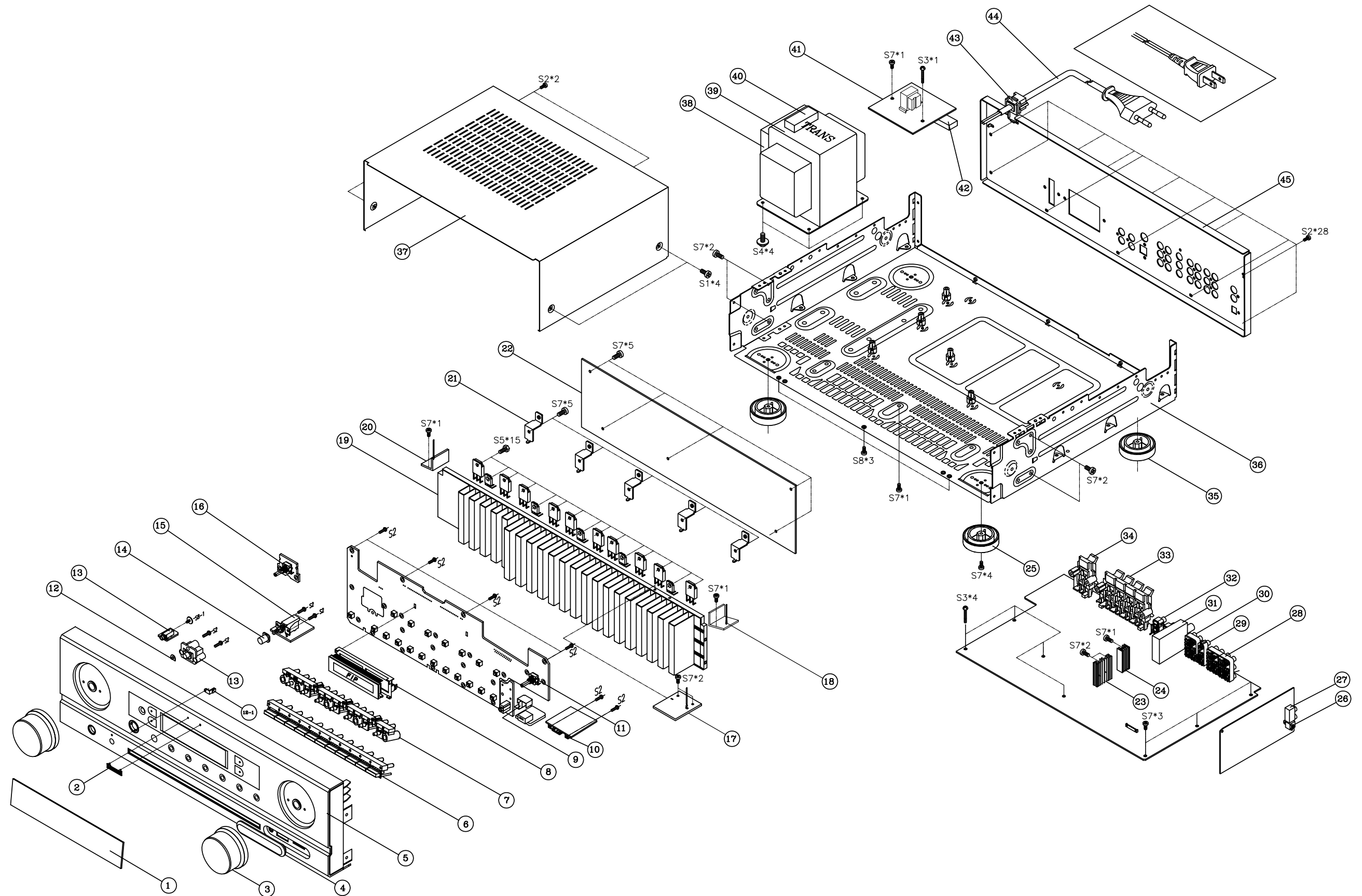
No.	DESCRIPTION	Q'TY	PARTS No.	VER.
PACKAGE				
	INSTRUCTION MANUAL	1	5707000001260S	D/E/G
	INSTRUCTION MANUAL	1	5707000001310S	K
	BOX,GIFT	1	6007211180040S	D/G
	BOX,GIFT	1	6007211180050S	K
	BOX,INNER CARTON	1	6017210050080S	E
	BOX,PARTS	1	6030210052000S	K
	CUSHION,SNOW	1	6230043714010S	
	PAD, SNOW	2	6240210194000S	E
	PE,SHEET(750*1460/SET)	1	6327040059000S	
	POLY BAG	1	6337040062010S	
	REMOCON, RC-125 55KEY	1	8300125000010S	
	ANTENNA, LOOP	1	E601016000010S	
	ANTENNA, WIRE(FM)	1	E605010070001S	
	BATTERY, AAA	2	G670001R50210S	
CABINET & CHASSIS				
1	WINDOW, Display	1	5077212582000S	D/E/K
	WINDOW, Display	1	5077212582010S	G
2	BADGE, GOLD	1	5630210051000S	D/E-B/G
	BADGE, SILVER	1	5630210051010S	D/E-S
	BADGE, SILVER	1	5630210268000S	K-S/K-G
3	KNOB, VOLUME	2	5080210191030SZ	K-G
	KNOB, VOLUME	2	5080210191400SZ	D/E-B/G
	KNOB, VOLUME	2	5080210191800SZ	D/E/K-S
4	COVER, USB	1	4317214161000S	D/E-B/G
	COVER, USB	1	4317214161100S	D/E/K-S
	COVER, USB	1	4317214161200S	K-G
5	PANEL, FRONT	1	3067213861100S	D/E-B/G
	PANEL, FRONT	1	3067213861200S	D/E/K-S
	PANEL, FRONT	1	3067213861300S	K-G
6	BUTTON, 11KEY	1	5090212771300S	D/E-B/G
	BUTTON, 11KEY	1	5097212771100S	K-G
	BUTTON, 11KEY	1	5097212771200S	D/E/K-S
7	BUTTON, 7KEY	1	5090212761000SZ	D/E/K-S
	BUTTON, 7KEY	1	5090212761100SZ	K-G
	BUTTON, 7KEY	1	5090212761200SZ	D/E-B/G

No.	DESCRIPTION	Q'TY	PARTS No.	VER.
8	HOLDER FLT	1	432004078301AS	
9	SHIELD, PLATE USB-B	1	3070210456100S	
10	BRACKET, BLUETOOTH	2	4010210196000S	
11	SW,ENCODER	1	G121123070010S	
12	INDICATOR,SPEAKER	1	5160040643010S	
12-1	INDICATOR, GUIDE LED	1	5160041003010S	
13	JACK,D6.5	1	G402040161331S	
14	BUTTON, POWER	1	5090213561000S	D/E-B/G
	BUTTON, POWER	1	5097213561100S	K-G
	BUTTON, POWER	1	5097213561200S	D/E/K-S
15	SW,PUSH	1	G000122006060S	
16	SW,ENCODER	1	G121123050010S	
17	PCB ASS'Y, GUIDE 1	1		
18	PCB ASS'Y, GUIDE 2	1		
19	HEAT SINK, MAIN		2120210538100S	
20	PCB ASS'Y, GUIDE 3	1		
21	BRACKET, H SINK	5	4010056906010S	
22	PCB ASS'Y, AMP	1		
23	HEAT SINK, REG TR	1	2120043538030S	
24	HEAT SINK, REG TR(24X45)	1	2120044298010S	
25	FOOT, H/STAMPING/ASS'Y	2	4007040201020S	D/E/K-S
	FOOT, H/STAMPING/ASS'Y	2	4007040201040S	D/E/K-B/G
26	MODULE, OPTICAL	1	E100116500040S	
27	TER,RCA 2PIN	1	G601206A0200YS	
28	TER,RCA 12PIN	1	G6081201A120YS	
29	TER,RCA 3PIN	1	G60631901B20YS	
30	TER,RCA 6PIN	1	G603610A0041YS	
31	TUNER,FM/AM RDS	1	E903104100010S	G
	TUNER,FM/AM 1		E903004100010S	D/E/K
32	TER,RCA 4PIN	1	G602405BE310YS	
33	TER,BOARD PUSH 8P	1	G598801SA090YS	
34	TER,BOARD PUSH 2P	1	G59221206000YS	
35	FOOT, PL	2	4000040201010S	
36	CHASSIS, MAIN	1	3200200026020S	
37	CABINET, TOP	1	3007041236061S	D/E-B/G
	CABINET, TOP	1	3007041236071S	D/E/K-S
	CABINET, TOP	1	3007041236081S	K-G

No.	DESCRIPTION	Q'TY	PARTS No.	VER.
38	CUSHION,TRANS 60*40*16t	1	4050211365000S	
39	POWER TRANS, MAIN 230V/50Hz	1	8200960560120S	D/E/G
	POWER TRANS, MAIN 220V/50,60Hz	1	8200960560130S	K
40	CUSHION, TRANS 50*20*12t	1	4050210485000S	
41	PCB ASS'Y, ST-BY	1		
42	CUSHION, SPONGE	1	4050044345010S	
43	STOPPER, CORD	1	4380040162010S	
44	CORD ASS'Y, 2.5A/250V	1	L068250250100S	D/G
	CORD ASS'Y, 2.5A/250V	1	L068250250180S	K
	CORD ASS'Y, 7.5A/250V	1	L068250750020S	E
45	CHASSIS, BACK	1	3207212506111S	D/E/G
	CHASSIS, BACK	1	3207212506200S	K
SCREWS				
S1	SCREW, +2S 4*8 B-TYPE(DOT) BK/BH	4	1500040083B10S	D/E/G
	SCREW, +2S 4*8 B-TYPE(DOT) NI/BH	4	1500040084B10S	K
S2	SCREW, +2S 3*10 B-TYPE(DOT) BK/BH	26	B020030103B11S	
S3	SCREW, 3X18 B-TYPE ZNW/BH	5	B020030181B10S	
S4	SCREW, +3S 4*10 P+S-WASHER ZNW/BH	4	B028940101B10S	
S5	SCREW, +2S 3*16+S-WASHER ZNW/HH	15	1507041146010S	
S6	SCREW, +2S 3*8 ZnY WASHER PI12	2	1500001456010S	
S7	SCREW, +2S 3*8 B-TYPE ZNW/BH	51	B020030081B10S	D/E/G
	SCREW, +2S 3*8 B-TYPE ZNW/BH	54	B020030081B10S	K
S8	SCREW, +2S 3*8 B-TYPE BK/BH	3	B020030083B10S	D/E/G
MISCELLANEOUS				
Q206C	KTB2510, PNP	1	J501251000010S	
Q206FL	KTB2510, PNP	1	J501251000010S	
Q206FR	KTB2510, PNP	1	J501251000010S	
Q206SL	KTB2510, PNP	1	J501251000010S	
Q206SR	KTB2510, PNP	1	J501251000010S	
Q205C	KTD1510, NPN	1	J503151000020S	
Q205FL	KTD1510, NPN	1	J503151000020S	
Q205FR	KTD1510, NPN	1	J503151000020S	
Q205SL	KTD1510, NPN	1	J503151000020S	
Q205SR	KTD1510, NPN	1	J503151000020S	
Q204C	2SD947F, NPN	1	J503947F00000S	
Q204FL	2SD947F, NPN	1	J503947F00000S	
Q204FR	2SD947F, NPN	1	J503947F00000S	
Q204SL	2SD947F, NPN	1	J503947F00000S	
Q204SR	2SD947F, NPN	1	J503947F00000S	

EXPLODED VIEW

Model No.: RD-6503



ELECTRICAL PARTS LIST

Model No.: RD-6503

♣ Parts without Parts No. are not supplied.

Parts without version mentioned are common ones.

☉ D/G → EUROPE(230V/50Hz), E → AUSTRALIA(240V/50Hz), K → KOREA(220V/60Hz)

REF No.	DESCRIPTION	Q'TY	PARTS No.	VER.
PCB1	ASSEMBLY P.C.BOARD MAIN		7025HK0808010	G
PCB1	ASSEMBLY P.C.BOARD MAIN		7025HK0808030	K
PCB1	ASSEMBLY P.C.BOARD MAIN		7025HK0808040	D/E
	COILS			
BD103/BD104	BEAD COIL, 120ohm	2	D340160811210S	
BD106-BD112	BEAD COIL, 120ohm	7	D340160811210S	
BD115	BEAD COIL, 120ohm	1	D340160811210S	
BD116-BD119	LINE FILTER COIL, BFS2550A0F1	4	D320255000520S	
J124	INDUCTOR COIL, 100UH	1	D330101001020S	
J189	LINE FILTER COIL, BFS2550A0F1	1	D320255000520S	
J193	LINE FILTER COIL, BFS2550A0F1	1	D320255000520S	
J197	LINE FILTER COIL, BFS2550A0F1	1	D320255000520S	
	CAPACITORS			
C101L/R	CERAMIC CHIP T.C 100 pF 50V J	2	D010101167160S	
C102L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C103L/R	CERAMIC CHIP T.C 100 pF 50V J	2	D010101167160S	
C104L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C105L/R	CERAMIC CHIP T.C 220 pF 50V J	2	D010221167160S	
C106L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C107L/R	CERAMIC CHIP T.C 220 pF 50V J	2	D010221167160S	
C108L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C109L/R	CERAMIC CHIP T.C 220 pF 50V J	2	D010221167160S	
C110L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C111L/R	CERAMIC CHIP T.C 220 pF 50V J	2	D010221167160S	
C112L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C113L/R	CERAMIC CHIP T.C 220 pF 50V J	2	D010221167160S	
C114L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C115C	CERAMIC CHIP T.C 100 pF 50V J	1	D010101167160S	
C115L/R	CERAMIC CHIP T.C 100 pF 50V J	2	D010101167160S	
C115SL	CERAMIC CHIP T.C 100 pF 50V J	1	D010101167160S	
C115SR	CERAMIC CHIP T.C 100 pF 50V J	1	D010101167160S	
C115SW	CERAMIC CHIP T.C 100 pF 50V J	1	D010101167160S	
C116C	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C116L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C116SL	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C116SR	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C116SW	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C117L/R	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C118/C119	ELECT GE 85C 10 uF 50V M	2	D040100087070S	
C120	CERAMIC CHIP HIK 0.022 uF 25V K	1	D011223777160S	
C121	CERAMIC CHIP HIK 0.047 uF 16V K	1	D011473773160S	
C122	CERAMIC CHIP HIK 0.15 uF 10V Z	1	D011154792160S	
C123-C128	ELECT GE 85C 100 uF 10V M	6	D040101082090S	
C131	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C132	CERAMIC CHIP HIK 0.15 uF 10V Z	1	D011154792160S	
C133	CERAMIC CHIP HIK 0.047 uF 16V K	1	D011473773160S	
C134	CERAMIC CHIP HIK 0.022 uF 25V K	1	D011223777160S	
C135	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C136	ELECT GE 85C 1 uF 50V M	1	D040010087150S	K
C1366	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C137/C138	CERAMIC CHIP T.C 100 pF 50V J	2	D010101167160S	
C139	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C140SW	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C141SW	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	

REF No.	DESCRIPTION	Q'TY	PARTS No.	VER.
C142SW	CERAMIC CHIP HIK 1000 pF 50V K	1	D011102777160S	
C143SW	CERAMIC CHIP T.C 47 pF 50V J	1	D010470167160S	
C144SW	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C145SW	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C146SW	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C147SW	CERAMIC CHIP HIK 3300 pF 50V K	1	D011332777160S	
C149SW	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C150SW	CERAMIC CHIP T.C 330 pF 50V J	1	D010331167160S	
C151SW	CERAMIC CHIP T.C 680 pF 50V J	1	D010681167160S	
C154C	CERAMIC CHIP HIK 3300 pF 50V K	1	D011332777160S	
C154L/R	CERAMIC CHIP HIK 3300 pF 50V K	2	D011332777160S	
C154SL	CERAMIC CHIP HIK 3300 pF 50V K	1	D011332777160S	
C158C	ELECT GE 85C 4.7 uF 50V M	1	D0404R7087250S	
C158L/R	ELECT GE 85C 4.7 uF 50V M	2	D0404R7087250S	
C158SL	ELECT GE 85C 4.7 uF 50V M	1	D0404R7087250S	
C158SR	ELECT GE 85C 4.7 uF 50V M	1	D0404R7087250S	
C158SW	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C159C	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C159F	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C159S	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C159SW	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C160C	FILM POLYESTER 0.1 uF 100V J	1	D02010406C060S	
C160L/R	FILM POLYESTER 0.1 uF 100V J	2	D02010406C060S	
C160SL	FILM POLYESTER 0.1 uF 100V J	1	D02010406C060S	
C160SR	FILM POLYESTER 0.1 uF 100V J	1	D02010406C060S	
C161C	FILM POLYESTER 0.01 uF 100V J	1	D02010306C060S	
C161L/R	FILM POLYESTER 0.01 uF 100V J	2	D02010306C060S	
C161SL	FILM POLYESTER 0.01 uF 100V J	1	D02010306C060S	
C161SR	FILM POLYESTER 0.01 uF 100V J	1	D02010306C060S	
C162C	FILM POLYESTER 0.01 uF 100V J	1	D02010306C060S	K
C162C	FILM POLYESTER 0.012 uF 100V J	1	D02012306C060S	D/E/G
C162L/R	FILM POLYESTER 0.01 uF 100V J	2	D02010306C060S	K
C162L/R	FILM POLYESTER 0.012 uF 100V J	2	D02012306C060S	D/E/G
C162SL	FILM POLYESTER 0.01 uF 100V J	1	D02010306C060S	K
C162SL	FILM POLYESTER 0.012 uF 100V J	1	D02012306C060S	D/E/G
C162SR	FILM POLYESTER 0.01 uF 100V J	1	D02010306C060S	K
C162SR	FILM POLYESTER 0.012 uF 100V J	1	D02012306C060S	D/E/G
C164SW	CERAMIC CHIP T.C 100 pF 50V J	1	D010101167160S	
C167	ELECT GE 85C 2.2 uF 50V M	1	D0402R2087160S	
C168-C170	CERAMIC CHIP T.C 0.01 uF 50V K	3	D010103777160S	
C171-C174	CERAMIC CHIP T.C 100 pF 50V J	4	D010101167160S	
C175	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C176	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C178	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C179/C180	ELECT GE 85C 6800 uF 63V M	2	D040682088010S	
C182-C186	FILM POLYESTER 0.1 uF 250V K	5	D02010407H080S	
C187/C188	ELECT GE 85C 1 uF 50V M	2	D040010087150S	
C189	ELECT GE 85C 330 uF 63V M	1	D040331088230S	
C190	ELECT GE 85C 4.7 uF 100V M	1	D0404R708C060S	
C191	ELECT GE 85C 10 uF 50V M	1	D040100087070S	
C192	CERAMIC CHIP HIK 0.1 uF 50V K	1	D011104577160S	
C193	ELECT GE 85C 330 uF 10V M	1	D040331082070S	
C194	CERAMIC CHIP HIK 0.1 uF 50V K	1	D011104577160S	
C195	ELECT GE 85C 330 uF 10V M	1	D040331082070S	
C196	CERAMIC CHIP HIK 0.1 uF 50V K	1	D011104577160S	
C197	ELECT GE 85C 100 uF 10V M	1	D040101082090S	
C198/C199	CERAMIC CHIP HIK 0.1 uF 50V K	2	D011104577160S	

REF No.	DESCRIPTION	Q'TY	PARTS No.	VER.
C200	ELECT GE 85C 6800 uF 16V M	1	D040682083000S	
C201-C203	FILM POLYESTER 0.1 uF 100V J	3	D02010406C060S	
C204/C205	ELECT GE 85C 1 uF 50V M	2	D040010087150S	
C206	ELECT GE 85C 4700 uF 25V M	1	D040472084020S	
C207	ELECT GE 85C 1000 uF 25V M	1	D040102084060S	
C208-C210	FILM POLYESTER 0.1 uF 100V J	3	D02010406C060S	
C211	ELECT GE 85C 0.47 uF 50V M	1	D040R47087050S	
C212	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C213	ELECT GE 85C 3.3 uF 50V M	1	D0403R3087050S	
C214	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C215/C216	CERAMIC CHIP T.C 100 pF 50V J	2	D010101167160S	
C217	CERAMIC CHIP T.C 0.01 uF 50V K	1	D010103777160S	
C218	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C219	ELECT GE 85C 4.7 uF 50V M	1	D0404R7087250S	
C220	CERAMIC CHIP HIK 0.047 uF 16V K	1	D011473773160S	
C221	ELECT GE 85C 470 uF 6.3V M	1	D040471081070S	
C222/C223	ELECT GE 85C 4.7 uF 50V M	2	D0404R7087250S	
C224-C228	CERAMIC CHIP HIK 0.1 uF 50V K	5	D011104577160S	
C229	CERAMIC CHIP HIK 0.1 uF 50V K	1	D011104577160S	K
C230	CERAMIC CHIP HIK 0.1 uF 50V K	1	D011104577160S	
C231-C234	CERAMIC CHIP T.C 0.01 uF 50V K	4	D010103777160S	
C244/C245	CERAMIC CHIP HIK 0.1 uF 50V K	2	D011104577160S	
C251	CERAMIC CHIP T.C 220 pF 50V J	1	D010221167160S	
C252	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C253	CERAMIC CHIP T.C 220 pF 50V J	1	D010221167160S	
C254	ELECT GE 85C 47 uF 16V M	1	D040470083080S	
C257/C258	ELECT GE 85C 470 uF 10V M	2	D040471082060S	
C260	CERAMIC CHIP HIK 0.047 uF 16V K	1	D011473773160S	
C264	ELECT GE 85C 100 uF 16V M	1	D040101083070S	
C354/C355	CERAMIC SEMI DISC 0.1 uF 50V Z	2	D006104597050S	
C414-C416	CERAMIC CHIP HIK 0.1 uF 50V K	3	D011104577160S	
C467/C468	CERAMIC CHIP T.C 0.01 uF 50V K	2	D010103777160S	
C154SR	CERAMIC CHIP HIK 3300 pF 50V K	1	D011332777160S	
	CONNECTORS			
CP101	CN.WAFER 7.92MM	1	L108353280360S	
CP102	CN.WAFER 2.5MM (6P)	1	L102526700600S	
CP103	CN.FPC 1.25MM (7P)	1	L131007100010S	
CP105	CN.WAFER 2.0MM (4P)	1	L101100040410S	
CP106	CN.WAFER 2.0MM	1	L101200100910S	
CP107/CP108	CN.WAFER 2.0MM (18P)	2	L101100041810S	
CP109	CN.WAFER 2.0MM (4P)	1	L101100040410S	K
CP110	CN.WAFER 2.0MM	1	L101200101010S	
CP111	CN.WAFER 2.5MM (12P)	1	L102526701200S	
CP112	CN.WAFER 2.0MM (4P)	1	L101200100410S	
CP113	CN.WAFER 2.0MM	1	L101200100910S	
CP114	CN.WAFER 2.0MM (3P)	1	L101200100310S	
FPC101	CN.FPC 1.25MM (17P)	1	L131111700010S	
	DIODES			
D101-D110	1N4148WS, SWITCHING CHIP	10	K005041483230S	
D111/D112	KBPC604, RECTIFIER BRIDGE	2	K047604000020S	
D116-D119	1SS133T, SWITCHING	4	K000013300520S	
D120/D121	1N4148WS, SWITCHING CHIP	2	K005041483230S	
D122	1N4007, SWITCHING	1	K000400700010S	
D123	1N4148WS, SWITCHING CHIP	1	K005041483230S	
D124	1SS133T, SWITCHING	1	K000013300520S	
D126-D128	1N4148WS, SWITCHING CHIP	3	K005041483230S	
D129-D134	1N4007, SWITCHING	6	K000400700010S	

