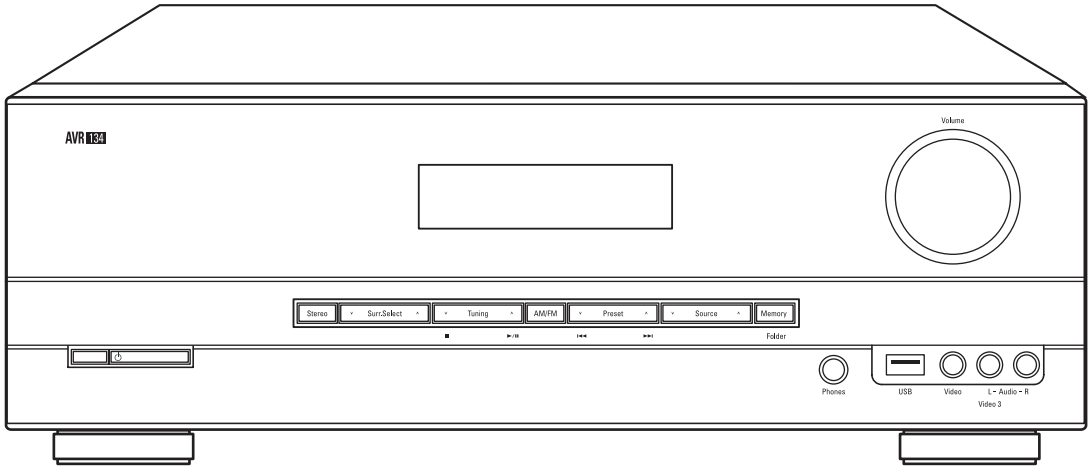
SERVICE MANUAL

AVR-134

AUDIO/VIDEO RECEIVER



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harman/kardon®

SAFETY PRECAUTIONS

WARNING

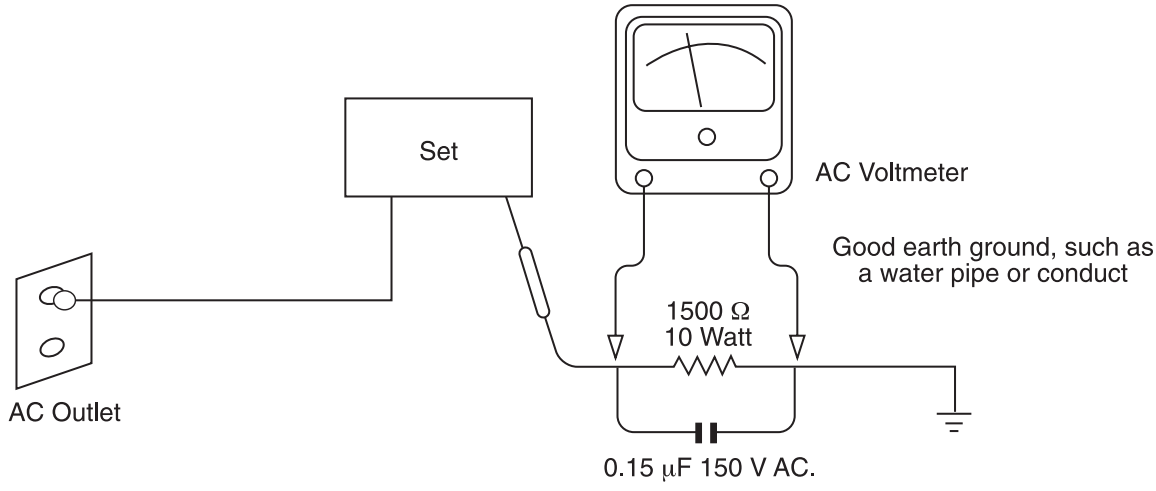
Before servicing this unit, familiarize yourself with the following precautions:

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 Ω per volt or greater. Then connect a 1500 Ω 10 watt resistor, paralleled by a 0.15 µF 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 Ω resistor and a 0.15 µF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metalic 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.

At 5000 Ω per volt or greater sensitivity,
the reading should not exceed 0.75 V.



Place the probe on each exposed metalic part.