REF No.	DESCRIPTION	Q'TY	PARTS No.	VER.
D135/D136	1N4148WS, SWITCHING CHIP	2	K005041483230S	
D142	1N4148WS, SWITCHING CHIP	1	K005041483230S	
D201/D202	1N4148WS, SWITCHING CHIP	2	K005041483230S	
	INTEGRATED CIRCUITS			
IC101	UPD78F0536GK(T), CPU	1	J020780536000S	
IC103	KIA7812API, LINEAR-REGULATOR	1	J126781200040S	
IC104	KIA7912PI, LINEAR-REGULATOR	1	J126791200060S	
IC105	CF4558CB, LINEAR OP	1	J121455800150S	
IC106	LA7956, MONITOR SW	1	J171795600010S	
IC107	FT24C08, MEMORY-EEPROM	1	J000240800020S	
IC108	KIA78R05PI, LINEAR-REGULATOR	1	J126780500370S	
IC109	R2A15218FP, ELECT VR	1	J084152180010S	
IC111/IC112	KIA7805API, LINEAR-REGULATOR	2	J126780500110S	
IC113	KIA7812API, LINEAR-REGULATOR	1	J126781200040S	K
	JACKS			
JACK101	TER,RCA	1	G6081201A120YS	
JACK102	TER,RCA 3PIN	1	G60631901B20YS	
JACK103	TER,RCA 6PIN	1	G603610A0041YS	
JACK105	TER,RCA 4PIN	1	G602405BE310YS	
JACK106	TER,BOARD PUSH 8P	1	G598801SA090YS	
JACK107	TER,BOARD PUSH 2P	1	G59221206000YS	
	TRANSISTORS			
Q103/Q104	KTC2875B(MB), NPN	2	J5222875B0010S	
Q105	KRA105S(PE), PNP	1	J520010500210S	
Q106	KTC2875B(MB), NPN	1	J5222875B0010S	
Q107	KRA105S(PE), PNP	1	J520010500210S	
Q108	KTC2875B(MB), NPN	1	J5222875B0010S	
Q109	KRA105S(PE), PNP	1	J520010500210S	
Q110	KTC2875B(MB), NPN	1	J5222875B0010S	
Q111	KRA105S(PE), PNP	1	J520010500210S	
Q114/Q115	KTC2875B(MB), NPN	2	J5222875B0010S	
Q116-Q118	KRC105S(NE), NPN	3	J522010500210S	
Q120	KRC105S(NE), NPN	1	J522010500210S	
Q121	KTA1268BL, PNP	1	J5001268B0050S	
Q122	KTC3198Y, NPN	1	J5023198Y0000S	
Q123/Q124	KTA1268BL, PNP	2	J5001268B0050S	
Q125	KSA916Y, PNP	1	J5000916Y0050S	
Q126	KTA1268BL, PNP	1	J5001268B0050S	
Q127	KTC3198Y, NPN	1	J5023198Y0000S	
Q128	KTA1268BL, PNP	1	J5001268B0050S	
Q129/Q130	KTC3198Y, NPN	2	J5023198Y0000S	
Q131	KTA1268BL, PNP	1	J5001268B0050S	
Q132/Q133	KTC3198Y, NPN	2	J5023198Y0000S	
Q134	KTA1268BL, PNP	1	J5001268B0050S	
Q135/Q136	KTC3198Y, NPN	2	J5023198Y0000S	
Q137	KRC102S(NB), NPN	1	J522010200210S	
Q138	KTC2875B(MB), NPN	1	J5222875B0010S	
Q201/Q202	KTC3198Y, NPN	2	J5023198Y0000S	
Q204/Q205	KRC105S(NE), NPN	2	J522010500210S	
	RESISTORS			
R101L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R102L/R	CHIP THICK220 kohm 1/16W J	2	C20002246M160S	
R103L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R104L/R	CHIP THICK220 kohm 1/16W J	2	C20002246M160S	
R105L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R106L/R	CHIP THICK100 kohm 1/16W J	2	C20001046M160S	
R107L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	

REF No.	DESCRIPTION	Q'TY	PARTS No.	VER.
R108L/R	CHIP THICK100 kohm 1/16W J	2	C20001046M160S	
R109L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R110L/R	CHIP THICK100 kohm 1/16W J	2	C20001046M160S	
R111L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R112L/R	CHIP THICK100 kohm 1/16W J	2	C20001046M160S	
R113L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R114L/R	CHIP THICK100 kohm 1/16W J	2	C20001046M160S	
R115C	CHIP THICK330 ohm 1/16W J	1	C20003316M160S	
R115L/R	CHIP THICK330 ohm 1/16W J	2	C20003316M160S	
R115SL	CHIP THICK330 ohm 1/16W J	1	C20003316M160S	
R115SR	CHIP THICK330 ohm 1/16W J	1	C20003316M160S	
R115SW	CHIP THICK330 ohm 1/16W J	1	C20003316M160S	
R116C	CHIP THICK2.2 Mohm 1/16W J	1	C20002256M160S	
R116L/R	CHIP THICK2.2 Mohm 1/16W J	2	C20002256M160S	
R116SL	CHIP THICK2.2 Mohm 1/16W J	1	C20002256M160S	
R116SR	CHIP THICK2.2 Mohm 1/16W J	1	C20002256M160S	
R116SW	CHIP THICK2.2 Mohm 1/16W J	1	C20002256M160S	
R117	CHIP THICK4.7 kohm 1/16W J	1	C20004726M160S	
R120-R122	CHIP THICK100 kohm 1/16W J	3	C20001046M160S	
R123	CHIP THICK4.7 kohm 1/16W J	1	C20004726M160S	
R124/R125	CARBON FILM470 ohm 1/5W J	2	C00004716P520S	
R125SW	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R126SW	CHIP THICK47 kohm 1/16W J	1	C20004736M160S	
R127SW	CHIP THICK3.3 kohm 1/16W J	1	C20003326M160S	
R128SW	CHIP THICK4.7 kohm 1/16W J	1	C20004726M160S	
R131SW	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R132SW	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R133SW	CHIP THICK4.7 kohm 1/16W J	1	C20004726M160S	
R134SW	CHIP THICK2 kohm 1/16W J	1	C20002026M160S	
R135SW	CHIP THICK4.7 kohm 1/16W J	1	C20004726M160S	
R136SW	CARBON FILM4.7 kohm 1/5W J	1	C00004726P520S	
R137SW	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R138C	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R138L/R	CHIP THICK1 kohm 1/16W J	2	C20001026M160S	
R138SL	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R138SR	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R139C	CHIP THICK47 kohm 1/16W J	1	C20004736M160S	
R139L/R	CHIP THICK47 kohm 1/16W J	2	C20004736M160S	
R139SL	CHIP THICK47 kohm 1/16W J	1	C20004736M160S	
R139SR	CHIP THICK47 kohm 1/16W J	1	C20004736M160S	
R140SW	CHIP THICK2.2 kohm 1/16W J	1	C20002226M160S	
R141SW	CHIP THICK2.2 kohm 1/16W J	1	C20002226M160S	
R142/R143	METAL FILM 100PPM68 ohm 1W J	2	C060068065060S	
R148C	CARBON FILM1 kohm 1/5W J	1	C00001026P520S	
R148L/R	CARBON FILM1 kohm 1/5W J	2	C00001026P520S	
R148SL	CARBON FILM1 kohm 1/5W J	1	C00001026P520S	
R148SR	CARBON FILM1 kohm 1/5W J	1	C00001026P520S	
R148SW	CARBON FILM1 kohm 1/5W J	1	C00001026P520S	
R149C	CHIP THICK470 ohm 1/16W J	1	C20004716M160S	
R149L/R	CHIP THICK470 ohm 1/16W J	2	C20004716M160S	
R149SL	CHIP THICK470 ohm 1/16W J	1	C20004716M160S	
R149SR	CHIP THICK470 ohm 1/16W J	1	C20004716M160S	
R150C	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R150F	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R150S	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R150SW	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R151C	CHIP THICK2.2 kohm 1/16W J	1	C20002226M160S	

REF No.	DESCRIPTION	Q'TY	PARTS No.	VER.
R151L/R	CHIP THICK2.2 kohm 1/16W J	2	C20002226M160S	
R151SL	CARBON FILM2.2 kohm 1/5W J	1	C00002226P520S	
R151SR	CHIP THICK2.2 kohm 1/16W J	1	C20002226M160S	
R152C	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R152F	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R152S	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R152SW	CHIP THICK1 kohm 1/16W J	1	C20001026M160S	
R153C	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R153F	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R153S	CHIP THICK470 kohm 1/16W J	1	C20004746M160S	
R153SW	CHIP THICK1.2 kohm 1/16W J	1	C20001226M160S	
R154C	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R154L/R	CHIP THICK100 kohm 1/16W J	2	C20001046M160S	
R154SL	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R154SR	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R155C	CARBON FILM22 kohm 1/5W J	1	C00002236P520S	
R155L/R	CARBON FILM22 kohm 1/5W J	2	C00002236P520S	
R155SL	CARBON FILM22 kohm 1/5W J	1	C00002236P520S	
R155SR	CARBON FILM22 kohm 1/5W J	1	C00002236P520S	
R156C	METAL FILM 100PPM10 ohm 1W J	1	C060010065050S	
R156L/R	METAL FILM 100PPM10 ohm 1W J	2	C060010065050S	
R156SL	METAL FILM 100PPM10 ohm 1W J	1	C060010065050S	
R156SR	METAL FILM 100PPM10 ohm 1W J	1	C060010065050S	
R157/R158	METAL FILM 100PPM470 ohm 2W J	2	C060047166520S	
R159SW	CHIP THICK220 ohm 1/16W J	1	C20002216M160S	
R160/R161	CHIP THICK47 ohm 1/16W J	2	C20004706M160S	G
R160SW	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R162	CHIP THICK560 kohm 1/16W J	1	C20005646M160S	
R163	CHIP THICK3.6 kohm 1/16W J	1	C20003626M160S	
R164	CHIP THICK220 ohm 1/16W J	1	C20002216M160S	
R165	CHIP THICK33 kohm 1/16W J	1	C20003336M160S	
R166	CHIP THICK4.7 kohm 1/16W J	1	C20004726M160S	
R167	CHIP THICK2.2 kohm 1/16W J	1	C20002226M160S	
R168-R170	CHIP THICK47 ohm 1/16W J	3	C20004706M160S	
R171	METAL FILM 100PPM10 ohm 1W J	1	C060010065050S	
R172/R173	CHIP THICK47 ohm 1/16W J	2	C20004706M160S	G
R174-R176	METAL FILM 100PPM2.2 kohm 1W J	3	C060022265050S	
R177	CARBON FILM22 kohm 1/5W J	1	C00002236P520S	
R178/R179	CEMENT RADIAL FORM0.1 ohm 5W J	2	C141R10069010S	
R180	CARBON FILM1 kohm 1/5W J	1	C00001026P520S	
R181	CARBON FILM180 ohm 1/5W J	1	C00001816P520S	
R182	CHIP THICK560 kohm 1/16W J	1	C20005646M160S	
R183	CARBON FILM100 ohm 1/5W J	1	C00001016P520S	
R184	METAL FILM 100PPM4.7 ohm 1W J	1	C0604R7065050S	
R185	CHIP THICK10 kohm 1/16W J	1	C20001036M160S	
R186	METAL FILM 100PPM22 ohm 1/4W J	1	C060022063050S	
R187	CHIP THICK15 kohm 1/16W J	1	C20001536M160S	
R188/R189	CHIP THICK47 kohm 1/16W J	2	C20004736M160S	
R190	METAL FILM 100PPM47 kohm 1/4W J	1	C060047363050S	
R191	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R192	CHIP THICK43 kohm 1/16W J	1	C20004336M160S	
R193	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R194	CHIP THICK43 kohm 1/16W J	1	C20004336M160S	
R195	CHIP THICK100 kohm 1/16W J	1	C20001046M160S	
R196	CHIP THICK33 kohm 1/16W J	1	C20003336M160S	
R197	CARBON FILM2.2 kohm 1/5W J	1	C00002226P520S	
R198-R200	CARBON FILM51 kohm 1/5W J	3	C00005136P520S	

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
R201	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R202	CHIP THICK	27 kohm	1/16W	J	1		C20002736M160S	
R203	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R204	CEMENT RADIAL FORM	0.1 ohm	5W	J	1		C141R10069010S	
R205-R208	METAL FILM 100PPM	0.22 ohm	1W	J	4		C060R22065050S	
R209	CHIP THICK	100 ohm	1/16W	J	1		C20001016M160S	
R210	CHIP THICK	33 kohm	1/16W	J	1		C20003336M160S	
R211	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R212	CARBON FILM	33 kohm	1/5W	J	1		C00003336P520S	
R213	CARBON FILM	1 kohm	1/5W	J	1		C00001026P520S	
R214	CARBON FILM	33 kohm	1/5W	J	1		C00003336P520S	
R215	CEMENT RADIAL FORM	0.1 ohm	5W	J	1		C141R10069010S	
R217/R218	CARBON FILM	10 kohm	1/5W	J	2		C00001036P520S	
R219	CHIP THICK	10 kohm	1/16W	J	1		C20001036M160S	
R220	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R221	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R222	CHIP THICK	220 kohm	1/16W	J	1		C20002246M160S	
R223	CHIP THICK	10 kohm	1/16W	J	1		C20001036M160S	
R224	CARBON FILM	33 kohm	1/5W	J	1		C00003336P520S	
R225	CHIP THICK	47 kohm	1/16W	J	1		C20004736M160S	
R226/R227	CHIP THICK	4.7 kohm	1/16W	J	2		C20004726M160S	
R228	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R229/R230	CHIP THICK	100 ohm	1/16W	J	2		C20001016M160S	
R231/R232	CHIP THICK	33 kohm	1/16W	J	2		C20003336M160S	
R233/R234	CARBON FILM	33 kohm	1/5W	J	2		C00003336P520S	
R236	CARBON FILM	47 ohm	1/5W	J	1		C00004706P520S	
R237	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R238	CARBON FILM	1 kohm	1/5W	J	1		C00001026P520S	
R239	CARBON FILM	3.3 kohm	1/5W	J	1		C00003326P520S	
R240	CARBON FILM	33 kohm	1/5W	J	1		C00003336P520S	
R243	CARBON FILM	10 kohm	1/5W	J	1		C00001036P520S	
R244	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R246	CHIP THICK	47 kohm	1/16W	J	1		C20004736M160S	
R251/R252	CHIP THICK	75 ohm	1/16W	J	2		C20007506M160S	
R254	CHIP THICK	75 ohm	1/16W	J	1		C20007506M160S	
R255	CHIP THICK	22 kohm	1/16W	J	1		C20002236M160S	
R256	CHIP THICK	390 ohm	1/16W	J	1		C20003916M160S	
R257	CHIP THICK	75 ohm	1/16W	J	1		C20007506M160S	
R258	CHIP THICK	22 kohm	1/16W	J	1		C20002236M160S	
R259	CHIP THICK	390 ohm	1/16W	J	1		C20003916M160S	
R260	CHIP THICK	3.3 kohm	1/16W	J	1		C20003326M160S	
R261/R262	CHIP THICK	330 ohm	1/16W	J	2		C20003316M160S	
R263	CARBON FILM	4.7 ohm	1/5W	J	1		C0004R706P520S	
R265/R266	CARBON FILM	47 ohm	1/5W	J	2		C00004706P520S	
R267	CHIP THICK	47 ohm	1/16W	J	1		C20004706M160S	
R268-R270	CARBON FILM	47 ohm	1/5W	J	3		C00004706P520S	
R271-R274	CHIP THICK	47 ohm	1/16W	J	4		C20004706M160S	
R275	CHIP THICK	3.3 kohm	1/16W	J	1		C20003326M160S	
	MISCELLANEOUS							
GND101	TERMINAL				1		3790040886000S	
GND102	TERMINAL				1		3790040886000S	
GND103/GND104	TERMINAL				2		3790040886000S	
HSINK101	HEAT SINK, REG TR(24X45)				1		2120044298010S	
HSINK102	HEAT SINK, H=45/REG TR				1		2120043538030S	
J102-J108	CN,WIRE 1P				7		L045084006040S	
J110	CN,WIRE 1P				1		L045084006040S	
J113	CN,WIRE 1P				1		L045084006040S	

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
J117	CHIP THICK	0 ohm	1/16W	J	1		C20000006M160S	
J119	CN,WIRE 1P				1		L045084006040S	
J121-J123	CN,WIRE 1P				3		L045084006040S	
J125-J127	CN,WIRE 1P				3		L045084006040S	
J129-J132	CN,WIRE 1P				4		L045084006040S	
J134/J135	CN,WIRE 1P				2		L045084006040S	
J136	CN,WIRE 1P				1		L045084006040S	K
J137	CHIP THICK	0 ohm	1/8W	J	1		C200000061300S	
J138	CN,WIRE 1P				1		L045084006040S	
J139/J140	CHIP THICK	0 ohm	1/8W	J	2		C200000061300S	
J142-J147	CN,WIRE 1P				6		L045084006040S	
J152	CN,WIRE 1P				1		L045084006040S	
J154-J162	CN,WIRE 1P				9		L045084006040S	
J163	CHIP THICK	0 ohm	1/8W	J	1		C200000061300S	
J164-J172	CN,WIRE 1P				9		L045084006040S	
J174-J188	CN,WIRE 1P				15		L045084006040S	
J190-J192	CN,WIRE 1P				3		L045084006040S	
J194-J196	CN,WIRE 1P				3		L045084006040S	
J198-J204	CN,WIRE 1P				7		L045084006040S	
J205	CHIP THICK	0 ohm	1/8W	J	1		C200000061300S	
J206-J269	CN,WIRE 1P				64		L045084006040S	
J274-J277	CN,WIRE 1P				4		L045084006040S	
J282	CN,WIRE 1P				1		L045084006040S	
J294-J297	CN,WIRE 1P				4		L045084006040S	
J299-J304	CN,WIRE 1P				6		L045084006040S	
J305	CHIP THICK	0 ohm	1/8W	J	1		C200000061300S	
J306-J326	CN,WIRE 1P				21		L045084006040S	
J329-J332	CN,WIRE 1P				4		L045084006040S	
J334/J335	CHIP THICK	0 ohm	1/8W	J	2		C200000061300S	
J336-J338	CN,WIRE 1P				3		L045084006040S	
J343	CN,WIRE 1P				1		L045084006040S	
J344	CHIP THICK	0 ohm	1/8W	J	1		C200000061300S	
J345	CN,WIRE 1P				1		L045084006040S	K
J347-J350	CHIP THICK	0 ohm	1/8W	J	4		C200000061300S	
J351-J355	CN,WIRE 1P				5		L045084006040S	
J356	CHIP THICK	0 ohm	1/8W	J	1		C200000061300S	
J358-J365	CN,WIRE 1P				8		L045084006040S	
J366-J369	CN,WIRE 1P				4		L045084006040S	K
J370-J372	CN,WIRE 1P				3		L045084006040S	
PACK101	TUNER,FM/AM				1		E903004100010S	D/E/K
PACK101	TUNER,FM/AM RDS				1		E903104100010S	G
RLY101-RLY104	RELAY, 12V 5A				4		G680120502050S	
WIRE100	CN,WIRE 90MM (1P)				1		L000900010010S	
WIRE10AB	CN,WIRE 100MM (2P)				1		L000141020120S	
ZD101/ZD102	0.2W 7.5V, ZENER CHIP				2		K06607R54P400S	
ZD103/ZD104	0.2W 16V, ZENER CHIP				2		K06616R04P400S	
ZD105	0.2W 3.3V, ZENER CHIP				1		K06603R34P400S	
ZD106	MTZJ2.4B, ZENER				1		K06002R444520S	
	SCREW, +2S 3*8 B-TYPE ZNW/BH				3		B020030081B10S	
	TAPE, ACETATE CLOTH				1		1220210059060S	
PCB1-1 ASSEMBLY P.C.BOARD GUIDE1								
CLAMP201	CLAMP				1		4330000120000S	
J270-J273	CN,WIRE 1P				4		L045084006040S	
J278-J281	CN,WIRE 1P				4		L045084006040S	
PCB1-2 ASSEMBLY P.C.BOARD GUIDE2								
CLAMP301	CLAMP				1		4330000120000S	
J286-J293	CN,WIRE 1P				8		L045084006040S	

REF No.	DESCRIPTION				Q'TY	PARTS No.	VER.
PCB1-3 ASSEMBLY P.C.BOARD GUIDE3							
CLAMP401	CLAMP				1	4330000120000S	
PCB2	ASSEMBLY P.C.BOARD FRONT				7025HK0808012		G
PCB2	ASSEMBLY P.C.BOARD FRONT				7025HK0808032		K
PCB2	ASSEMBLY P.C.BOARD FRONT				7025HK0808042		D/E
C701/C702	CERAMIC CHIP HIK	820 pF	50V	K	2	D011821777160S	
C703	ELECT GE 85C	47 uF	16V	M	1	D040470083080S	
C704	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577162S	
C705/C706	CERAMIC CHIP HIK	820 pF	50V	K	2	D011821777160S	
C707	FILM POLYESTER	0.047 uF	100V	J	1	D02047306C060S	
C708/C709	ELECT GE 85C	1 uF	50V	M	2	D040010087150S	
C710	FILM POLYESTER	0.047 uF	100V	J	1	D02047306C060S	
C719	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577162S	
C721	ELECT GE 85C	100 uF	10V	K	1	D040101082090S	
C726-C728	CERAMIC CHIP HIK	0.01 uF	50V	M	3	D011103777160S	
C731	ELECT GE 85C	10 uF	50V	M	1	D040100087070S	
C734	ELECT GE 85C	1 uF	50V	M	1	D040010087150S	
C743-C745	CERAMIC CHIP T.C	100 pF	50V	J	3	D010101167160S	
C746/C747	CERAMIC HIK AXIAL	102 K			2	D005102177531S	
CN701,A	CN,WIRE 80MM (3P)				1	L000800030130S	
CP704	CN.WAFER 2.5MM (3P)				1	L102526803010S	
DZ705	0.2W 7.5V, ZENER CHIP				1	K06607R54P400S	
FLT700	HOLDER FLT				1	432004078301AS	
FLT700	DISPLAY, FLT				1	K530080300010S	
FPC700	CN.FPC 1.25MM (17P)				1	L131101700010S	
IC701	SC16315, LINEAR-DRIVER				1	J127163150010S	
J701/J702	CN,WIRE 1P				2	L045084006040S	
J705-J708	CN,WIRE 1P				4	L045084006040S	
J710/J711	CN,WIRE 1P				2	L045084006040S	
J713	CN,WIRE 1P				1	L045084006040S	
J715/J716	CN,WIRE 1P				2	L045084006040S	
J719-J730	CN,WIRE 1P				12	L045084006040S	
L700	INDUCTOR COIL, 100UH				1	D330101001020S	
L702	INDUCTOR COIL, 10UH				1	D330100700520S	
L703/L704	INDUCTOR COIL, 2.2UH				2	D3302R2001020S	
LED701/LED702	LED, 3PI RED				2	K500032000150S	
Q701/Q702	KRC105S(NE), NPN				2	J522010500210S	
Q703	KRA105S(PE), PNP				1	J520010500210S	
Q704	KRC105S(NE), NPN				1	J522010500210S	
R702/R703	CHIP THICK	68 kohm	1/16W	J	2	C20006836M160S	
R704-R731	CHIP THICK	56 kohm	1/16W	J	28	C20005636M160S	
R732/R733	CHIP THICK	68 kohm	1/16W	J	2	C20006836M160S	
R736	CHIP THICK	8.2 kohm	1/16W	J	1	C20008226M160S	
R737	CHIP THICK	82 kohm	1/16W	J	1	C20008236M160S	
R738	CHIP THICK	8.2 kohm	1/16W	J	1	C20008226M160S	
R739/R740	CHIP THICK	47 ohm	1/16W	J	2	C20004706M160S	
R741/R742	CHIP THICK	4.7 kohm	1/16W	J	2	C20004726M160S	
R744/R745	CHIP THICK	3.3 kohm	1/16W	J	2	C20003326M160S	
R746	CHIP THICK	100 ohm	1/16W	J	1	C20001016M160S	
R747	CHIP THICK	3.3 kohm	1/16W	J	1	C20003326M160S	
R748	CHIP THICK	200 ohm	1/16W	J	1	C20002016M160S	
R749-R751	CHIP THICK	2.2 kohm	1/16W	J	3	C20002226M160S	
R752-R754	CHIP THICK	1.5 kohm	1/16W	J	3	C20001526M160S	
R755-R757	CHIP THICK	1 kohm	1/16W	J	3	C20001026M160S	
R771	CHIP THICK	15 kohm	1/16W	J	1	C20001536M160S	
R774	CHIP THICK	47 ohm	1/16W	J	1	C20004706M160S	
RMC701	MODULE, NJL34H380A 38KHz				1	E940343800010S	

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
SW701-SW719	SW,TACT					19	G180000270010S	
VR701	SW,ENCODER					1	G121123070010S	
W70,71	RING,TER WIRE 120,80MM (2P)					1	8410121020020S	
WIRE703	RING,TER WIRE 180MM (1P)					1	8410181220010S	
PCB2-1 ASSEMBLY P.C.BOARD MULTI-JOG								
C741	CERAMIC HIK AXIAL	0.01 uF	16V	M	1	D005103773530S		
CB703	BEAD COIL, 120ohm					1	D340160811210S	
VR702	SW,ENCODER					1	G121123050010S	
PCB2-2 ASSEMBLY P.C.BOARD POWER-SW								
CN709	CN,WIRE 420MM (2P)					1	L000421020030S	
SW700	SW,PUSH					1	G000122006060S	
PCB2-3 ASSEMBLY P.C.BOARD HEADPHONE								
C711	CERAMIC CHIP T.C	0.01 uF	50V	K	1	D010103777160S		
CB701/CB702	BEAD COIL, 120ohm					2	D340160811210S	
CB707	BEAD COIL, 120ohm					1	D340160811210S	
CN702	CN,WIRE 380MM (4P)					1	L002381040010S	
JACK705	JACK,D6.5					1	G402040161331S	
WIRE702	RING,TER WIRE 120MM (1P)					1	8410121010020S	
PCB2-4 ASSEMBLY P.C.BOARD AUX								
C718L/R	CERAMIC CHIP T.C	470 pF	50V	J	2	D010471167160S		
C738	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S		
C746L/R	ELECT GE 85C	10 uF	16V	M	2	D040100083050S		
CB704	BEAD COIL, 120ohm					1	D340160811210S	
CN706	CN,WIRE 300MM (3P)					1	L002301030060S	
JACK701	JACK,D3.5					1	G401035180050S	
R777L/R	CHIP THICK	470 ohm	1/16W	J	2	C20004716M160S		
R781L/R	CHIP THICK	220 kohm	1/16W	J	2	C20002246M160S		
PCB3	ASSEMBLY P.C.BOARD AMP					7025HK0808011		G
PCB3	ASSEMBLY P.C.BOARD AMP					7025HK0808031		K
PCB3	ASSEMBLY P.C.BOARD AMP					7025HK0808041		D/E
	CAPACITORS							
C201C	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C201FL	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C201FR	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C201SL	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C201SR	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C202C	CERAMIC HIK AXIAL	681 K			1	D005681177521S		
C202FL	CERAMIC HIK AXIAL	681 K			1	D005681177521S		
C202FR	CERAMIC HIK AXIAL	681 K			1	D005681177521S		
C202SL	CERAMIC HIK AXIAL	681 K			1	D005681177521S		
C202SR	CERAMIC HIK AXIAL	681 K			1	D005681177521S		
C203C	CERAMIC-UNKNOWN	220 pF	500V		1	D009092212500S		
C203FL	CERAMIC-UNKNOWN	220 pF	500V		1	D009092212500S		
C203FR	CERAMIC-UNKNOWN	220 pF	500V		1	D009092212500S		
C203SL	CERAMIC-UNKNOWN	220 pF	500V		1	D009092212500S		
C203SR	CERAMIC-UNKNOWN	220 pF	500V		1	D009092212500S		
C204C	CERAMIC T.C DISC	33 pF	500V	J	1	D00033006D050S		
C204FL	CERAMIC T.C DISC	33 pF	500V	J	1	D00033006D050S		
C204FR	CERAMIC T.C DISC	33 pF	500V	J	1	D00033006D050S		
C204SL	CERAMIC T.C DISC	33 pF	500V	J	1	D00033006D050S		
C204SR	CERAMIC T.C DISC	33 pF	500V	J	1	D00033006D050S		
C205C	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C205FL	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C205FR	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C205SL	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C205SR	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C206C	CERAMIC HIK AXIAL	102 K			1	D005102177531S		

REF No.	DESCRIPTION				Q'TY	PARTS No.	VER.
C206FL	CERAMIC HIK AXIAL	102 K			1	D005102177531S	
C206FR	CERAMIC HIK AXIAL	102 K			1	D005102177531S	
C206SL	CERAMIC HIK AXIAL	102 K			1	D005102177531S	
C206SR	CERAMIC HIK AXIAL	102 K			1	D005102177531S	
C207C	ELECT GE 85C	47 uF	50V	M	1	D040470087070S	
C207FL	ELECT GE 85C	47 uF	50V	M	1	D040470087070S	
C207FR	ELECT GE 85C	47 uF	50V	M	1	D040470087070S	
C207SL	ELECT GE 85C	47 uF	50V	M	1	D040470087070S	
C207SR	ELECT GE 85C	47 uF	50V	M	1	D040470087070S	
C208C	ELECT GE 85C	10 uF	50V	M	1	D040100087070S	
C208FL	ELECT GE 85C	10 uF	50V	M	1	D040100087070S	
C208FR	ELECT GE 85C	10 uF	50V	M	1	D040100087070S	
C208SL	ELECT GE 85C	10 uF	50V	M	1	D040100087070S	
C208SR	ELECT GE 85C	10 uF	50V	M	1	D040100087070S	
C209C	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C209FL	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C209FR	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C209SL	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C209SR	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C210C	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C210FL	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C210FR	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C210SL	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C210SR	CERAMIC HIK DISC	100 pF	500V	K	1	D00410106D050S	
C211C	CERAMIC HIK AXIAL	0.022 uF	25V	Z	1	D005223594520S	
C211FL	CERAMIC HIK AXIAL	0.022 uF	25V	Z	1	D005223594520S	
C211FR	CERAMIC HIK AXIAL	0.022 uF	25V	Z	1	D005223594520S	
C211SL	CERAMIC HIK AXIAL	0.022 uF	25V	Z	1	D005223594520S	
C211SR	CERAMIC HIK AXIAL	0.022 uF	25V	Z	1	D005223594520S	
C212	ELECT GE 85C	10 uF	100V	M	1	D04010008C050S	
	CONNECTORS						
CN101	CN,WIRE 100MM (10P)				1	L002101100060S	
CN102	CN,WIRE 80MM (12P)				1	L000800120050S	
	DIODES						
D201C	1SS133T, SWITCHING				1	K000013300520S	
D201FL	1SS133T, SWITCHING				1	K000013300520S	
D201FR	1SS133T, SWITCHING				1	K000013300520S	
D201SL	1SS133T, SWITCHING				1	K000013300520S	
D201SR	1SS133T, SWITCHING				1	K000013300520S	
	COILS						
L201C	INDUCTOR COIL, TURNS=7T				1	D330900001330S	
L201FL	INDUCTOR COIL, TURNS=7T				1	D330900001330S	
L201FR	INDUCTOR COIL, TURNS=7T				1	D330900001330S	
L201SL	INDUCTOR COIL, TURNS=7T				1	D330900001330S	
L201SR	INDUCTOR COIL, TURNS=7T				1	D330900001330S	
	TRANSISTORS						
Q201C	KSA992F, PNP				1	J5000992F0050S	
Q201FL	KSA992F, PNP				1	J5000992F0050S	
Q201FR	KSA992F, PNP				1	J5000992F0050S	
Q201SL	KSA992F, PNP				1	J5000992F0050S	
Q201SR	KSA992F, PNP				1	J5000992F0050S	
Q202C	KSA992F, PNP				1	J5000992F0050S	
Q202FL	KSA992F, PNP				1	J5000992F0050S	
Q202FR	KSA992F, PNP				1	J5000992F0050S	
Q202SL	KSA992F, PNP				1	J5000992F0050S	
Q202SR	KSA992F, PNP				1	J5000992F0050S	
Q203C	KTC3200BL, NPN				1	J5023200B0050S	

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
Q203FL	KTC3200BL, NPN					1	J5023200B0050S	
Q203FR	KTC3200BL, NPN					1	J5023200B0050S	
Q203SL	KTC3200BL, NPN					1	J5023200B0050S	
Q203SR	KTC3200BL, NPN					1	J5023200B0050S	
Q207C	KTC3200BL, NPN					1	J5023200B0050S	
Q207FL	KTC3200BL, NPN					1	J5023200B0050S	
Q207FR	KTC3200BL, NPN					1	J5023200B0050S	
Q207SL	KTC3200BL, NPN					1	J5023200B0050S	
Q207SR	KTC3200BL, NPN					1	J5023200B0050S	
	RESISTORS							
R201C	CARBON FILM	220 ohm	1/5W	J	1	C00002216P520S		
R201FL	CARBON FILM	220 ohm	1/5W	J	1	C00002216P520S		
R201FR	CARBON FILM	220 ohm	1/5W	J	1	C00002216P520S		
R201SL	CARBON FILM	220 ohm	1/5W	J	1	C00002216P520S		
R201SR	CARBON FILM	220 ohm	1/5W	J	1	C00002216P520S		
R203C	CARBON FILM	7.5 kohm	1/5W	J	1	C00007526P520S		
R203FL	CARBON FILM	7.5 kohm	1/5W	J	1	C00007526P520S		
R203FR	CARBON FILM	7.5 kohm	1/5W	J	1	C00007526P520S		
R203SL	CARBON FILM	7.5 kohm	1/5W	J	1	C00007526P520S		
R203SR	CARBON FILM	7.5 kohm	1/5W	J	1	C00007526P520S		
R204C	CARBON FILM	39 kohm	1/5W	J	1	C00003936P520S		
R204FL	CARBON FILM	39 kohm	1/5W	J	1	C00003936P520S		
R204FR	CARBON FILM	39 kohm	1/5W	J	1	C00003936P520S		
R204SL	CARBON FILM	39 kohm	1/5W	J	1	C00003936P520S		
R204SR	CARBON FILM	39 kohm	1/5W	J	1	C00003936P520S		
R205C	CARBON FILM	470 kohm	1/5W	J	1	C00004746P520S		
R205FL	CARBON FILM	470 kohm	1/5W	J	1	C00004746P520S		
R205FR	CARBON FILM	470 kohm	1/5W	J	1	C00004746P520S		
R205SL	CARBON FILM	470 kohm	1/5W	J	1	C00004746P520S		
R205SR	CARBON FILM	470 kohm	1/5W	J	1	C00004746P520S		
R206C	CARBON FILM	33 kohm	1/5W	J	1	C00003336P520S		
R206FL	CARBON FILM	33 kohm	1/5W	J	1	C00003336P520S		
R206FR	CARBON FILM	33 kohm	1/5W	J	1	C00003336P520S		
R206SL	CARBON FILM	33 kohm	1/5W	J	1	C00003336P520S		
R206SR	CARBON FILM	33 kohm	1/5W	J	1	C00003336P520S		
R207C	CARBON FILM	1.5 kohm	1/5W	J	1	C00001526P520S		
R207FL	CARBON FILM	1.5 kohm	1/5W	J	1	C00001526P520S		
R207FR	CARBON FILM	1.5 kohm	1/5W	J	1	C00001526P520S		
R207SL	CARBON FILM	1.5 kohm	1/5W	J	1	C00001526P520S		
R207SR	CARBON FILM	1.5 kohm	1/5W	J	1	C00001526P520S		
R208C	CARBON FILM	47 kohm	1/5W	J	1	C00004736P520S		
R208FL	CARBON FILM	47 kohm	1/5W	J	1	C00004736P520S		
R208FR	CARBON FILM	47 kohm	1/5W	J	1	C00004736P520S		
R208SL	CARBON FILM	47 kohm	1/5W	J	1	C00004736P520S		
R208SR	CARBON FILM	47 kohm	1/5W	J	1	C00004736P520S		
R209C	CARBON FILM	1.2 kohm	1/5W	J	1	C00001226P520S		
R209FL	CARBON FILM	1.2 kohm	1/5W	J	1	C00001226P520S		
R209FR	CARBON FILM	1.2 kohm	1/5W	J	1	C00001226P520S		
R209SL	CARBON FILM	1.2 kohm	1/5W	J	1	C00001226P520S		
R209SR	CARBON FILM	1.2 kohm	1/5W	J	1	C00001226P520S		
R210C	CARBON FILM	470 ohm	1/5W	J	1	C00004716P520S		
R210FL	CARBON FILM	470 ohm	1/5W	J	1	C00004716P520S		
R210FR	CARBON FILM	470 ohm	1/5W	J	1	C00004716P520S		
R210SL	CARBON FILM	470 ohm	1/5W	J	1	C00004716P520S		
R210SR	CARBON FILM	470 ohm	1/5W	J	1	C00004716P520S		
R211C	METAL FILM 100PPM	47 ohm	1/4W	J	1	C060047063050S		
R211FL	METAL FILM 100PPM	47 ohm	1/4W	J	1	C060047063050S		

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
R211FR	METAL FILM 100PPM	47 ohm	1/4W	J	1		C060047063050S	
R211SL	METAL FILM 100PPM	47 ohm	1/4W	J	1		C060047063050S	
R211SR	METAL FILM 100PPM	47 ohm	1/4W	J	1		C060047063050S	
R212C	CARBON FILM	1.5 kohm	1/5W	J	1		C00001526P520S	
R212FL	CARBON FILM	1.5 kohm	1/5W	J	1		C00001526P520S	
R212FR	CARBON FILM	1.5 kohm	1/5W	J	1		C00001526P520S	
R212SL	CARBON FILM	1.5 kohm	1/5W	J	1		C00001526P520S	
R212SR	CARBON FILM	1.5 kohm	1/5W	J	1		C00001526P520S	
R213C	CARBON FILM	1.8 kohm	1/5W	J	1		C00001826P520S	
R213FL	CARBON FILM	1.8 kohm	1/5W	J	1		C00001826P520S	
R213FR	CARBON FILM	1.8 kohm	1/5W	J	1		C00001826P520S	
R213SL	CARBON FILM	1.8 kohm	1/5W	J	1		C00001826P520S	
R213SR	CARBON FILM	1.8 kohm	1/5W	J	1		C00001826P520S	
R214C	CARBON FILM	2.7 kohm	1/5W	J	1		C00002726P520S	
R214FL	CARBON FILM	2.7 kohm	1/5W	J	1		C00002726P520S	
R214FR	CARBON FILM	2.7 kohm	1/5W	J	1		C00002726P520S	
R214SL	CARBON FILM	2.7 kohm	1/5W	J	1		C00002726P520S	
R214SR	CARBON FILM	2.7 kohm	1/5W	J	1		C00002726P520S	
R216C	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R216FL	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R216FR	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R216SL	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R216SR	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R217C	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R217FL	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R217FR	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R217SL	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R217SR	METAL FILM 100PPM	5.6 kohm	1W	J	1		C060056265050S	
R218C	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R218FL	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R218FR	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R218SL	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R218SR	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R219C	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R219FL	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R219FR	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R219SL	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R219SR	METAL FILM 100PPM	4.7 ohm	1/4W	J	1		C0604R7063050S	
R220C	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R220FL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R220FR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R220SL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R220SR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R221C	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R221FL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R221FR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R221SL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R221SR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R222C	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R222FL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R222FR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R222SL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R222SR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R223C	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R223FL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R223FR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R223SL	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
R223SR	METAL FILM 100PPM	0.47 ohm	2W	J	1		C060R47066050S	
R224C	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R224FL	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R224FR	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R224SL	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R224SR	CARBON FILM	27 kohm	1/5W	J	1		C00002736P520S	
R225C	CARBON FILM	330 kohm	1/5W	J	1		C00003346P520S	
R225FL	CARBON FILM	330 kohm	1/5W	J	1		C00003346P520S	
R225FR	CARBON FILM	330 kohm	1/5W	J	1		C00003346P520S	
R225SL	CARBON FILM	330 kohm	1/5W	J	1		C00003346P520S	
R225SR	CARBON FILM	330 kohm	1/5W	J	1		C00003346P520S	
R226C	CARBON FILM	75 kohm	1/5W	J	1		C00007536P520S	
R226FL	CARBON FILM	75 kohm	1/5W	J	1		C00007536P520S	
R226FR	CARBON FILM	75 kohm	1/5W	J	1		C00007536P520S	
R226SL	CARBON FILM	75 kohm	1/5W	J	1		C00007536P520S	
R226SR	CARBON FILM	75 kohm	1/5W	J	1		C00007536P520S	
R227C	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R227FL	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R227FR	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R227SL	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R227SR	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R228C	METAL FILM 100PPM	10 ohm	1W		1		C060010065520S	
R228FL	METAL FILM 100PPM	10 ohm	1W		1		C060010065520S	
R228FR	METAL FILM 100PPM	10 ohm	1W		1		C060010065520S	
R228SL	METAL FILM 100PPM	10 ohm	1W		1		C060010065520S	
R228SR	METAL FILM 100PPM	10 ohm	1W		1		C060010065520S	
R229	METAL FILM 100PPM	10 ohm	1W	J	1		C060010065050S	
	MISCELLANEOUS							
J204	CN,WIRE 1P				1		L045084006040S	
J206	CN,WIRE 1P				1		L045084006040S	
J208	CN,WIRE 1P				1		L045084006040S	
J210-J214	CN,WIRE 1P				5		L045084006040S	
J216	CN,WIRE 1P				1		L045084006040S	
J218	CN,WIRE 1P				1		L045084006040S	
J222-J231	CN,WIRE 1P				10		L045084006040S	
J233/J234	CN,WIRE 1P				2		L045084006040S	
J238	CN,WIRE 1P				1		L045084006040S	
J240-J242	CN,WIRE 1P				3		L045084006040S	
J246-J253	CN,WIRE 1P				8		L045084006040S	
J255-J266	CN,WIRE 1P				12		L045084006040S	
J268/J269	CN,WIRE 1P				2		L045084006040S	
J271-J273	CN,WIRE 1P				3		L045084006040S	
PCB4	ASSEMBLY P.C.BOARD DSP					7025HK0808013	G	
PCB4	ASSEMBLY P.C.BOARD DSP					7025HK0808033	K	
PCB4	ASSEMBLY P.C.BOARD DSP					7025HK0808043	D/E	
	CAPACITORS							
C100	ELECT GE 85C	220 uF	10V	M	1		D040221082080S	
C101-C115	CERAMIC CHIP HIK	0.1 uF	50V	K	15		D011104577160S	
C116	ELECT GE 85C	220 uF	10V	M	1		D040221082080S	
C117-C129	CERAMIC CHIP HIK	0.1 uF	50V	K	13		D011104577160S	
C130	ELECT GE 85C	100 uF	10V	M	1		D040101082090S	
C131-C137	CERAMIC CHIP HIK	0.1 uF	50V	K	7		D011104577160S	
C138/C139	ELECT GE 85C	100 uF	10V	M	2		D040101082090S	
C140	CERAMIC CHIP HIK	0.1 uF	50V	K	1		D011104577160S	
C141	ELECT GE 85C	100 uF	10V	M	1		D040101082090S	
C142	CERAMIC CHIP HIK	0.1 uF	50V	K	1		D011104577160S	
C143	CERAMIC CHIP T.C	470 pF	50V	J	1		D010471167160S	