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 : 240 V / 50 Hz

1. FRONT AMP SECTION
   *SPKR LEVEL : ALL 0dB *SPK SIZE:LLLY
   *6CH INPUT *TONE OFF

	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	6CH INPUT	1kHz	R/O	mV	200±30	200±50
2	TOTAL HARMONIC DISTORTION	6CH INPUT	20Hz	R/O-3dB	%	≤ 0.07	≤ 0.09
	(STEREO IN)		1kHz	R/O-3dB	%	≤ 0.07	≤ 0.09
			20KHz	R/O-3dB	%	≤ 0.07	≤ 0.09
3	CONTINUOUS AVERAGE POWER	6CH INPUT	20Hz	(6)ohms	W	75	72
	at 0.1% THD		1kHz	〃	W	75	72
	(STEREO IN)		20kHz	〃	W	75	72
4	S/N RATIO, INPUT SHORT IHF-A FILTER	6CH INPUT	1kHz	R/O	dB	≥ 90	≥ 85
5	FREQUENCY RESPONSE (-3dB)	6CH INPUT		1W/1KHz Ref.	Hz~kHz	20~55	20~50

2. CENTER AMP SECTION
   *SPKR LEVEL : ALL 0dB *SPK SIZE:LLLY
   *6CH INPUT *TONE OFF

	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	6CH INPUT	1kHz	R/O	mV	200±30	200±50
2	TOTAL HARMONIC DISTORTION	6CH INPUT	20Hz	R/O-3dB	%	≤ 0.07	≤ 0.09
	(STEREO IN)		1kHz	R/O-3dB	%	≤ 0.07	≤ 0.09
			20kHz	R/O-3dB	%	≤ 0.07	≤ 0.09
3	CONTINUOUS AVERAGE POWER	6CH INPUT	20Hz	(6)ohms	W	75	72
	at 0.1% THD		1kHz	〃	W	75	72
	(STEREO IN)		20kHz	〃	W	75	72
4	S/N RATIO, INPUT SHORT IHF-A FILTER	6CH INPUT	1kHz	R/O	dB	≥ 90	≥ 85
5	FREQUENCY RESPONSE (-3dB)	6CH INPUT		1W/1kHz Ref.	Hz~kHz	20~55	20~50

3. SURROUND AMP SECTION

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

*6CH INPUT *TONE OFF

	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	6CH INPUT	1kHz	R/O	mV	200±30	200±50
2	TOTAL HARMONIC DISTORTION (STEREO IN)	6CH INPUT	20Hz	R/O-3dB	%	≤0.07	≤0.09
			1kHz	R/O-3dB	%	≤0.07	≤0.09
			20kHz	R/O-3dB	%	≤0.07	≤0.09
3	CONTINUOUS AVERAGE POWER at 0.1% THD (STEREO IN)	6CH INPUT	20Hz	(6)ohms	W	75	72
			1kHz	〃	W	75	72
			20kHz	〃	W	75	72
4	S/N RATIO, INPUT SHORT IHF-A FILTER	6CH INPUT	1kHz	R/O	dB	≥90	≥85
5	FREQUENCY RESPONSE (-3dB)	6CH INPUT		1W/1kHz Ref.	Hz~kHz	20~55	20~50

4. SUBWOOFER SECTION

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

*6CH INPUT *TONE OFF

	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

*TONE OFF(TONE DIRECT)

	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY	CD	1kHz		mV	200±30	200±50
2	CHANNEL BALANCE	CD	1kHz	R/O TO -40dB	dB	±2	±3
4	RESIDUAL NOISE	CD	1kHz	VOL min.	mV	≤1.0	≤1.2
5	TOTAL HARMONIC DISTORTION	CD	(20)Hz	R/O-3dB	%	≤0.07	≤0.09
			1kHz	〃	%	≤0.07	≤0.09
			(20)kHz	〃	%	≤0.07	≤0.09
6	CONTINUOUS AVERAGE POWER at 0.1% THD	CD	(20)Hz	(6)ohms	W	75	72
			1kHz	〃	W	75	72
			(20)kHz	〃	W	75	72
8	S/N RATIO,IHF-A FILTER	CD	1kHz	R/O	dB	≥90	≥85
9	CHANNEL SEPARATION	CD	100Hz	R/O-3dB	dB	≥57	≥50
			1kHz	〃	dB	≥57	≥55
			10kHz	〃	dB	≥57	≥55
10	FUNCTION CROSSTALK	CD→TAPE	1kHz	〃	dB	≥65	≥60
			10kHz	〃	dB	≥45	≥40
11	FREQUENCY RESPONSE (-3dB)	CD		1W	Hz~kHz	20~55	20~50
12	TONE CONTROL , ±(12)dB (TONE ON)	CD	100Hz	1W	dB	±12(±2)	±12(±3)
			10kHz	〃	dB	±12(±2)	±12(±3)
13	HEADPHONE OUTPUT H/P = 64ohms	CD	1kHz	R/O	V	2.5±0.5	2.5±1.0