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
C148	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S		
C149/C150	CERAMIC CHIP HIK	0.1 uF	50V	K	2	D011104577160S		
C151	ELECT GE 85C	220 uF	10V	M	1	D040221082080S		
C152/C153	CERAMIC CHIP HIK	0.1 uF	50V	K	2	D011104577160S		
C154	ELECT GE 85C	220 uF	10V	M	1	D040221082080S		
C155/C156	CERAMIC CHIP HIK	0.1 uF	50V	K	2	D011104577160S		
C157	ELECT GE 85C	220 uF	10V	M	1	D040221082080S		
C158	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577160S		
C159	CERAMIC CHIP T.C	16 pF	50V	J	1	D010160167160S		
C160	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577160S		
C161	CERAMIC CHIP T.C	16 pF	50V	J	1	D010160167160S		
C162	ELECT GE 85C	220 uF	10V	M	1	D040221082080S		
C163/C164	ELECT GE 85C	10 uF	50V	M	2	D040100087070S		
C165/C166	CERAMIC CHIP T.C	220 pF	50V	J	2	D010221167160S		
C167	ELECT GE 85C	47 uF	16V	M	1	D040470083080S		
C168	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C169	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S		
C170	CERAMIC CHIP T.C	22 pF	16V	J	1	D010220167160S		
C171/C172	CERAMIC CHIP HIK	0.1 uF	50V	K	2	D011104577160S		
C173	ELECT GE 85C	0.1 uF	50V	M	1	D040R10087080S		
C175/C176	CERAMIC CHIP HIK	0.1 uF	50V	K	2	D011104577160S		
C177	CERAMIC CHIP T.C	22 pF	16V	J	1	D010220167160S		
C178	ELECT GE 85C	0.1 uF	50V	M	1	D040R10087080S		
C180	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577160S		
C181	CERAMIC CHIP T.C	22 pF	16V	J	1	D010220167160S		
C182	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C183	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577160S		
C184	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C185	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C186	ELECT GE 85C	100 uF	10V	M	1	D040101082090S		
C187-C190	CERAMIC CHIP HIK	0.1 uF	50V	K	4	D011104577160S		
C191/C192	ELECT GE 85C	100 uF	10V	M	2	D040101082090S		
C193/C194	CERAMIC CHIP HIK	0.1 uF	50V	K	2	D011104577160S		
C195-C197	CERAMIC CHIP T.C	12 pF	50V	J	3	D010120167160S		
C198-C203	ELECT GE 85C	10 uF	50V	M	6	D040100087070S		
C210	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577160S		
C213	CERAMIC CHIP HIK	0.1 uF	50V	K	1	D011104577160S		
C308	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S	K	
C313	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S	K	
C316	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S	K	
C319	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S	K	
	CONNECTORS							
CN101/CN102	CN.WAFER 2.0MM (18P)					2	L101100031810S	
CN105	CN.WAFER 2.0MM (4P)					1	L101100030410S	
CN106	CN.WAFER 2.0MM (4P)					1	L101100030410S	K
CP104	CN.WAFER 2.0MM (4P)					1	L101200100410S	
	DIODES							
D100-D103	1N4148WS, SWITCHING CHIP					4	K005041483230S	
	INTEGRATED CIRCUITS							
IC100	AT3664164P-6, MEMORY-RAM					1	J001366416410S	
IC101	ES29LV800ET, MEMORY FLASH					1	J005298000120S	
IC102	TMS320D, ANALOG					1	J080320787010S	
IC103	AK4588, ANALOG					1	J080458800010S	
IC104	SN74AHCU04PWR, LOGIC					1	J040740400290S	
IC105	SN74LV00APW, LOGIC					1	J040740000170S	
IC106	UBI9022, LINEAR-DRIVER					1	J127902200010S	
	COILS							

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
R151L/R	CHIP THICK	2.2 kohm	1/16W	J	2		C20002226M160S	
R151SL	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R151SR	CHIP THICK	2.2 kohm	1/16W	J	1		C20002226M160S	
R152C	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R152F	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R152S	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R152SW	CHIP THICK	1 kohm	1/16W	J	1		C20001026M160S	
R153C	CHIP THICK	470 kohm	1/16W	J	1		C20004746M160S	
R153F	CHIP THICK	470 kohm	1/16W	J	1		C20004746M160S	
R153S	CHIP THICK	470 kohm	1/16W	J	1		C20004746M160S	
R153SW	CHIP THICK	1.2 kohm	1/16W	J	1		C20001226M160S	
R154C	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R154L/R	CHIP THICK	100 kohm	1/16W	J	2		C20001046M160S	
R154SL	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R154SR	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R155C	CARBON FILM	22 kohm	1/5W	J	1		C00002236P520S	
R155L/R	CARBON FILM	22 kohm	1/5W	J	2		C00002236P520S	
R155SL	CARBON FILM	22 kohm	1/5W	J	1		C00002236P520S	
R155SR	CARBON FILM	22 kohm	1/5W	J	1		C00002236P520S	
R156C	METAL FILM 100PPM	10 ohm	1W	J	1		C060010065050S	
R156L/R	METAL FILM 100PPM	10 ohm	1W	J	2		C060010065050S	
R156SL	METAL FILM 100PPM	10 ohm	1W	J	1		C060010065050S	
R156SR	METAL FILM 100PPM	10 ohm	1W	J	1		C060010065050S	
R157/R158	METAL FILM 100PPM	470 ohm	2W	J	2		C060047166520S	
R159SW	CHIP THICK	220 ohm	1/16W	J	1		C20002216M160S	
R160/R161	CHIP THICK	47 ohm	1/16W	J	2		C20004706M160S	G
R160SW	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R162	CHIP THICK	560 kohm	1/16W	J	1		C20005646M160S	
R163	CHIP THICK	3.6 kohm	1/16W	J	1		C20003626M160S	
R164	CHIP THICK	220 ohm	1/16W	J	1		C20002216M160S	
R165	CHIP THICK	33 kohm	1/16W	J	1		C20003336M160S	
R166	CHIP THICK	4.7 kohm	1/16W	J	1		C20004726M160S	
R167	CHIP THICK	2.2 kohm	1/16W	J	1		C20002226M160S	
R168-R170	CHIP THICK	47 ohm	1/16W	J	3		C20004706M160S	
R171	METAL FILM 100PPM	10 ohm	1W	J	1		C060010065050S	
R172/R173	CHIP THICK	47 ohm	1/16W	J	2		C20004706M160S	G
R174-R176	METAL FILM 100PPM	2.2 kohm	1W	J	3		C060022265050S	
R177	CARBON FILM	22 kohm	1/5W	J	1		C00002236P520S	
R178/R179	CEMENT RADIAL FORM	0.1 ohm	5W	J	2		C141R10069010S	
R180	CARBON FILM	1 kohm	1/5W	J	1		C00001026P520S	
R181	CARBON FILM	180 ohm	1/5W	J	1		C00001816P520S	
R182	CHIP THICK	560 kohm	1/16W	J	1		C20005646M160S	
R183	CARBON FILM	100 ohm	1/5W	J	1		C00001016P520S	
R184	METAL FILM 100PPM	4.7 ohm	1W	J	1		C0604R7065050S	
R185	CHIP THICK	10 kohm	1/16W	J	1		C20001036M160S	
R186	METAL FILM 100PPM	22 ohm	1/4W	J	1		C060022063050S	
R187	CHIP THICK	15 kohm	1/16W	J	1		C20001536M160S	
R188/R189	CHIP THICK	47 kohm	1/16W	J	2		C20004736M160S	
R190	METAL FILM 100PPM	47 kohm	1/4W	J	1		C060047363050S	
R191	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R192	CHIP THICK	43 kohm	1/16W	J	1		C20004336M160S	
R193	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R194	CHIP THICK	43 kohm	1/16W	J	1		C20004336M160S	
R195	CHIP THICK	100 kohm	1/16W	J	1		C20001046M160S	
R196	CHIP THICK	33 kohm	1/16W	J	1		C20003336M160S	
R197	CARBON FILM	2.2 kohm	1/5W	J	1		C00002226P520S	
R198-R200	CARBON FILM	51 kohm	1/5W	J	3		C00005136P520S	

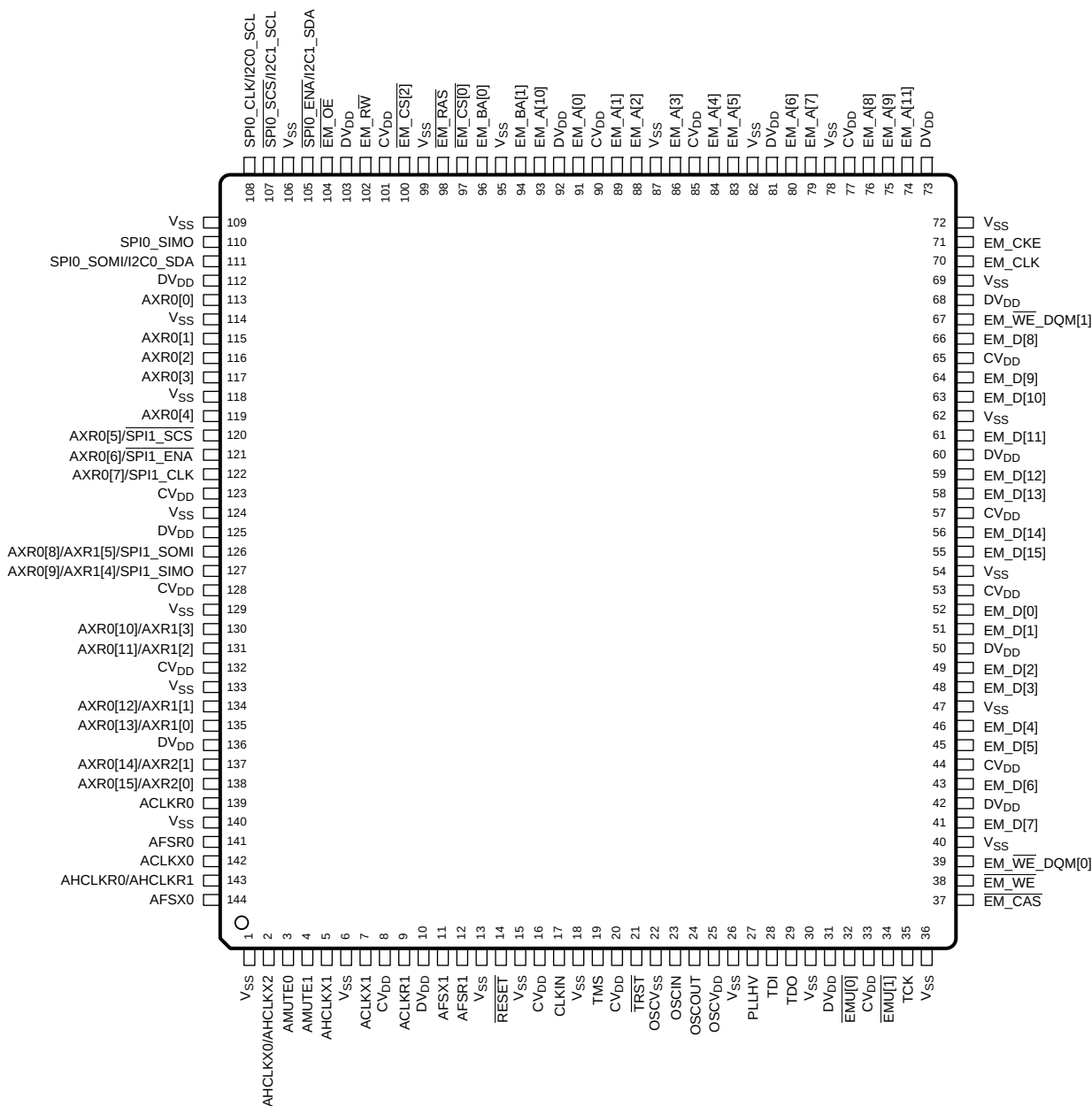
REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
R226	CHIP THICK	33 ohm	1/16W	J	1	C20003306M160S		
R227	CHIP THICK	10 kohm	1/16W	J	1	C20001036M160S		
R228	CHIP THICK	33 ohm	1/16W	J	1	C20003306M160S		
R229	CHIP THICK	47 kohm	1/16W	J	1	C20004736M160S		
R230	CHIP THICK	100 ohm	1/16W	J	1	C20001016M160S		
R233	CHIP THICK	75 ohm	1/16W	J	1	C20007506M160S		
R234	CHIP THICK	0 ohm	1/16W	J	1	C20000006M160S		
R238	CHIP THICK	1 Mohm	1/16W	J	1	C20001056M160S		
R239	CHIP THICK	100 kohm	1/16W	J	1	C20001046M160S		
R242	CHIP THICK	470 ohm	1/16W	J	1	C20004716M160S		
R243	CHIP THICK	100 kohm	1/16W	J	1	C20001046M160S		
R244	CHIP THICK	0 ohm	1/16W	J	1	C20000006M160S		
R245/R246	CHIP THICK	33 ohm	1/16W	J	2	C20003306M160S		
R247	CHIP THICK	0 ohm	1/16W	J	1	C20000006M160S		
R250/R251	CHIP THICK	0 ohm	1/8W	J	2	C200000061300S		
R318	CHIP THICK	10 kohm	1/16W	J	1	C20001036M160S	K	
R319	METAL FILM 100PPM	4.7 ohm	1W	J	1	C0604R7065050S	K	
R321	METAL FILM 100PPM	150 ohm	1W	J	1	C060015165050S	K	
	MISCELLANEOUS							
JACK100	MODULE, JSR1165-C					1	E100116500040S	
JACK101	JACK,D3.5					1	G401035320010S	K
JACK302	TER,RCA 2PIN					1	G601206A0200YS	
LUG100	RING,TER WIRE 60MM (1P)					1	8410600010060S	
REG100/REG101	BA33BC0FP, LINEAR-REGULATOR					2	J12603R300040S	
REG102	IL1117_1.2, LINEAR-REGULATOR					1	J126111712040S	
REG103	IL1117-3.3, LINEAR-REGULATOR					1	J126111700041S	
XTAL100	CRYSTAL, 12.288MHz					1	E80512R288010S	
XTAL101	CRYSTAL, 48.000MHz					1	E80548R000010S	
	SHIELD, PLATE DSP					1	3070210476000S	
PCB4-1 ASSEMBLY P.C.BOARD USB								
C204/C205	CERAMIC CHIP T.C	47 pF	50V	J	2	D010470167160S		
C207-C209	CERAMIC CHIP HIK	0.1 uF	50V	K	3	D011104577160S		
CN103	CN,PLUG CONTACT (4P)					1	G480040100010S	
CN104	CN,WIRE 320MM (4P)					1	L002321040030S	
D702/D703	ESD CHIP, IMSA-6802-01A					2	K067680200010S	
L120	BEAD COIL, 120ohm					1	D340160811210S	
L127	BEAD COIL, 120ohm					1	D340160811210S	
LUG702	RING,TER WIRE 60MM (1P)					1	8410600010030S	
R236/R237	CHIP THICK	20 ohm	1/16W	J	2	C20002006M160S		
R240/R241	CHIP THICK	15 ohm	1/16W	J	2	C20001536M160S		
PCB4-1 ASSEMBLY P.C.BOARD BLUETOOTH								
BKT1/BKT2	BRACKET, 0.8#/SCREW					2	4010210196000S	
BT700	CN.WAFER (24P)					1	L109305002420S	
C211	CHIP THICK	0 ohm	1/16W	J	1	C20000006M160S		
C700L/R	ELECT GE 85C	10 uF	50V	M	2	D040100087070S		
C701	CERAMIC CHIP HIK	0.01 uF	50V	K	1	D011103777160S		
CN700	CN,WIRE 320MM (9P)					1	L002321090010S	
DZ701	0.2W 3.3V, ZENER CHIP					1	K06603R34P400S	
LUG701	RING,TER WIRE 100MM (1P)					1	8410101010070S	
Q700L/R	KTC2875B(MB), NPN					2	J5222875B0010S	
Q701	KRA105S(PE), PNP					1	J520010500210S	
R700L/R	CHIP THICK	470 ohm	1/16W	J	2	C20004716M160S		
R701L/R	CHIP THICK	2.2 kohm	1/16W	J	2	C20002226M160S		
R702	CHIP THICK	1 kohm	1/16W	J	1	C20001026M160S		
R703	CHIP THICK	47 kohm	1/16W	J	1	C20004736M160S		
R704	CHIP THICK	1 kohm	1/16W	J	1	C20001026M160S		
R705	CHIP THICK	470 kohm	1/16W	J	1	C20004746M160S		

REF No.	DESCRIPTION					Q'TY	PARTS No.	VER.
R706	1N4148WS, SWITCHING CHIP					1	K005041483230S	
PCB5	ASSEMBLY P.C.BOARD STANDBY						7025HK0808014	G
PCB5	ASSEMBLY P.C.BOARD STANDBY						7025HK0808034	K
PCB5	ASSEMBLY P.C.BOARD STANDBY						7025HK0808044	D/E
C300	ELECT GE 85C	10 uF	50V	M	1	D040100087070S		
C301	ELECT GE 85C	2200 uF	16V	M	1	D040222083080S		
C302	ELECT GE 85C	1 uF	50V	M	1	D040010087150S		
C304	CERAMIC AC(SAFETY)	0.0047 uF	250VAC		1	D00847208H010S		
C315	ELECT GE 85C	1 uF	50V	M	1	D040010087150S		
CN301	CN.FPC 1.25MM (7P)					1	L131007000010S	
CP304	CN.WAFER 7.92MM					1	L108353280270S	
CP305	CN.WAFER 7.92MM					1	L108353280260S	
CP306	CN.WAFER 7.92MM					1	L108202000220S	
D302-D304	1N4148WS, SWITCHING CHIP					3	K005041483230S	
D305-D308	1N4007, SWITCHING					4	K000400700010S	
F301	FUSE, T4A/250V					1	N751224001110S	
F301A/B	HOLDER, PI5.2-REEL					2	G645000050010S	
GT301	TERMINAL					1	3790040886000S	
IC300	LM1117S, LINEAR-REGULATOR					1	J126111733030S	
J301-J303	CN,WIRE 1P					3	L045084006040S	
J304	CHIP THICK	0 ohm	1/8W	J	1	C200000061300S		
PT301	POWER TRANS, ST-BY 230V/50Hz					1	8200280150290S	D/E/G
PT301	POWER TRANS, ST-BY 220V/50,60Hz					1	8200280150300S	K
Q300/Q301	KTC3875S, NPN					2	J522038750210S	
R300	CHIP THICK	10 kohm	1/16W	J	1	C20001036M160S		
R301	CHIP THICK	20 kohm	1/16W	J	1	C20002036M160S		
R302	CHIP THICK	3.3 kohm	1/16W	J	1	C20003326M160S		
R303	CHIP THICK	2.2 kohm	1/16W	J	1	C20002226M160S		
R304	METAL FILM 100PPM	10 ohm	1/4W	J	1	C060010063050S		
R333	CHIP THICK	47 kohm	1/16W	J	1	C20004736M160S		
RLY301	RELAY, DC6V 5A					1	G680060502010S	
ZD301	MTZJ4.7B-0.5W, ZENER					1	K06004R744520S	

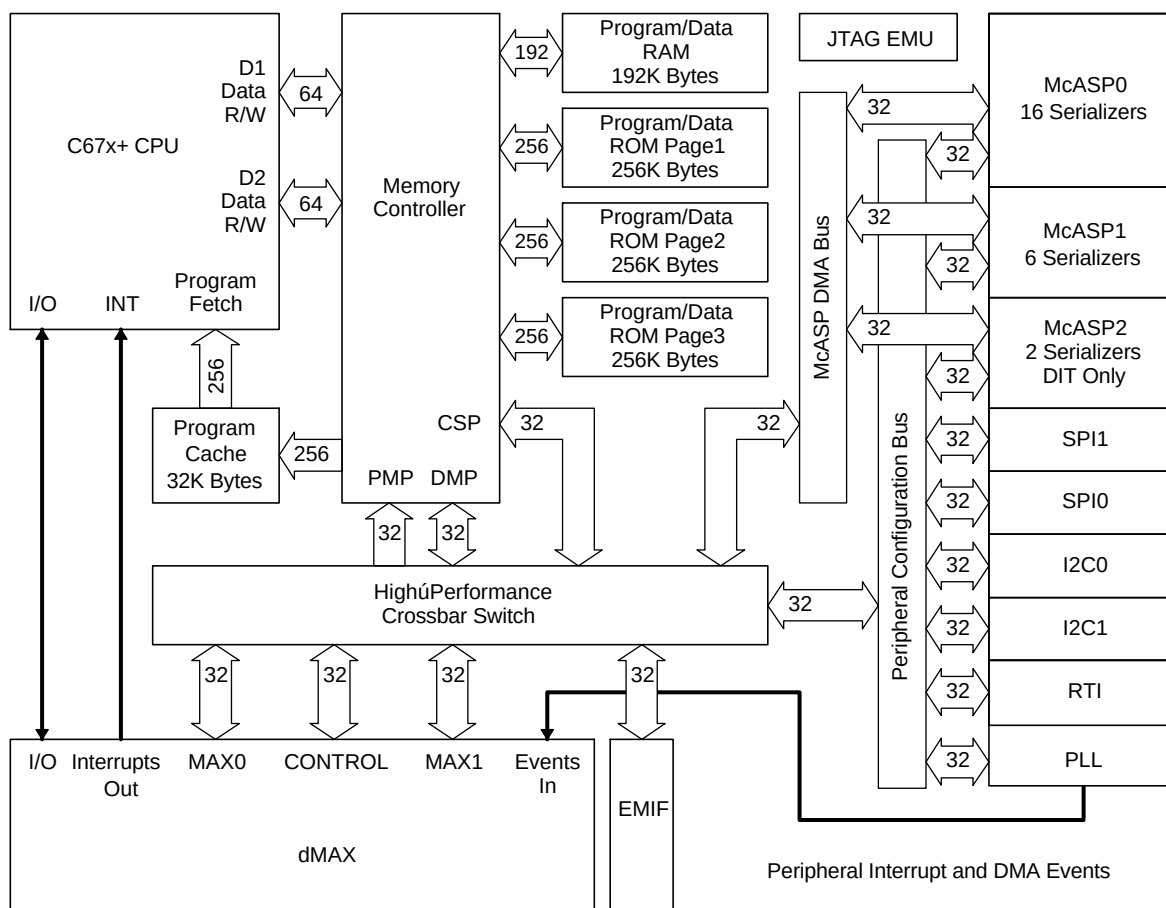
IC'S FUNCTIONAL BLOCK DIAGRAMS

DA787 : IC102

1. Pin Description



2. Block Diagram



3. Terminal Functions

Table, the Terminal Functions table, identifies the external signal names, the associated pin/ball numbers along with the mechanical package designator, the pin type (I, O, IO, OZ, or PWR), whether the pin/ball has any internal pullup/pulldown resistors, whether the pin/ball is configurable as an IO in GPIO mode, and a functional pin description.