6. Idle Voltage

*6CH Input *SPK SIZE:LLLY *Main Vol : -18dB

*TEST B'D : AMP *TONE OFF(TONE DIRECT),

*SPKR LEVEL : ALL 0dB *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) VOLUME POSISTION : -18dB

SURROUND MODE : DOLBY DIGITAL 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 NORMALIZATION	FRONT		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
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 : -18dB

AT PREOUT SPK MODE LLLY

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

NO	DESCRIPTION	INPUT	FREQ.	TRACK	UNIT	NOMINAL	LIMIT
1	OUTPUT 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	30kHz	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	30kHz	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	30kHz	15	dB	≥65	≥60

9. FM SECTION

Measuring methods in confirmity with IEC standard 315

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

Reference level = 1 mV on (75ohms, 300ohms) Deviation :

Filter = B.P.F at STEREO and MONO

Test Point : TP1 = 90.1 MHz, TP2 = 98.1 MHz, TP3 = 106.1 MHz (50kHz STEP)

MOD:40 kHz(Mono)/40 kHz±7.5 kHz (STEREO)

NO	DESCRIPTION		UNIT	NOMINAL	LIMIT
1	TUNING COVER RANGE	LOW ~ HIGH	MHz	87.5~108	
	STEP	AUTO/MANUAL	kHz	50/50(200/200 Brasil)	
2	USABLE SENSITIVITY	TP 1	dBu	≤ 12	≤ 15
	S/N = 30	TP 2	dBu	≤ 12	≤ 15
		TP 3	dBu	≤ 12	≤ 15
3	AUTO STOP LEVEL		dBu	25±6	25±8
4	S/N RATIO	MONO	dBu	≥ 55	≥ 50
	IHF "A"	STEREO	dBu	≥ 50	≥ 45
5	T.H.D	MONO 1, 1kHz	%	≤ 0.7	≤ 1.2
		STEREO 1, 1kHz	%	≤ 1.0	≤ 1.5
6	OVER LOAD DISTORTION (120dBu,75kHz)	MONO	dB	≤ 2	≤ 3
7	STEREO SEPARATION	250Hz	dBu	≥ 30	≥ 25
	(MAIN 53.5%, PILOT 10%)		dBu	≥ 30	≥ 25
	EXT 19kHz FILTER	6.3	dBu	≥ 20	≥ 15
8	FREQUENCY RESPONSE (50us, -3dB)	TP 2	Hz	60~8k	70~7k
9	IF REJECTION	TP 1	dB	≥ 75	≥ 70
10	IMAGE REJECTION	TP 3	dB	≥ 75	≥ 70
11	AM SUPRESSION (at AM 30% 1kHz)		dB	≥ 40	≥ 35
12	OUPUT LEVEL(MONO)	TP 2	mV rms	280±50	280±100

10. AM SECTION

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

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

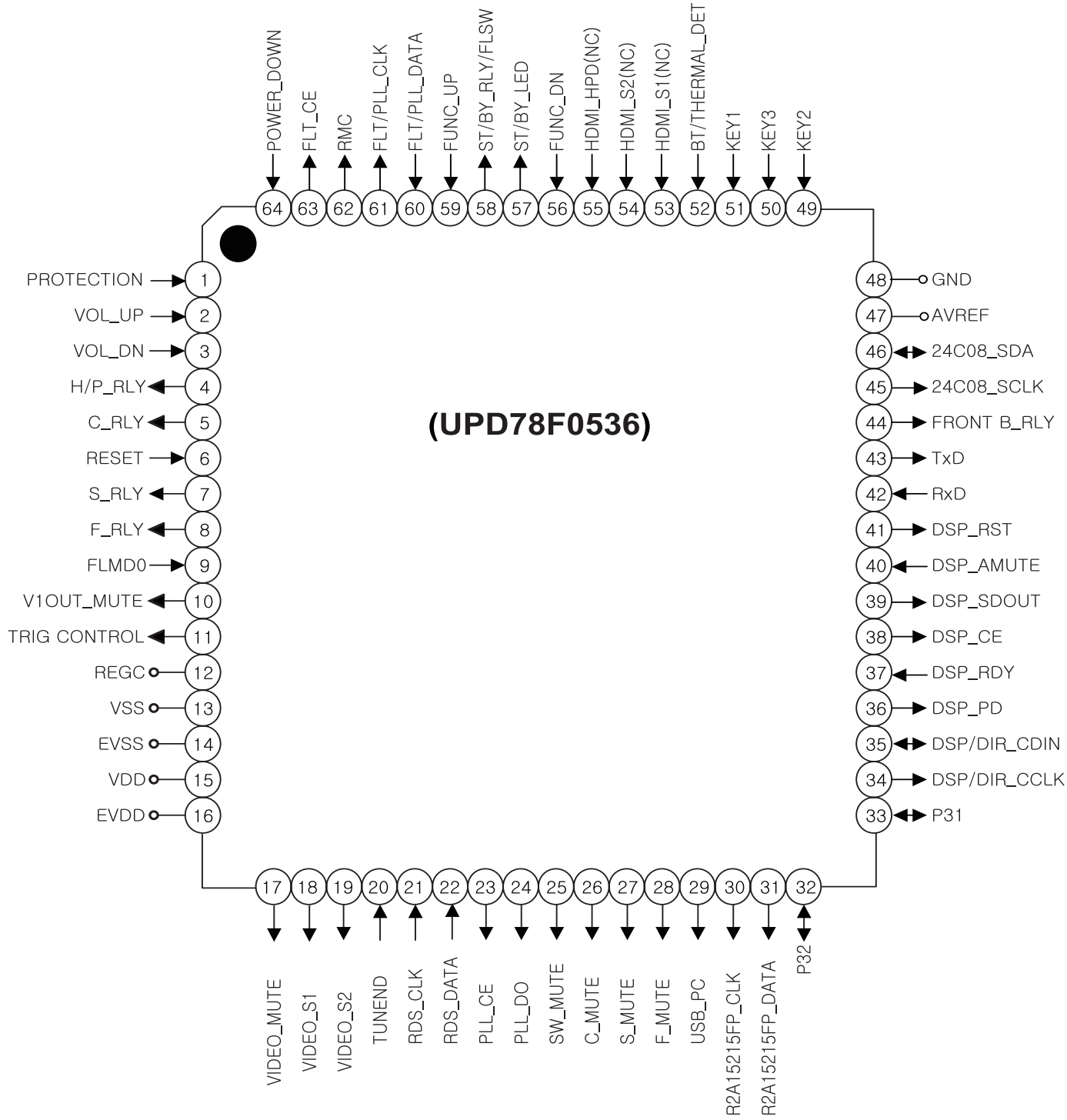
Test Point : MW TP 1 = (594/600) kHz, TP 2 = (999/1000) kHz, TP 3 = (1404/1400) kHz

NO	DESCRIPTION		UNIT	NOMI.	LIMIT
1	TUNING COVER RANGE	LOW~HIGH MW	kHz	522~1620(520~1710 Brasil)	
	STEP	AUTO/MANUAL	kHz	9/9(10/10 Brazil)	
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 100 dBu/m, 30% MOD	TP 2	dB	≥ 35	≥ 30
4	T.H.D 74 dB u/m, 30% MOD	TP 2	%	≤ 2	≤ 3
5	OVER LOAD DISTORTION 100 dB u/m ,80% MOD	TP 2	%	≤ 3	≤ 5
6	FREQUENCY RESPONSE (at 74 dBu/m, 400 Hz) - NO FILTER	AT-6dB	HZ	80~2K	100~1.8K
7	SELECTIVITY at SN: 20dB, ±9KHz	TP 2	dB	≥ 23	≥ 20
8	AGC FIGURE OF MERIT (at 100 dBμ/m)	TP 2	dB	≥ 50	≥ 40
9	IMAGE REJECTION	TP 3	dB	≥ 28	≥ 25
10	WHISTLE MODULATION (74dB u/m,900kHz)	2IF	%	≤ 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 74 dB u/m, 30 % MOD		mVrms	180±60	180±100