Table. Terminal Functions

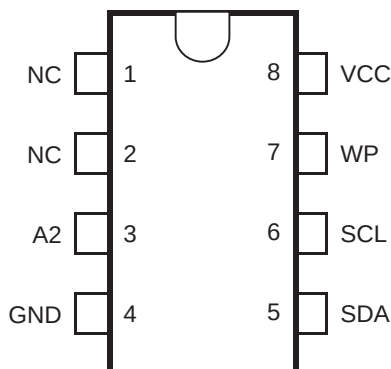
SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
External Memory Interface (EMIF) Address and Control					
EM_A[0]	91	O	-	N	EMIF Address Bus
EM_A[1]	89	O	-	N	
EM_A[2]	88	O	-	N	
EM_A[3]	86	O	-	N	
EM_A[4]	84	O	-	N	
EM_A[5]	83	O	-	N	
EM_A[6]	80	O	-	N	
EM_A[7]	79	O	-	N	
EM_A[8]	76	O	-	N	
EM_A[9]	75	O	-	N	
EM_A[10]	93	O	-	N	
EM_A[11]	74	O	-	N	
EM_BA[0]	96	O	-	N	SDRAM Bank Address and Asynchronous Memory
EM_BA[1]	94	O	-	N	Low-Order Address
$\overline{\text{EM_CS}}[0]$	97	O	-	N	SDRAM Chip Select
$\overline{\text{EM_CS}}[2]$	100	O	-	N	Asynchronous Memory Chip Select
$\overline{\text{EM_CAS}}$	37	O	-	N	SDRAM Column Address Strobe
$\overline{\text{EM_RAS}}$	98	O	-	N	SDRAM Row Address Strobe
$\overline{\text{EM_WE}}$	38	O	-	N	SDRAM Write Enable
EM_CKE	71	O	-	N	SDRAM Clock Enable
EM_CLK	70	O	-	N	SDRAM Clock
EM $\overline{\text{WE}}$ _DQM[0]	39	O	-	N	Write Enable or Byte Enable for EM_D[7:0]
EM $\overline{\text{WE}}$ _DQM[1]	67	O	-	N	Write Enable or Byte Enable for EM_D[15:8]
$\overline{\text{EM_OE}}$	104	O	-	N	SDRAM Output Enable
EM $\overline{\text{RW}}$	102	O	-	N	Asynchronous Memory Read/not Write
External Memory Interface (EMIF) Data Bus					
EM_D[0]	52	IO	-	N	EMIF Data Bus [Lower 16 Bits]
EM_D[1]	51	IO	-	N	
EM_D[2]	49	IO	-	N	
EM_D[3]	48	IO	-	N	
EM_D[4]	46	IO	-	N	
EM_D[5]	45	IO	-	N	
EM_D[6]	43	IO	-	N	
EM_D[7]	41	IO	-	N	
EM_D[8]	66	IO	-	N	
EM_D[9]	64	IO	-	N	
EM_D[10]	63	IO	-	N	
EM_D[11]	61	IO	-	N	
EM_D[12]	59	IO	-	N	
EM_D[13]	58	IO	-	N	
EM_D[14]	56	IO	-	N	
EM_D[15]	55	IO	-	N	

SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
McASP0, McASP1, McASP2, and SPI1 Serial Ports					
AHCLKR0/AHCLKR1	143	IO	-	Y	McASP0 and McASP1 Receive Master Clock
ACLKR0	139	IO	-	Y	McASP0 Receive Bit Clock
AFSR0	141	IO	-	Y	McASP0 Receive Frame Sync (L/R Clock)
AHCLKX0/AHCLKX2	2	IO	-	Y	McASP0 and McASP2 Transmit Master Clock
ACLKX0	142	IO	-	Y	McASP0 Transmit Bit Clock
AFSX0	144	IO	-	Y	McASP0 Transmit Frame Sync (L/R Clock)
AMUTE0	3	O	-	Y	McASP0 MUTE Output
AXR0[0]	113	IO	-	Y	McASP0 Serial Data 0
AXR0[1]	115	IO	-	Y	McASP0 Serial Data 1
AXR0[2]	116	IO	-	Y	McASP0 Serial Data 2
AXR0[3]	117	IO	-	Y	McASP0 Serial Data 3
AXR0[4]	119	IO	-	Y	McASP0 Serial Data 4
AXR0[5]/SPI1_SCS	120	IO	-	Y	McASP0 Serial Data 5 or SPI1 Slave Chip Select
AXR0[6]/SPI1_ENA	121	IO	-	Y	McASP0 Serial Data 6 or SPI1 Enable (Ready)
AXR0[7]/SPI1_CLK	122	IO	-	Y	McASP0 Serial Data 7 or SPI1 Serial Clock
AXR0[8]/AXR1[5]/SPI1_SOMI	126	IO	-	Y	McASP0 Serial Data 8 or McASP1 Serial Data 5 or SPI1 Data Pin Slave Out Master In
AXR0[9]/AXR1[4]/SPI1_SIMO	127	IO	-	Y	McASP0 Serial Data 9 or McASP1 Serial Data 4 or SPI1 Data Pin Slave In Master Out
AXR0[10]/AXR1[3]	130	IO	-	Y	McASP0 Serial Data 10 or McASP1 Serial Data 3
AXR0[11]/AXR1[2]	131	IO	-	Y	McASP0 Serial Data 11 or McASP1 Serial Data 2
AXR0[12]/AXR1[1]	134	IO	-	Y	McASP0 Serial Data 12 or McASP1 Serial Data 1
AXR0[13]/AXR1[0]	135	IO	-	Y	McASP0 Serial Data 13 or McASP1 Serial Data 0
AXR0[14]/AXR2[1]	137	IO	-	Y	McASP0 Serial Data 14 or McASP2 Serial Data 1
AXR0[15]/AXR2[0]	138	IO	-	Y	McASP0 Serial Data 15 or McASP2 Serial Data 0
ACLKR1	9	IO	-	Y	McASP1 Receive Bit Clock
AFSR1	12	IO	-	Y	McASP1 Receive Frame Sync (L/R Clock)
AHCLKX1	5	IO	-	Y	McASP1 Transmit Master Clock
ACLKX1	7	IO	-	Y	McASP1 Transmit Bit Clock
AFSX1	11	IO	-	Y	McASP1 Transmit Frame Sync (L/R Clock)
AMUTE1	4	O	-	Y	McASP1 MUTE Output
SPI0, I2C0, and I2C1 Serial Port Pins					
SPI0_SOMI/I2C0_SDA	111	IO	-	Y	SPI0 Data Pin Slave Out Master In or I2C0 Serial Data
SPI0_SIMO	110	IO	-	Y	SPI0 Data Pin Slave In Master Out
SPI0_CLK/I2C0_SCL	108	IO	-	Y	SPI0 Serial Clock or I2C0 Serial Clock
SPI0_SCS/I2C1_SCL	107	IO	-	Y	SPI0 Slave Chip Select or I2C1 Serial Clock
SPI0_ENA/I2C1_SDA	105	IO	-	Y	SPI0 Enable (Ready) or I2C1 Serial Data
Clocks					
OSCIN	23	I	-	N	1.2-V Oscillator Input
OSCOUT	24	O	-	N	1.2-V Oscillator Output
OSCV _{DD}	25	PWR	-	N	Oscillator 1.2-V V _{DD} tap point (for filter only)
OSCV _{SS}	22	PWR	-	N	Oscillator V _{SS} tap point (for filter only)
CLKIN	17	I	-	N	Alternate clock input (3.3-V LVCMOS Input)
PLLHV	27	PWR	-	N	PLL 3.3-V Supply Input (requires external filter)
Device Reset					
RESET	14	I	-	N	Device reset pin

SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
Emulation/JTAG Port					
TCK	35	I	IPU	N	Test Clock
TMS	19	I	IPU	N	Test Mode Select
TDI	28	I	IPU	N	Test Data In
TDO	29	OZ	IPU	N	Test Data Out
$\overline{\text{TRST}}$	21	I	IPD	N	Test Reset
$\overline{\text{EMU}}[0]$	32	IO	IPU	N	Emulation Pin 0
$\overline{\text{EMU}}[1]$	34	IO	IPU	N	Emulation Pin 1
Power Pins					
Core Supply (CV _{DD})	8, 16, 20, 33, 44, 53, 57, 65, 77, 85, 90, 101, 123, 128, 132				
IO Supply (DV _{DD})	10, 31, 42, 50, 60, 68, 73, 81, 92, 103, 112, 125, 136				
Ground (V _{SS})	1, 6, 13, 15, 18, 26, 30, 36, 40, 47, 54, 62, 69, 72, 78, 82, 87, 95, 99, 106, 109, 114, 118, 124, 129, 133, 140				

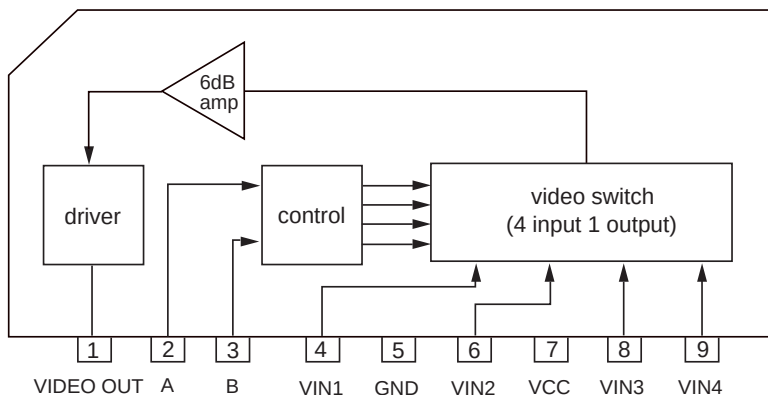
- (1) TYPE column refers to pin direction in functional mode. If a pin has more than one function with different directions, the functions are separated with a slash (/).
- (2) PULL column:
IPD = Internal Pulldown resistor
IPU = Internal Pullup resistor
- (3) If the GPIO column is 'Y', then in GPIO mode, the pin is configurable as an IO unless otherwise marked.

FT24C08 : IC107

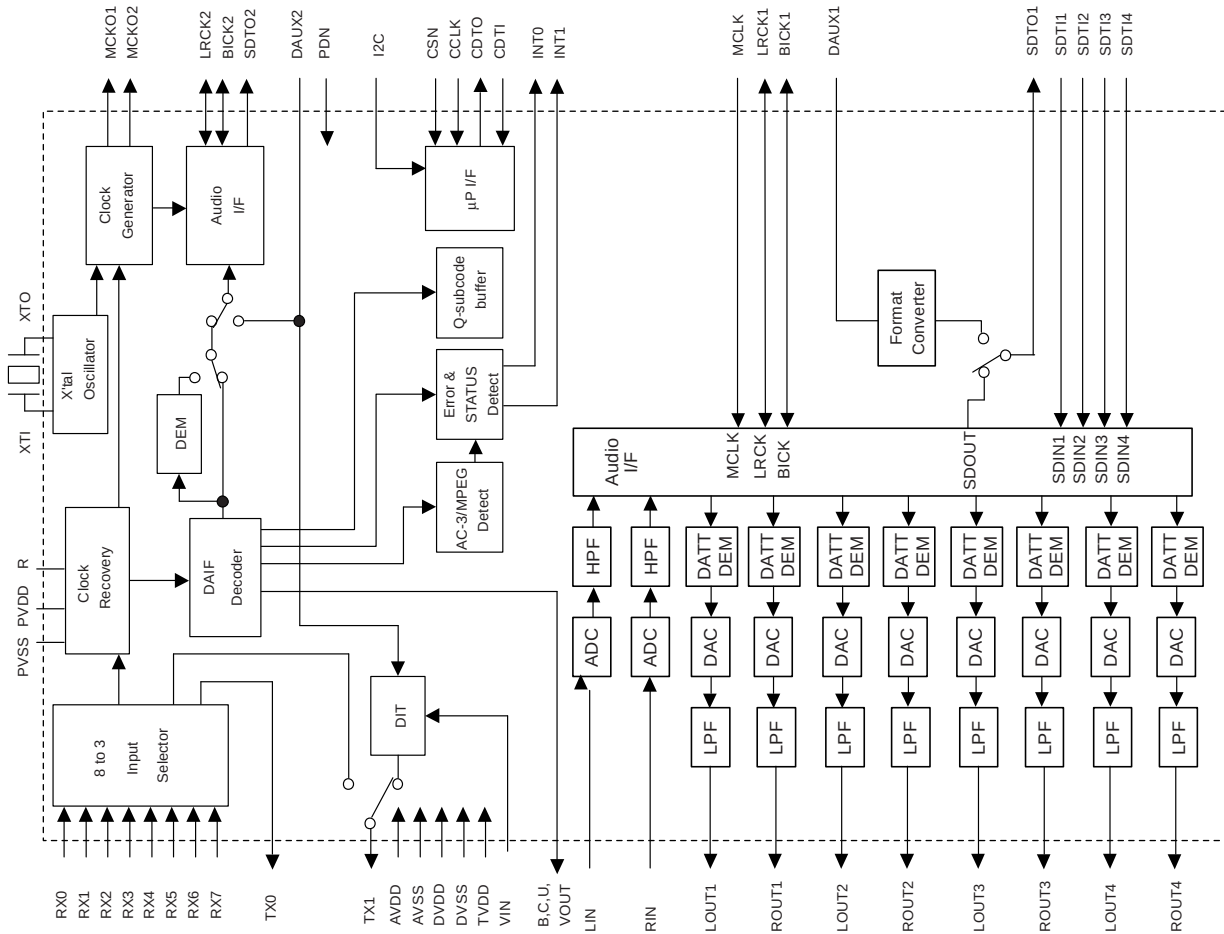
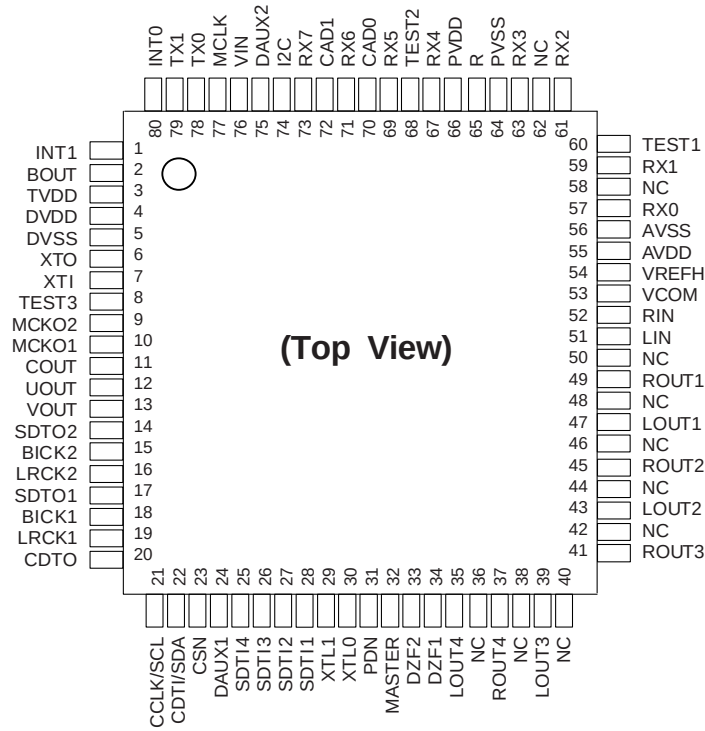


Pin Name	Pin Function
A2, A1, A0	Device Address Inputs
SDA	Serial Data Input / Open Drain Output
SCL	Serial Clock Input
WP	Write Protect
NC	No-Connect

LA7956 : IC106



AK4588 : IC103



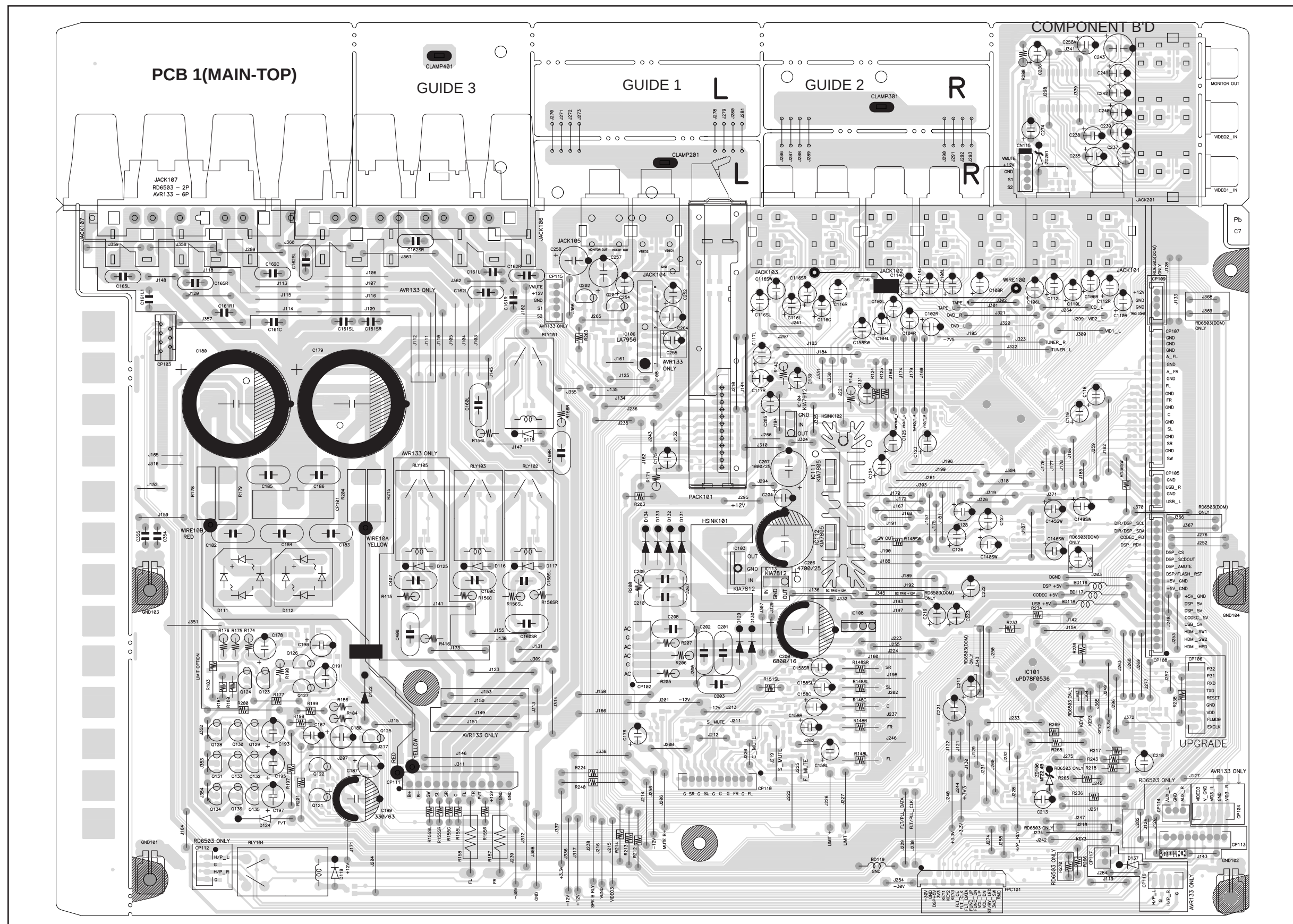
No.	Pin Name	I/O	Function
1	INT1	O	Interrupt 1 Pin
2	BOUT	O	Block-Start Output Pin for Receiver Input iHî during first 40 flames.
3	TVDD	-	Output Buffer Power Supply Pin, 2.7V~5.5V
4	DVDD	-	Digital Power Supply Pin, 4.5V~5.5V
5	DVSS	-	Digital Ground Pin
6	XTO	O	X'tal clock Output Pin
7	XTI	I	X'tal / External clock Input Pin
8	TEST3	I	Test 3 Pin This pin should be connected to DVSS.
9	MCKO2	O	Master Clock Output 2 Pin
10	MCKO1	O	Master Clock Output 1 Pin
11	COUT	O	C-bit Output Pin for Receiver Input
12	UOUT	O	U-bit Output Pin for Receiver Input
13	VOUT	O	V-bit Output Pin for Receiver Input
14	SDTO2	O	Audio Serial Data Output Pin (DIR/DIT part)
15	BICK2	I/O	Audio Serial Data Clock Pin (DIR/DIT part)
16	LRCK2	I/O	Channel Clock Pin (DIR/DIT part)
17	SDTO1	O	Audio Serial Data Output Pin (ADC/DAC part)
18	BICK1	I/O	Audio Serial Data Clock Pin (ADC/DAC part)
19	LRCK1	I/O	Input Channel Clock Pin
20	CDTO	O	Control Data Output Pin in Serial Mode, I2C pin= "L".
21	CCLK	I	Control Data Clock Pin in Serial Mode, I2C pin= "L".
	SCL	I	Control Data Clock Pin in Serial Mode, I2C pin= "H".
22	CDTI	I	Control Data Input Pin in Serial Mode, I2C pin= "L".
	SDA	I/O	Control Data Pin in Serial Mode, I2C pin= "H".
23	CSN	I	Chip Select Pin in Serial Mode, I2C pin= "L".
		I	This pin should be connected to DVSS, I2C pin= "H".
24	DAUX1	I	AUX Audio Serial Data Input Pin (ADC/DAC part)
25	SDTI4	I	DAC4 Audio Serial Data Input Pin
26	SDTI3	I	DAC3 Audio Serial Data Input Pin
27	SDTI2	I	DAC2 Audio Serial Data Input Pin
28	SDTI1	I	DAC1 Audio Serial Data Input Pin
29	XTL1	I	Xítal Frequency Select 0 Pin
30	XTL0	I	Xítal Frequency Select 1 Pin
31	PDN	I	Power-Down Mode Pin When "L", the AK4588 is powered-down, all output pin goes "L", all registers are reset. When CAD1-0 pins are changed, the AK4588 should be reset by PDN pin.
32	MASTER	I	Master Mode Select Pin "H": Master mode, "L": Slave mode
33	DZF2	O	Zero Input Detect 2 Pin (Table 13) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". When RSTN1 bit is "0" or PWDAN bit is "0", this pin goes to "H".
	OVF	O	Analog Input Overflow Detect Pin This pin goes to "H" if the analog input of Lch or Rch overflows. This pin becomes OVF pin if OVFE bit is set to 1.
34	DZF1	O	Zero Input Detect 1 Pin (Table 13) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". When RSTN1 bit is "0" or PWDAN bit is "0", this pin goes to "H".
35	LOUT4	O	DAC4 Lch Analog Output Pin
36	NC	-	No Connect pin No internal bonding. This pin should be opened.
37	ROUT4	O	DAC4 Rch Analog Output Pin
38	NC	-	No Connect pin No internal bonding. This pin should be opened.
39	LOUT3	O	DAC3 Lch Analog Output Pin

No.	Pin Name	I/O	Function
40	NC	-	No Connect pin No internal bonding. This pin should be opened.
41	ROUT3	O	DAC3 Rch Analog Output Pin
42	NC	-	No Connect pin No internal bonding. This pin should be opened.
43	LOUT2	O	DAC2 Lch Analog Output Pin
44	NC	-	No Connect pin No internal bonding. This pin should be opened.
45	ROUT2	O	DAC2 Rch Analog Output Pin
46	NC	-	No Connect pin No internal bonding. This pin should be opened.
47	LOUT1	O	DAC1 Lch Analog Output Pin
48	NC	-	No Connect pin No internal bonding. This pin should be opened.
49	ROUT1	O	DAC1 Rch Analog Output Pin
50	NC	-	No Connect pin No internal bonding. This pin should be opened.
51	LIN	I	Lch Analog Input Pin
52	RIN	I	Rch Analog Input Pin
53	VCOM	-	Common Voltage Output Pin 2.2 μ F capacitor should be connected to AVSS externally.
54	VREFH	-	Positive Voltage Reference Input Pin, AVDD
55	AVDD	-	Analog Power Supply Pin, 4.5V~5.5V
56	AVSS	-	Analog Ground Pin, 0V
57	RX0	I	Receiver Channel 0 Pin (Internal biased pin. Internally biased at PVDD/2)
58	NC	-	No Connect pin No internal bonding. This pin should be connected to PVSS.
59	RX1	I	Receiver Channel 1 Pin (Internal biased pin. Internally biased at PVDD/2)
60	TEST1	I	Test 1 Pin This pin should be connected to PVSS.
61	RX2	I	Receiver Channel 2 Pin (Internal biased pin. Internally biased at PVDD/2)
62	NC	-	No Connect pin No internal bonding. This pin should be connected to PVSS.
63	RX3	I	Receiver Channel 3 Pin (Internal biased pin. Internally biased at PVDD/2)
64	PVSS	-	PLL Ground pin
65	R	-	External Resistor Pin 12k Ω $\pm$ 1% resistor should be connected to PVSS externally.
66	PVDD	-	PLL Power supply Pin, 4.5V~5.5V
67	RX4	I	Receiver Channel 4 Pin (Internal biased pin. Internally biased at PVDD/2)
68	TEST2	I	Test 2 Pin This pin should be connected to PVSS.
69	RX5	I	Receiver Channel 5 Pin (Internal biased pin. Internally biased at PVDD/2)
70	CAD0	I	Chip Address 0 Pin (ADC/DAC part)
71	RX6	I	Receiver Channel 6 Pin (Internal biased pin. Internally biased at PVDD/2)
72	CAD1	I	Chip Address 1 Pin (ADC/DAC part)
73	RX7	I	Receiver Channel 7 Pin (Internal biased pin. Internally biased at PVDD/2)
74	I2C	I	Control Mode Select Pin. "L": 4-wire Serial, "H": I ² C Bus
75	DAUX2	I	Auxiliary Audio Data Input Pin (DIR/DIT part)
76	VIN	I	V-bit Input Pin for Transmitter Output
77	MCLK	I	Master Clock Input Pin
78	TX0	O	Transmit Channel (Through Data) Output 0 Pin
79	TX1	O	Transmit Channel Output1 pin When TX bit = "0", Transmit Channel (Through Data) Output 1 Pin. When TX bit = "1", Transmit Channel (DAUX2 Data) Output Pin (Default).
80	INT0	O	Interrupt 0 Pin

Note : All input pins except internal biased pins and internal pull-down pin should not be left floating.

PRINTED CIRCUIT BOARDS (1)

Model No.: RD-6503

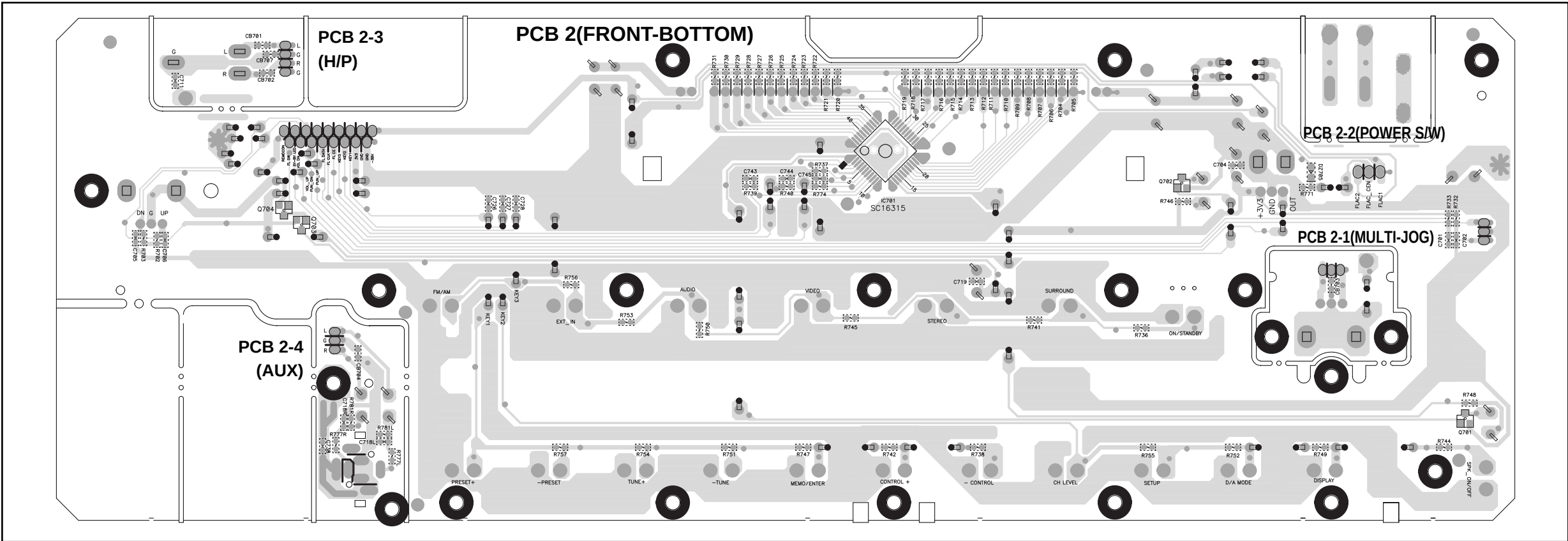
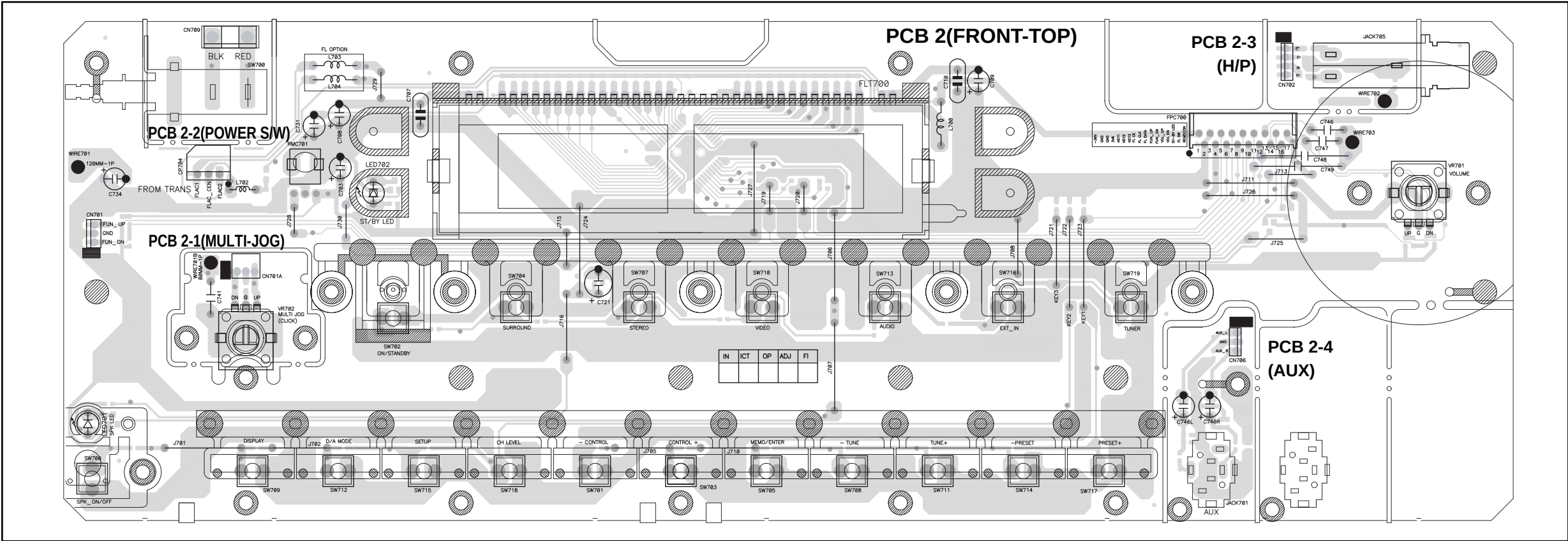


Model No.: RD-6503

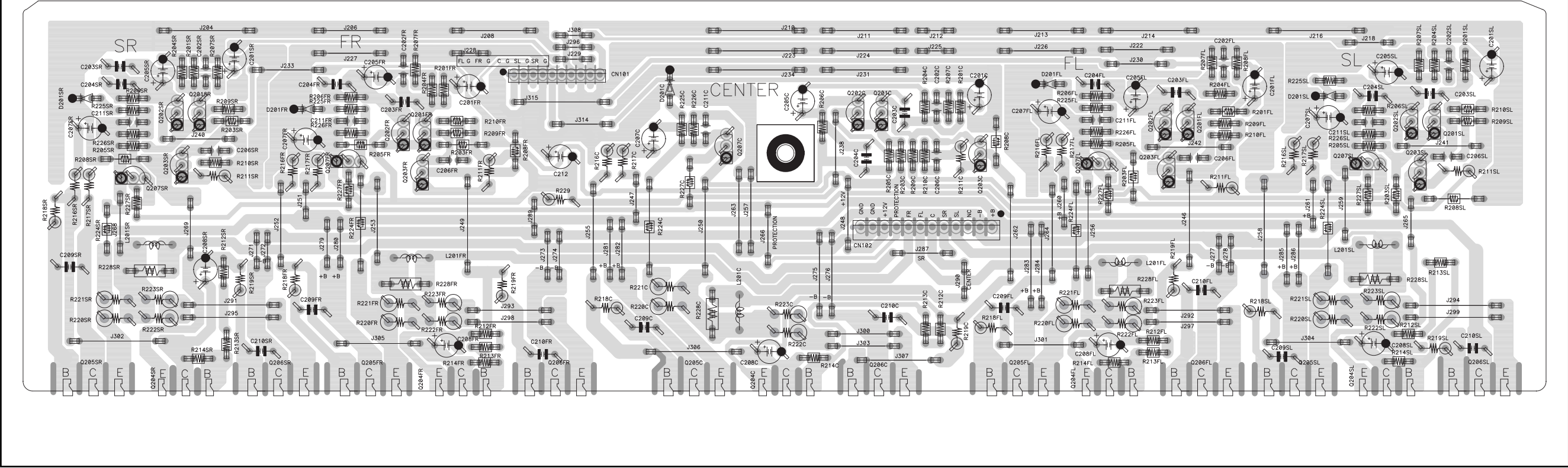


PRINTED CIRCUIT BOARDS (3)

Model No.: RD-6503

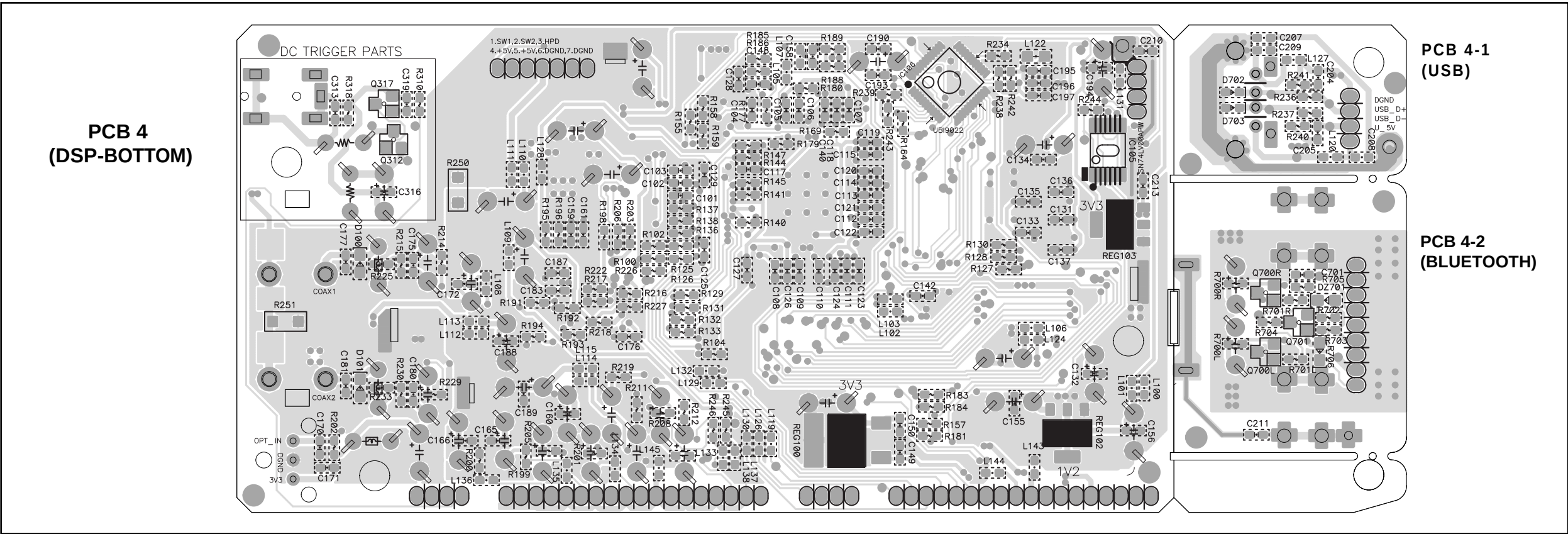
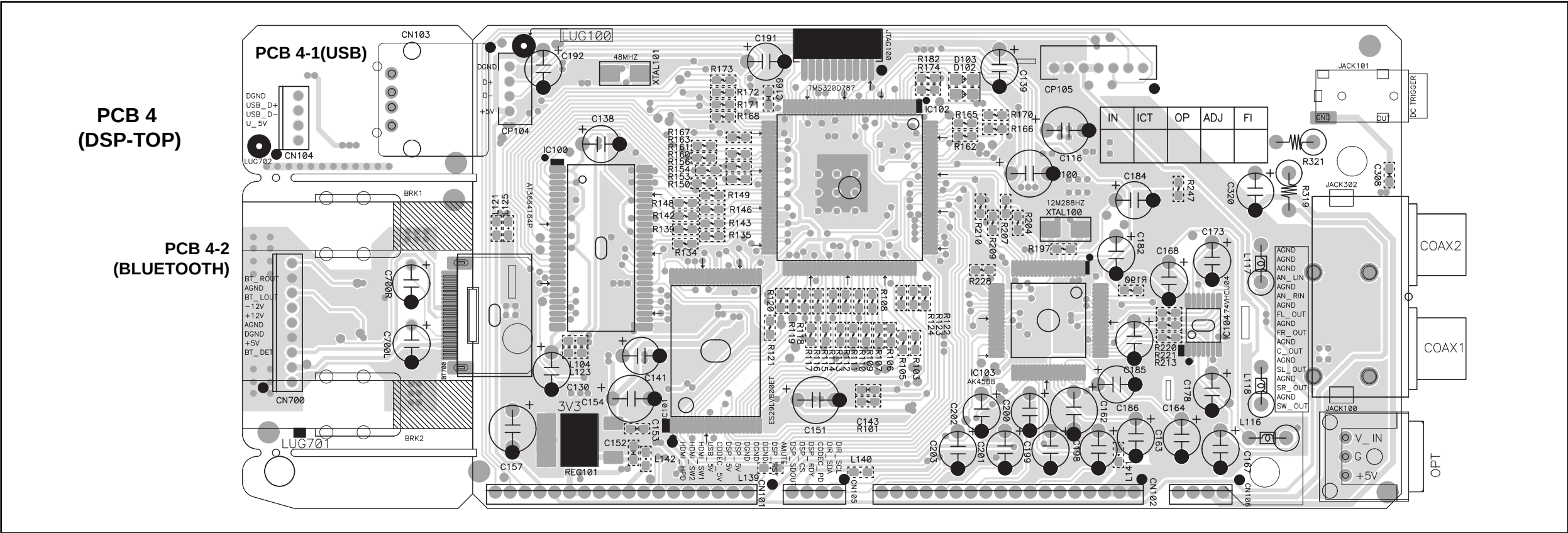


PCB 3(AMP)

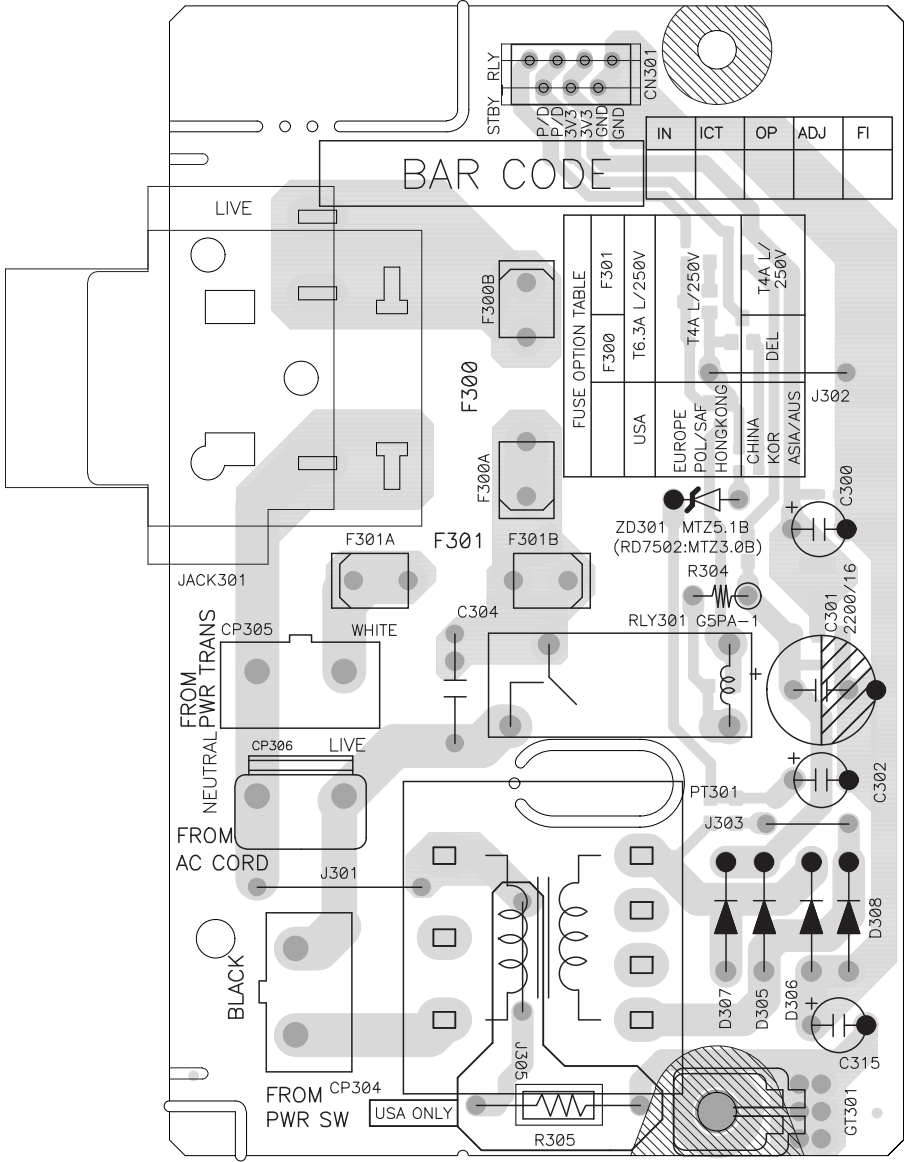


PRINTED CIRCUIT BOARDS (5)