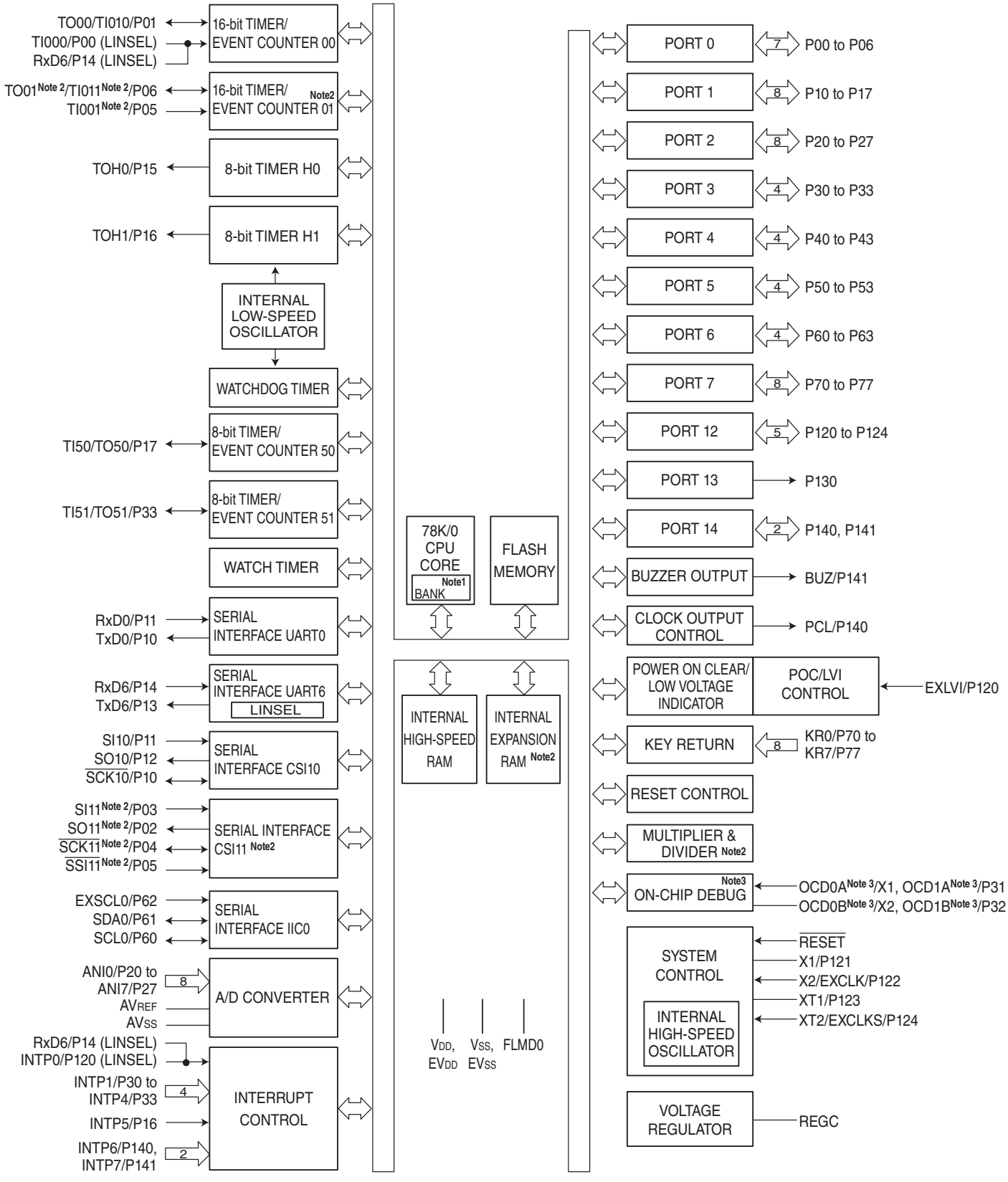
CIRCUIT DESCRIPTION

UPD78F0536GK : IC101

1. Pin Description



2. Block Diagram



Notes 1. Available only in the PD78F0536, 78F0537, and 78F0537D.