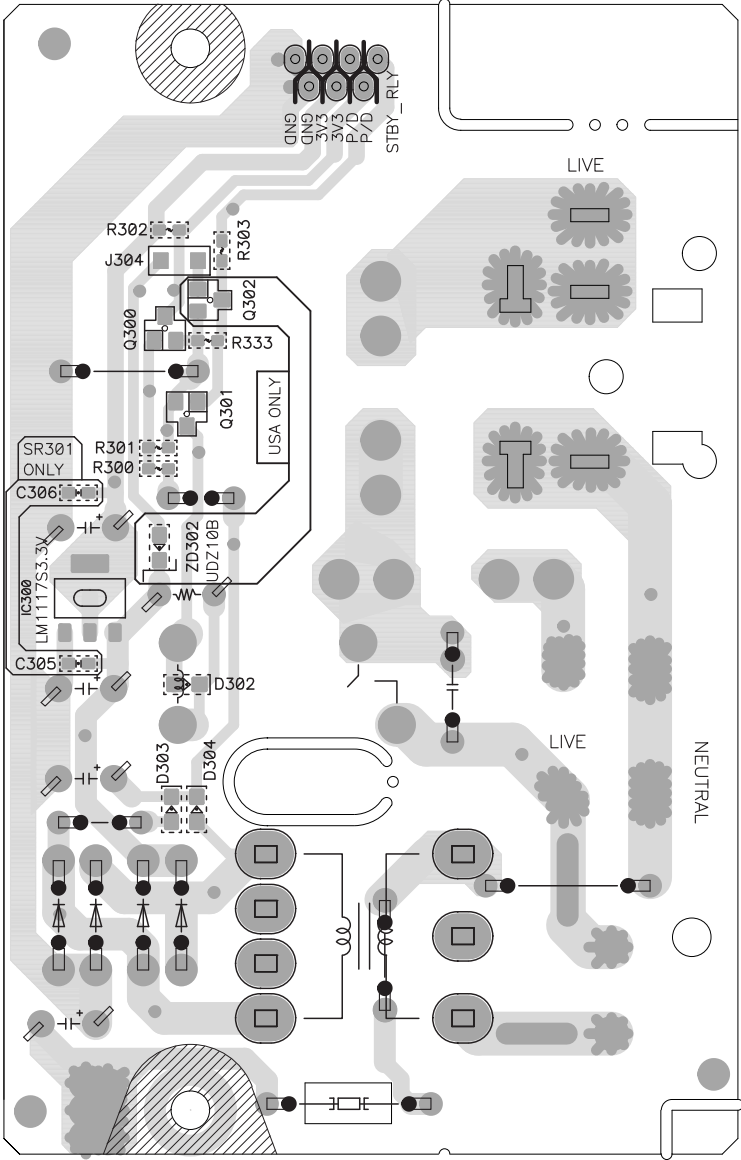
Model No.: RD-6503



PCB 5(ST-BY TOP)



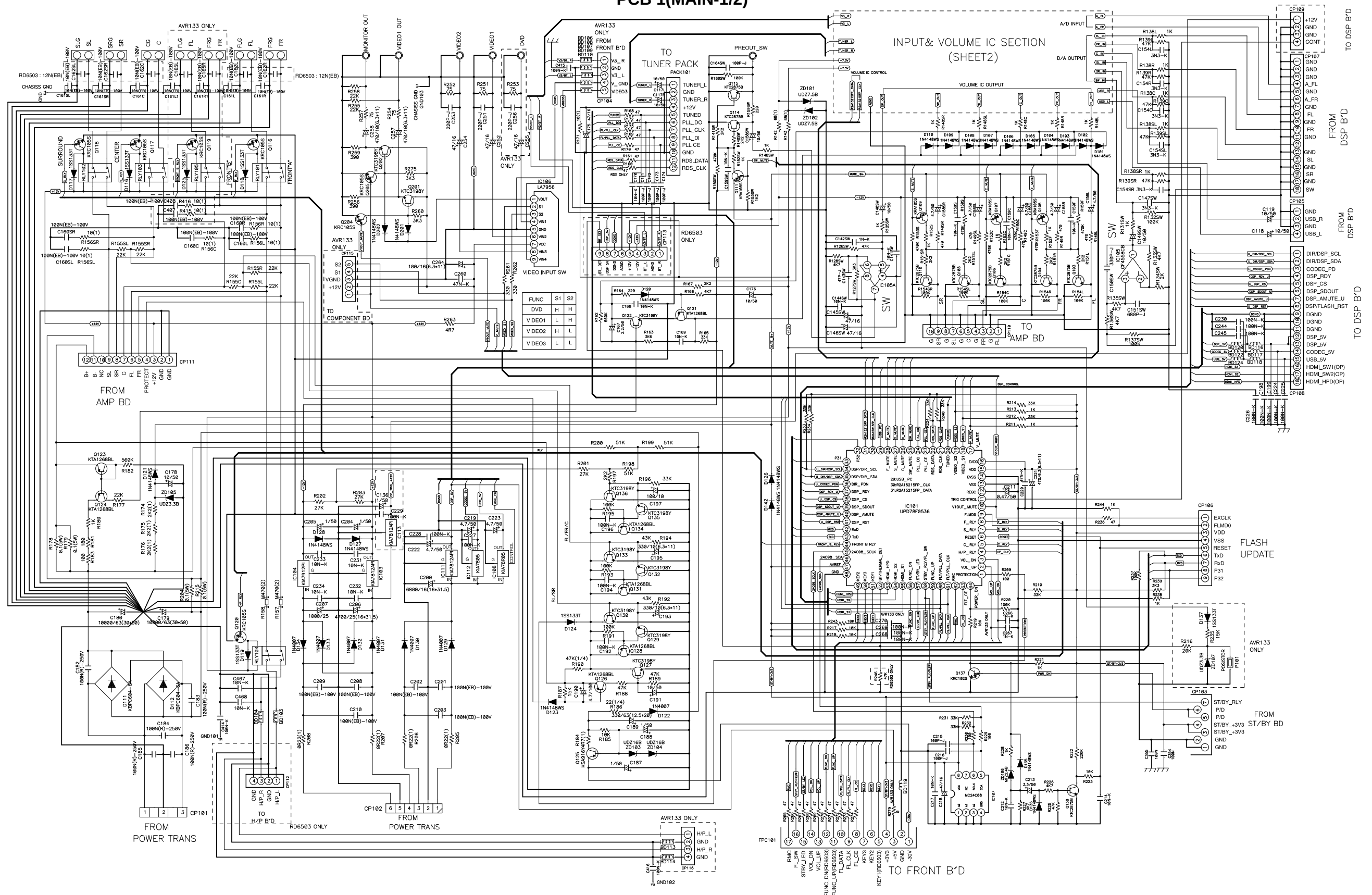
PCB 5(ST-BY BOTTOM)



SCHEMATIC DIAGRAMS (1)

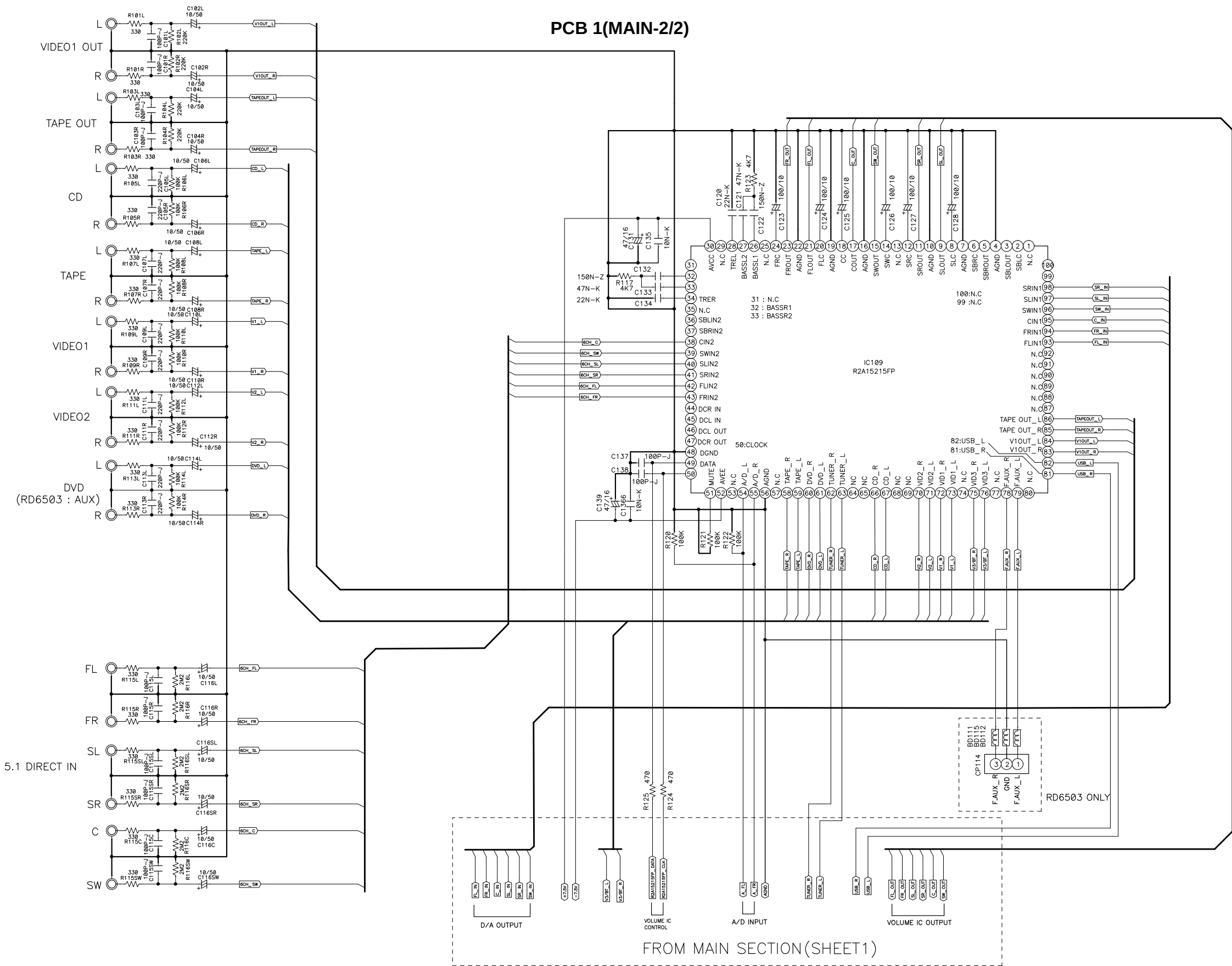
Model No.: RD-6503

PCB 1(MAIN-1/2)



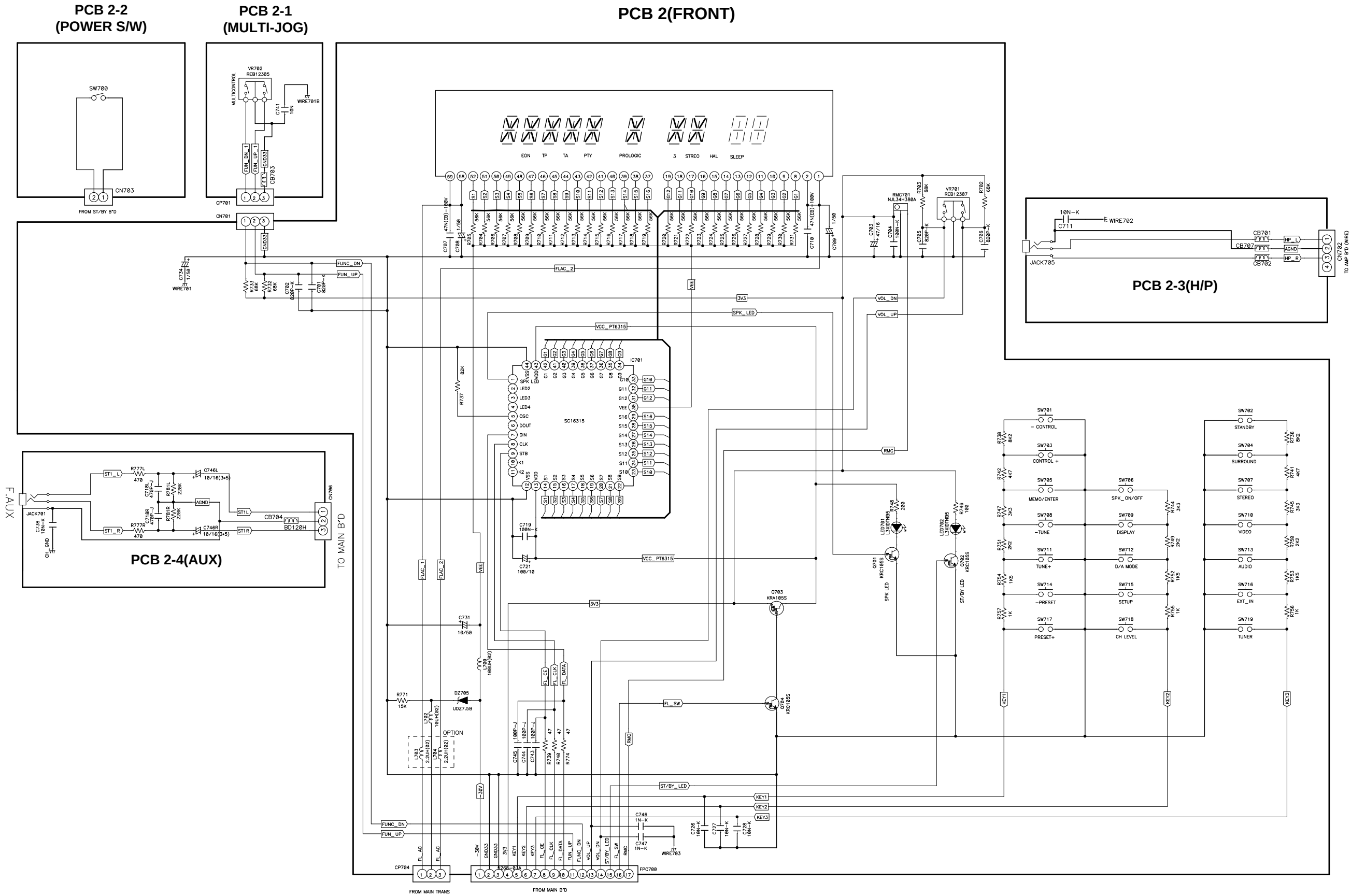
SCHEMATIC DIAGRAMS (2)

Model No.: RD-6503



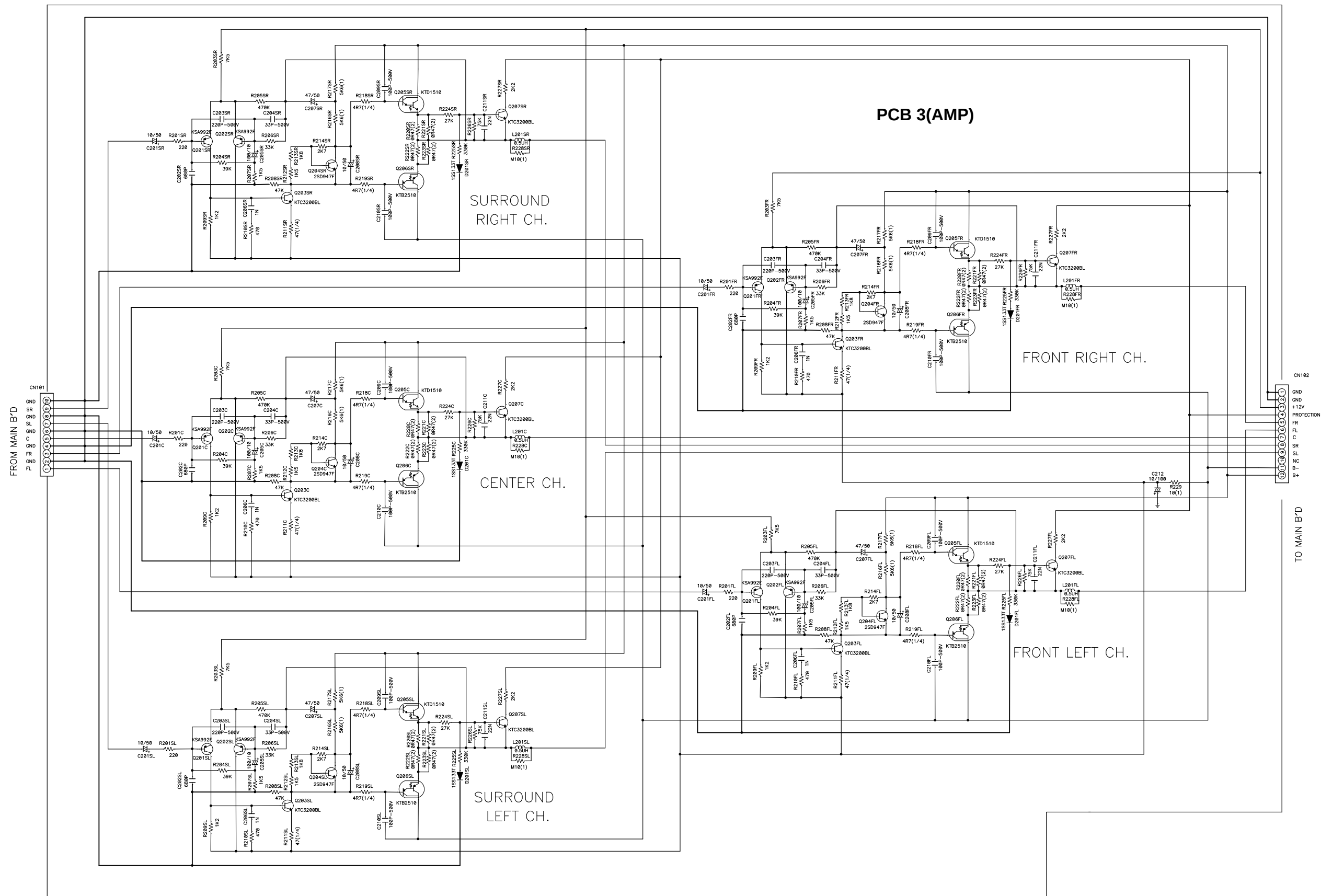
SCHEMATIC DIAGRAMS (3)

Model No.: RD-6503



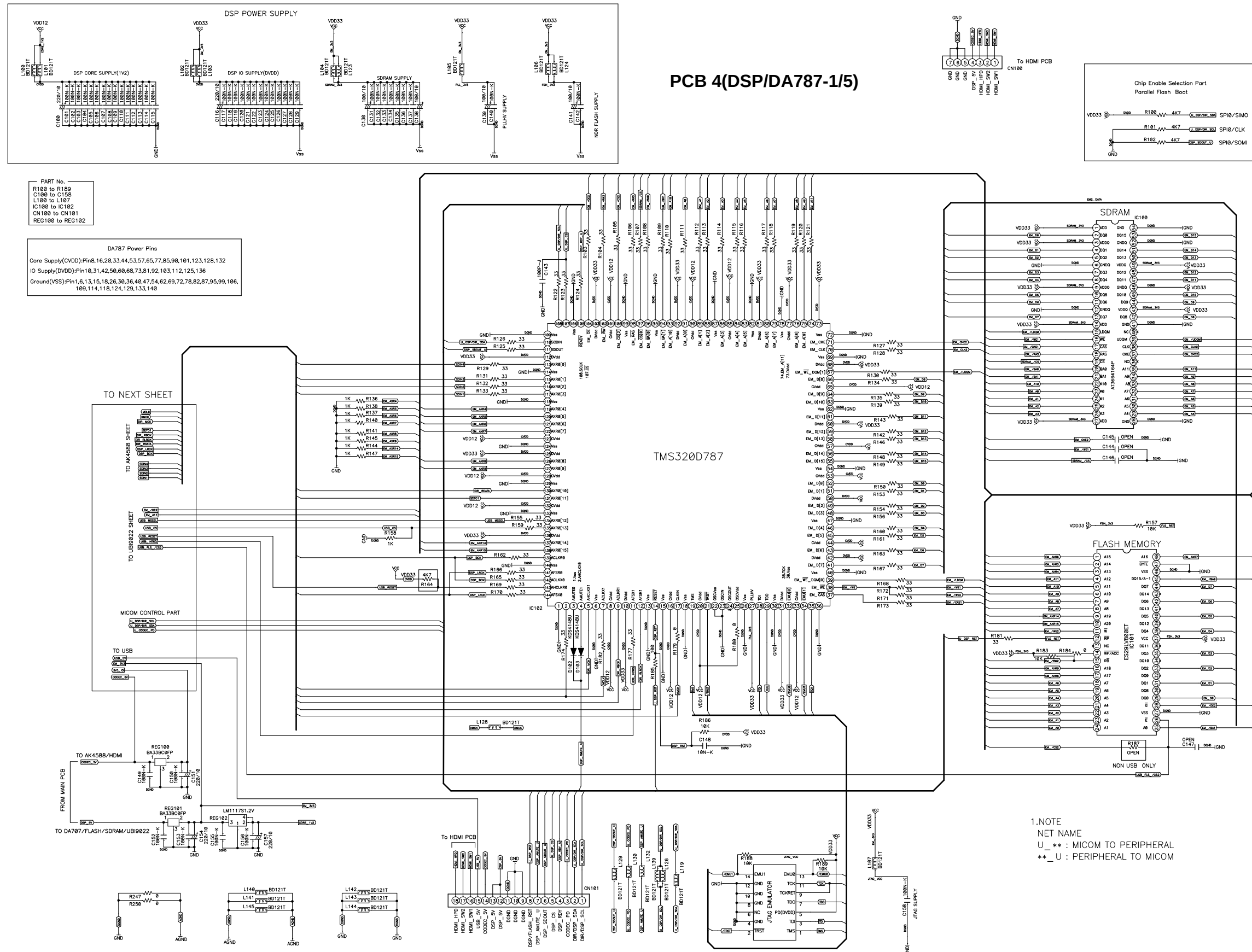
SCHEMATIC DIAGRAMS (4)

Model No.: RD-6503



SCHEMATIC DIAGRAMS (5)