2. Available only in the PD78F0534, 78F0535, 78F0536, 78F0537, and 78F0537D.

3. Available only in the PD78F0537D.

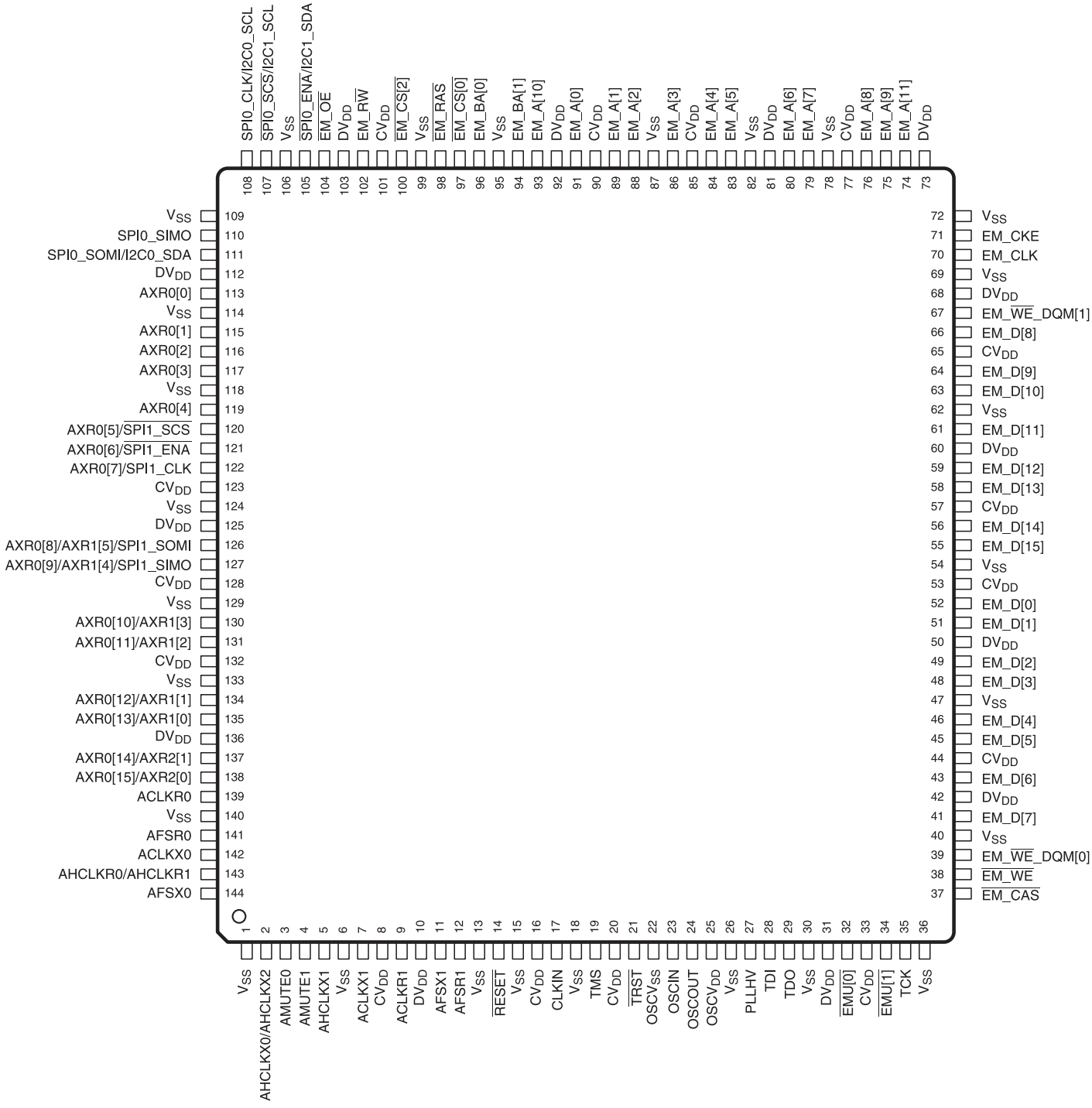
3. Pin Functions

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

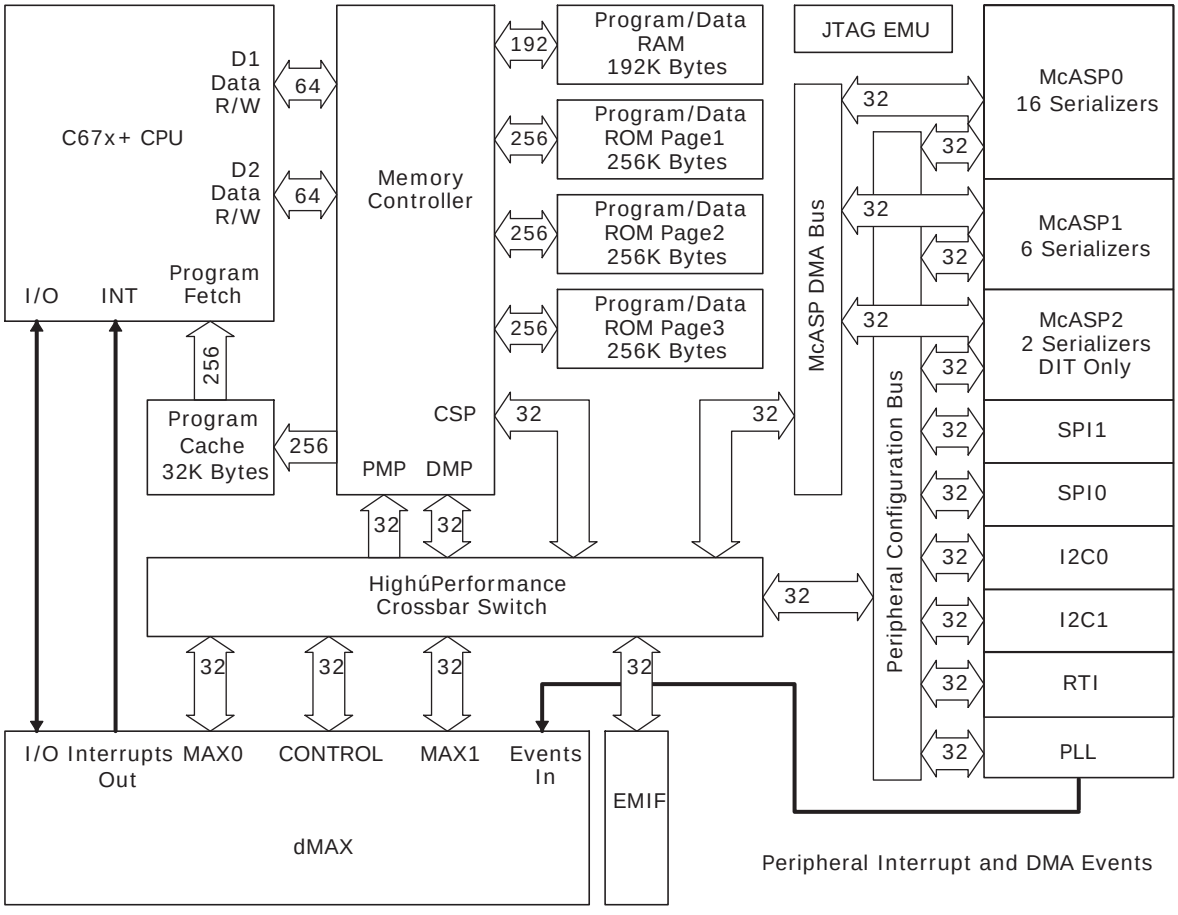
No.	Pin Name	Pin Symbol	I/O	Pin Description
37	P53	DSP_RDY	I	Input for DSP enable
38	P30/INTP1	DSP_CE	O	Chip select output for NJW1153
39	P17/TI50/TO05	DSP_ABOOT	O	Ouput for DSP Auto boot
40	P16/TOH1/INTP5	DSP_INTREQ	I	Interrupt signal output to DSP
41	P15/TOH0	DIR_PDN	O	Output for DIR power down
42	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	Ouput for HDMI HPD(NOT USED)
54	P22/ANI2	HDMI_S2	O	Ouput for HDMI S2 CONTROL(NOT USED)
55	P21/ANI1	HDMI_S2	O	Ouput for HDMI S1 CONTROL(NOT USED)
56	P20/ANI0	FUNC_DN	I	Input for function encoder down
57	P130	ST/BY_LED	O	Ouput for standby led
58	P04/SCK11	ST/BY_RLY	O	Onput for standby relay
59	P03/S111	FUNC_UP	I	Input for function encoder up
60	P02/S011	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

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_R$\overline{\text{W}}$	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]/ $\overline{\text{SPI1\_SCS}}$	120	IO	-	Y	McASP0 Serial Data 5 or SPI1 Slave Chip Select
AXR0[6]/$\overline{\text{SPI1\_ENA}}$	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
$\overline{\text{SPI0\_SCS}}$/I2C1_SCL	107	IO	-	Y	SPI0 Slave Chip Select or I2C1 Serial Clock
$\overline{\text{SPI0\_ENA}}$/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					
$\overline{\text{RESET}}$	14	I	-	N	Device reset pin