Model No.: RD-6503



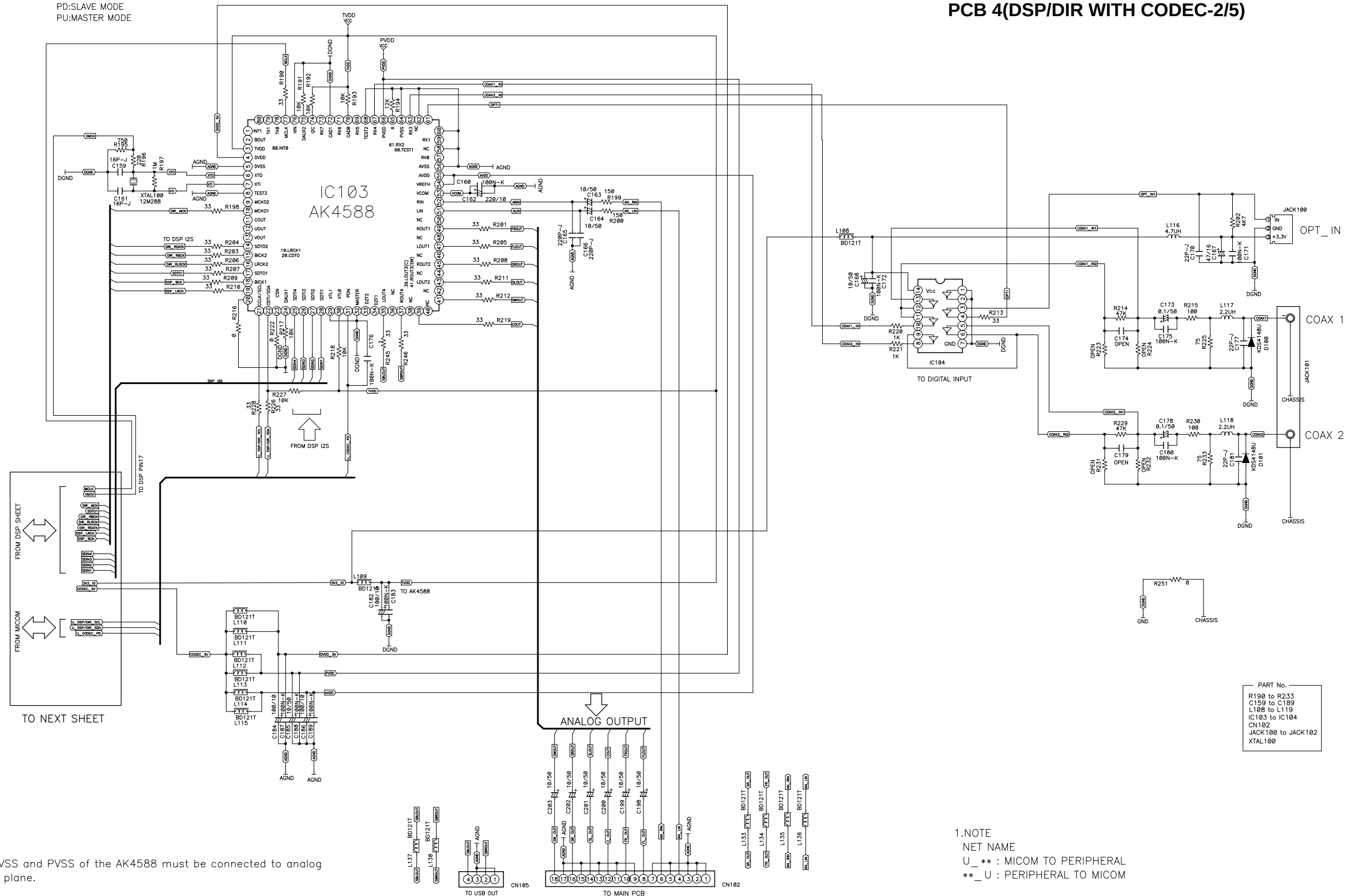
SCHEMATIC DIAGRAMS (6)

Model No.: RD-6503

XTL1(PIN29)	XTL0(PIN30)	XTAL FREQ
0	0	11.2896MHZ
0	1	12.288MHZ
1	0	24.576MHZ
1	1	USE CHANNEL STATUS

```
I2C MODE
CDS0(PIN20):I2C=PD
CSN(PIN23):I2C=PD
I2C(PIN74):I2C=PU
```

AUDIO INTERFACE TIMMING
MASTER MODE PIN32
PD:SLAVE MODE
PU:MASTER MODE

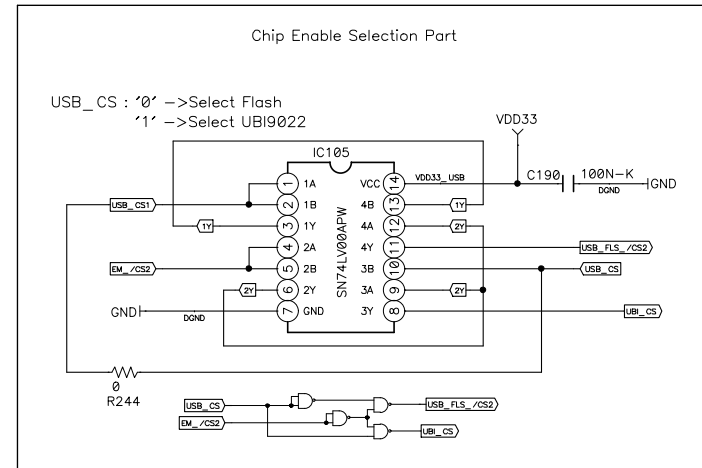


PART No.
 R190 to R233
 C159 to C189
 L108 to L119
 IC103 to IC104
 CN102
 JACK100 to JACK102
 XTAL100

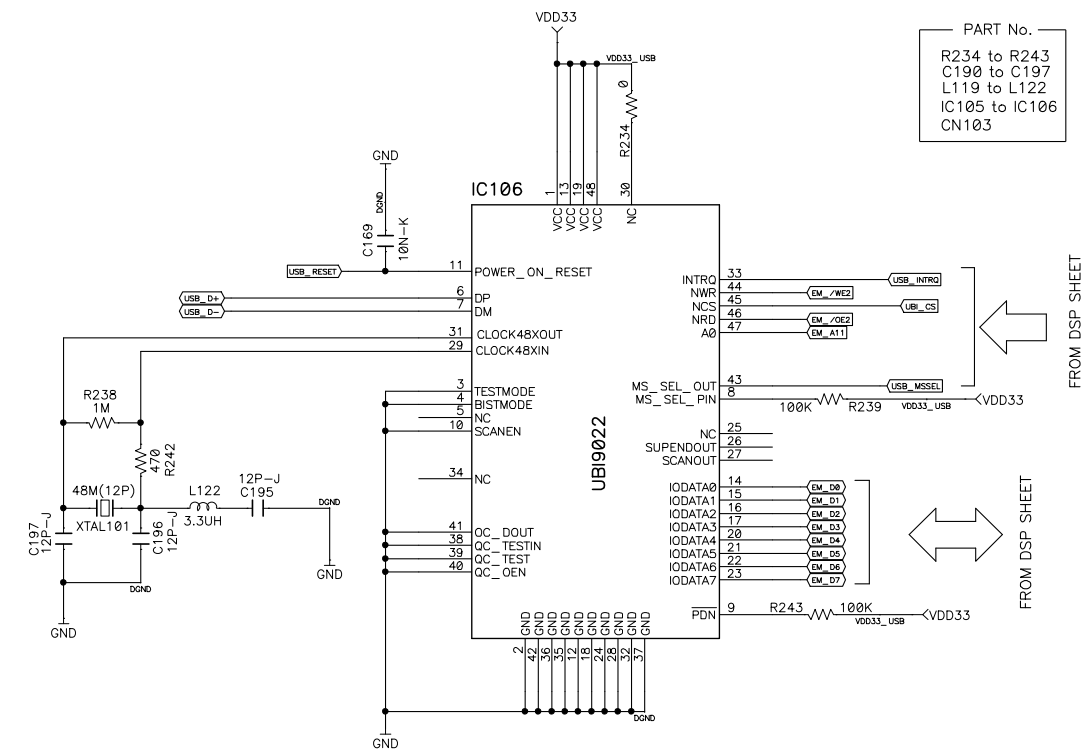
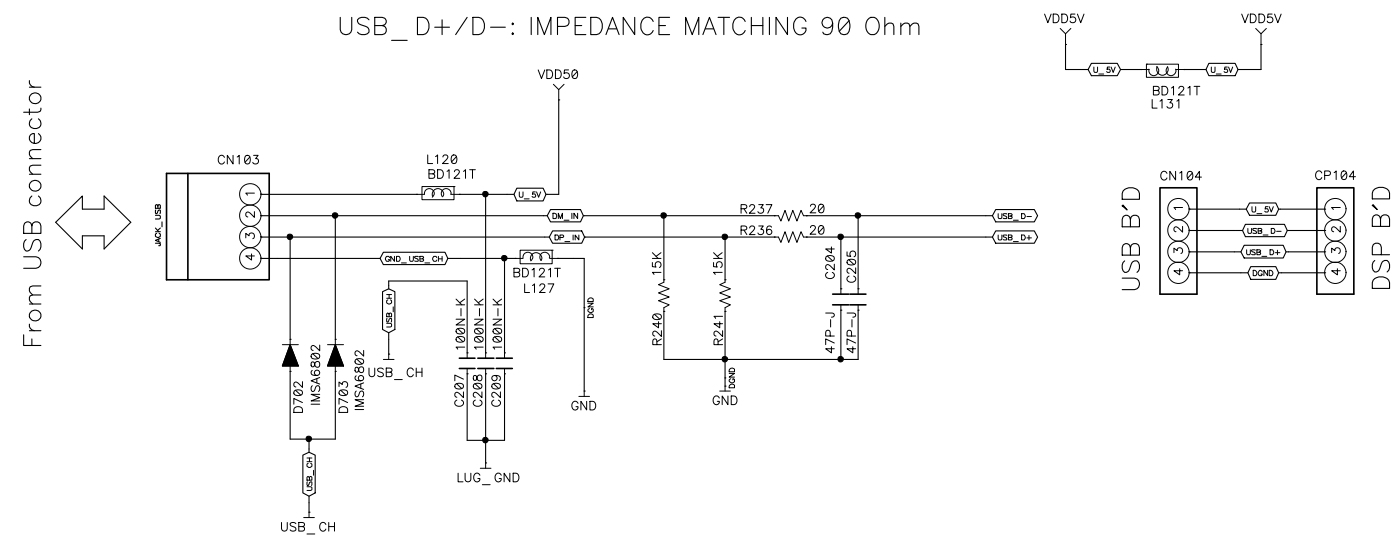
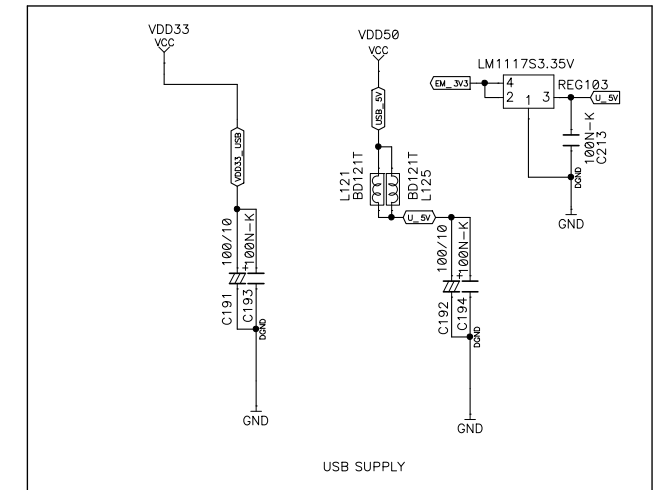
1.NOTE
NET NAME
U_** : MICOM TO PERIPHERAL
**_U : PERIPHERAL TO MICOM

SCHEMATIC DIAGRAMS (7)

Model No.: RD-6503



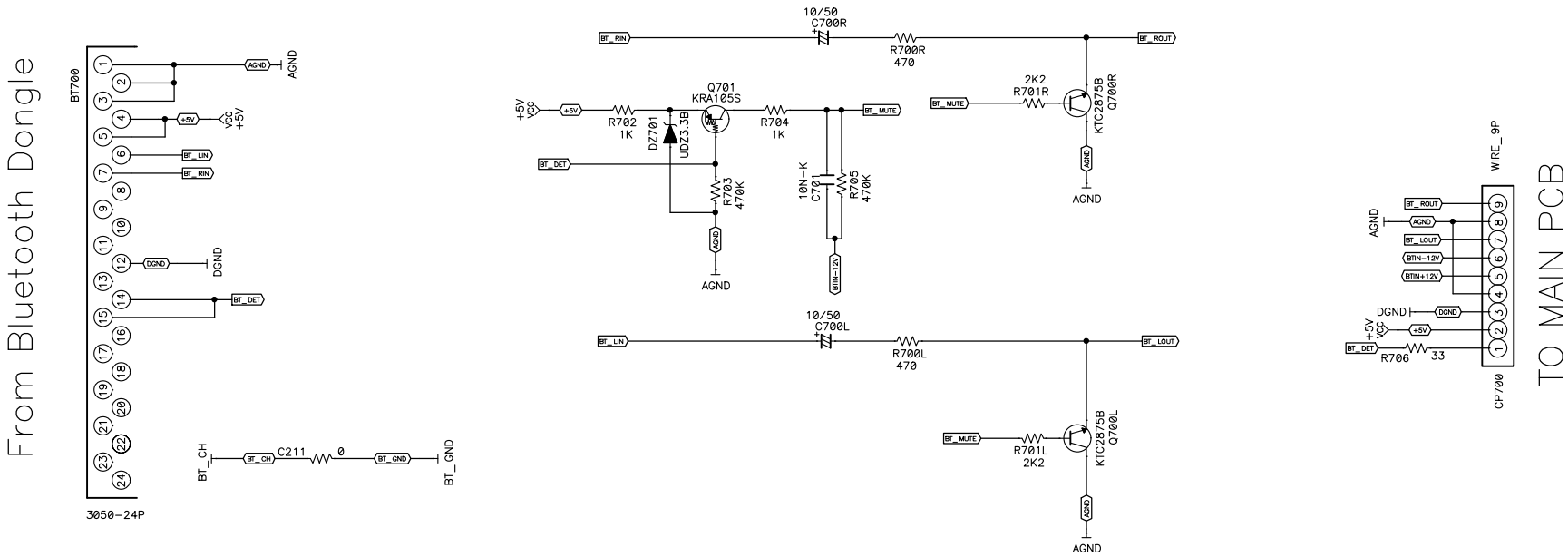
PCB 4(DSP/UBI9022-3/5)



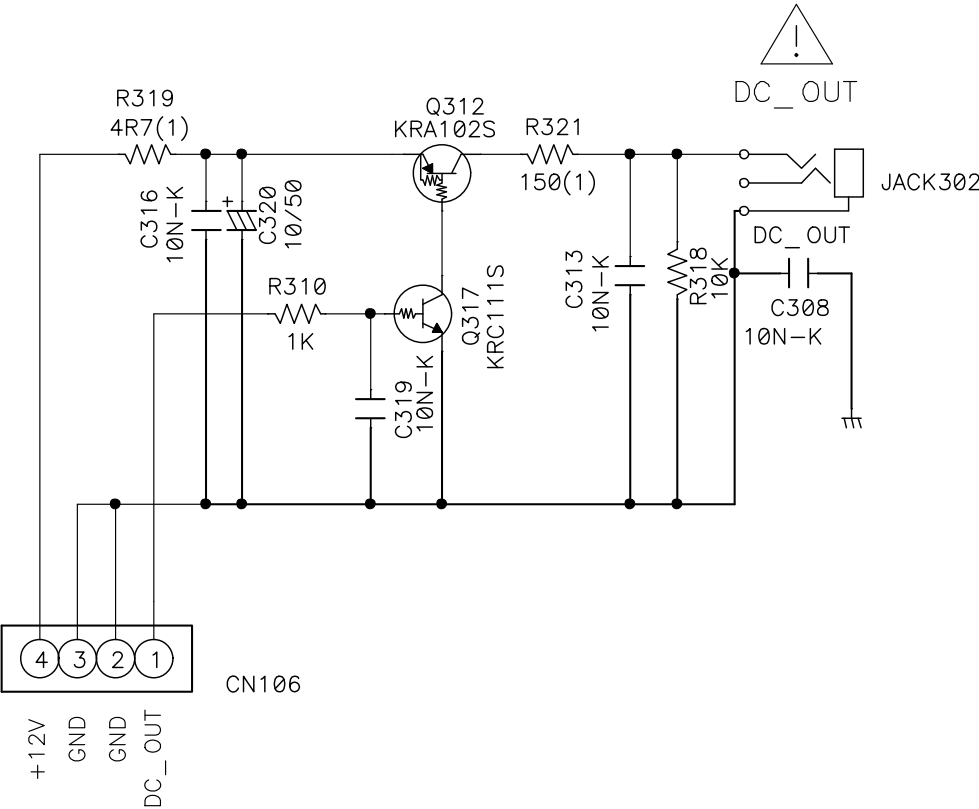
SCHEMATIC DIAGRAMS (8)

Model No.: RD-6503

PCB 4(DSP/BLUETOOTH-4/5)



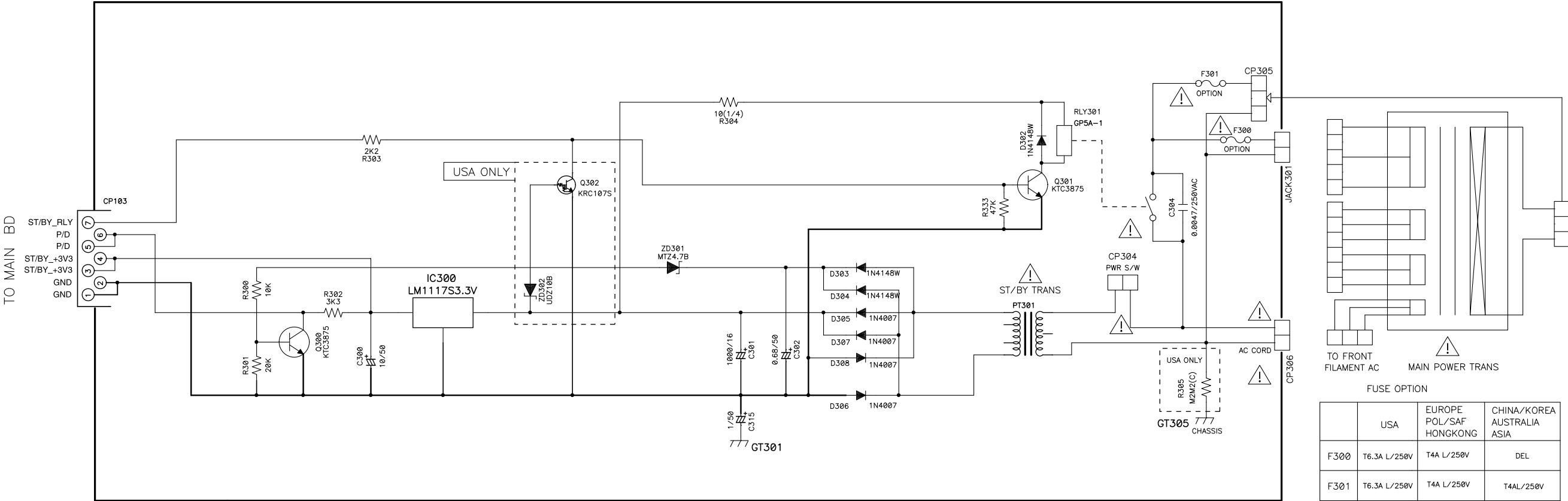
PCB 4(DSP/DC TRIGGER-5/5)



SCHEMATIC DIAGRAMS (9)

Model No.: RD-6503

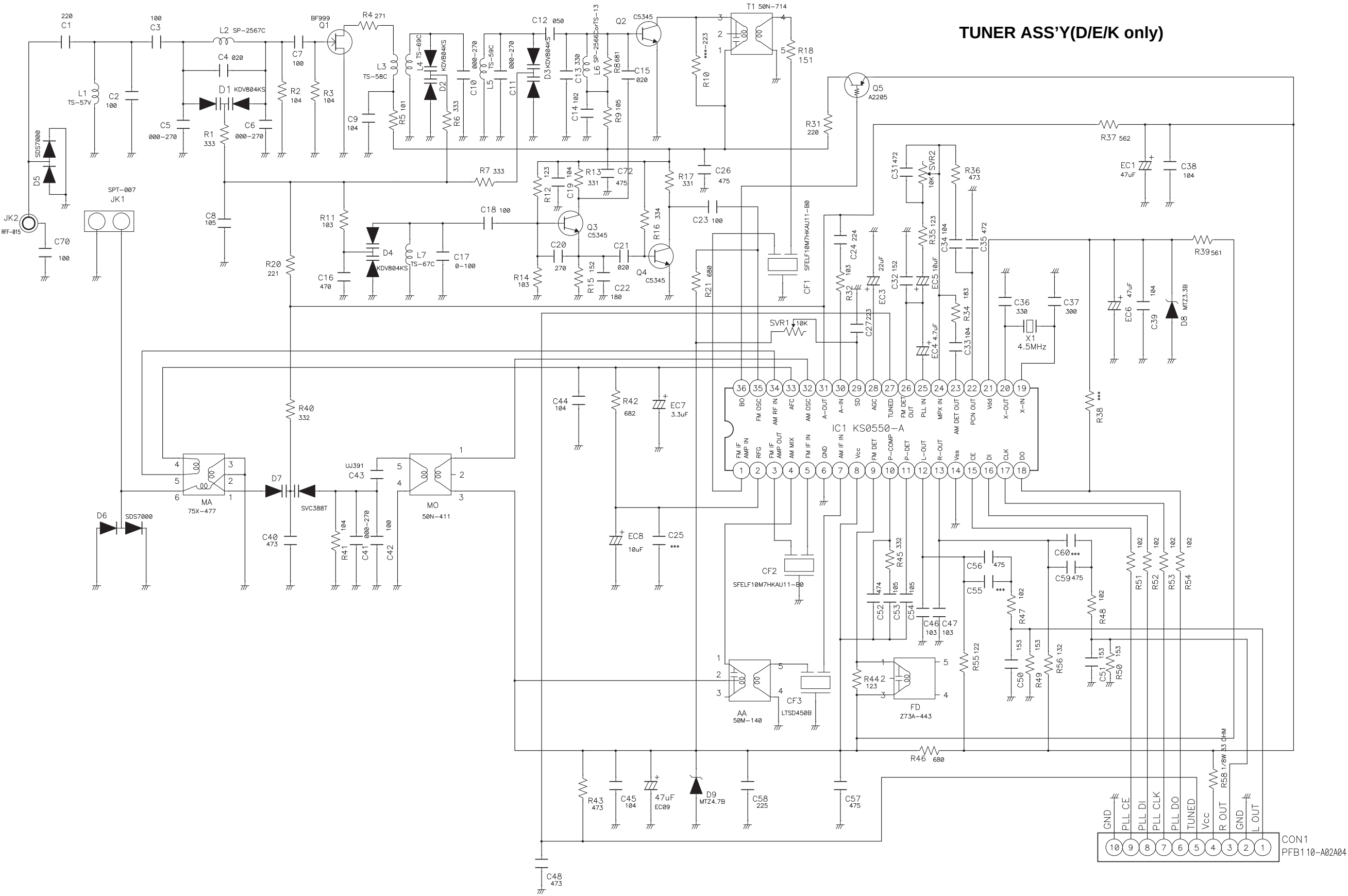
PCB 5(ST-BY)



SCHEMATIC DIAGRAMS (10)

Model No.: RD-6503

TUNER ASS'Y(D/E/K only)



SCHEMATIC DIAGRAMS (11)

Model No.: RD-6503

TUNER ASS'Y(RDS only)