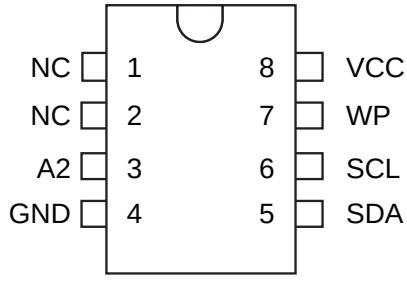
SIGNAL NAME	PIN NO.	TYPE(1)	PULL(2)	GPIO(3)	DESCRIPTION
Emulation / JTAG Port					
TCK	35	I	IPU	N	Test Clock
TMS	19	I	IPU	N	Test Mode Select
TDI	28	I	IPU	N	Test Data In
TDO	29	OZ	IPU	N	Test Data Out
$\overline{TRST}$	21	I	IPD	N	Test Reset
$\overline{EMU[0]}$	32	IO	IPU	N	Emulation Pin 0
$\overline{EMU[1]}$	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

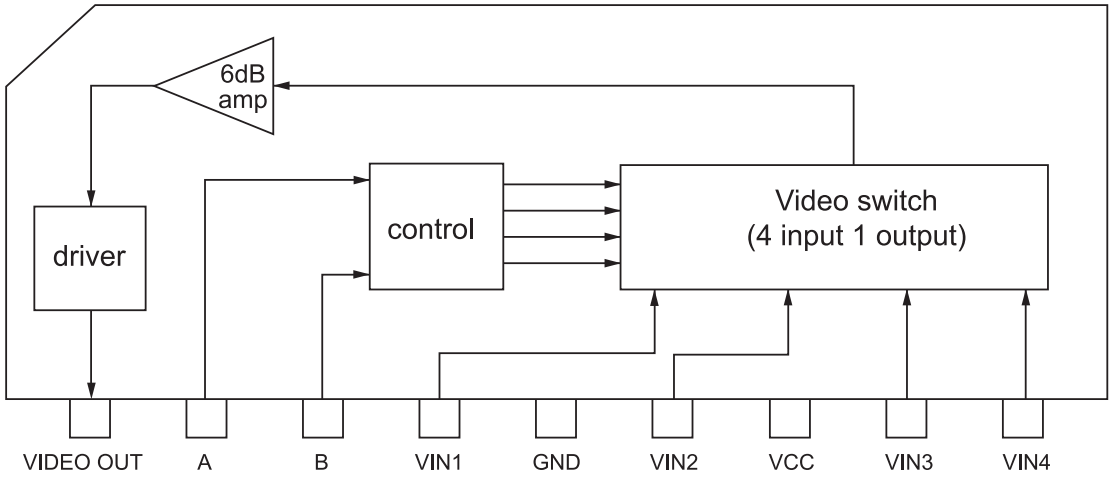
(3) If the GPIO column is 'Y', then in GPIO mode, the pin is configurable as an IO unless otherwise marked.

FT24C08 : IC107

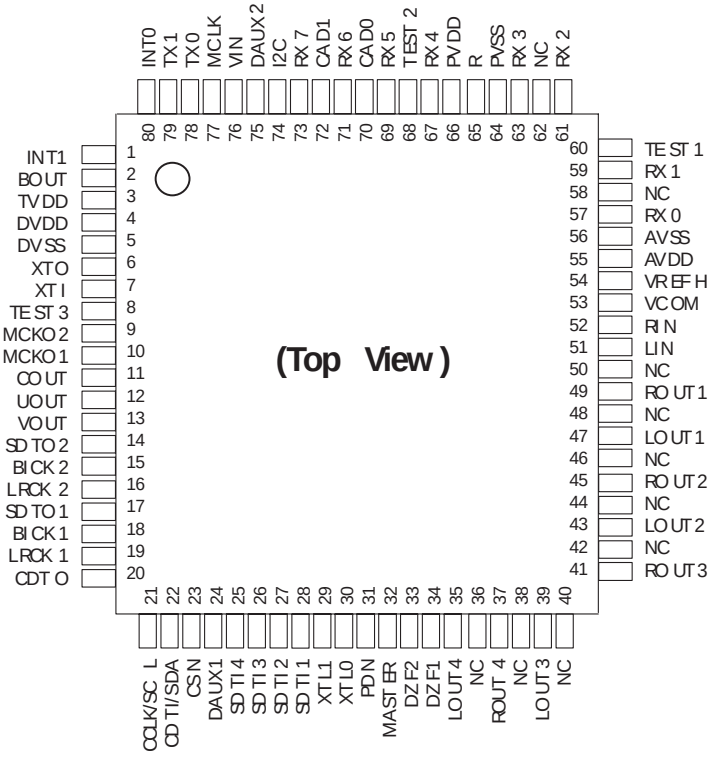


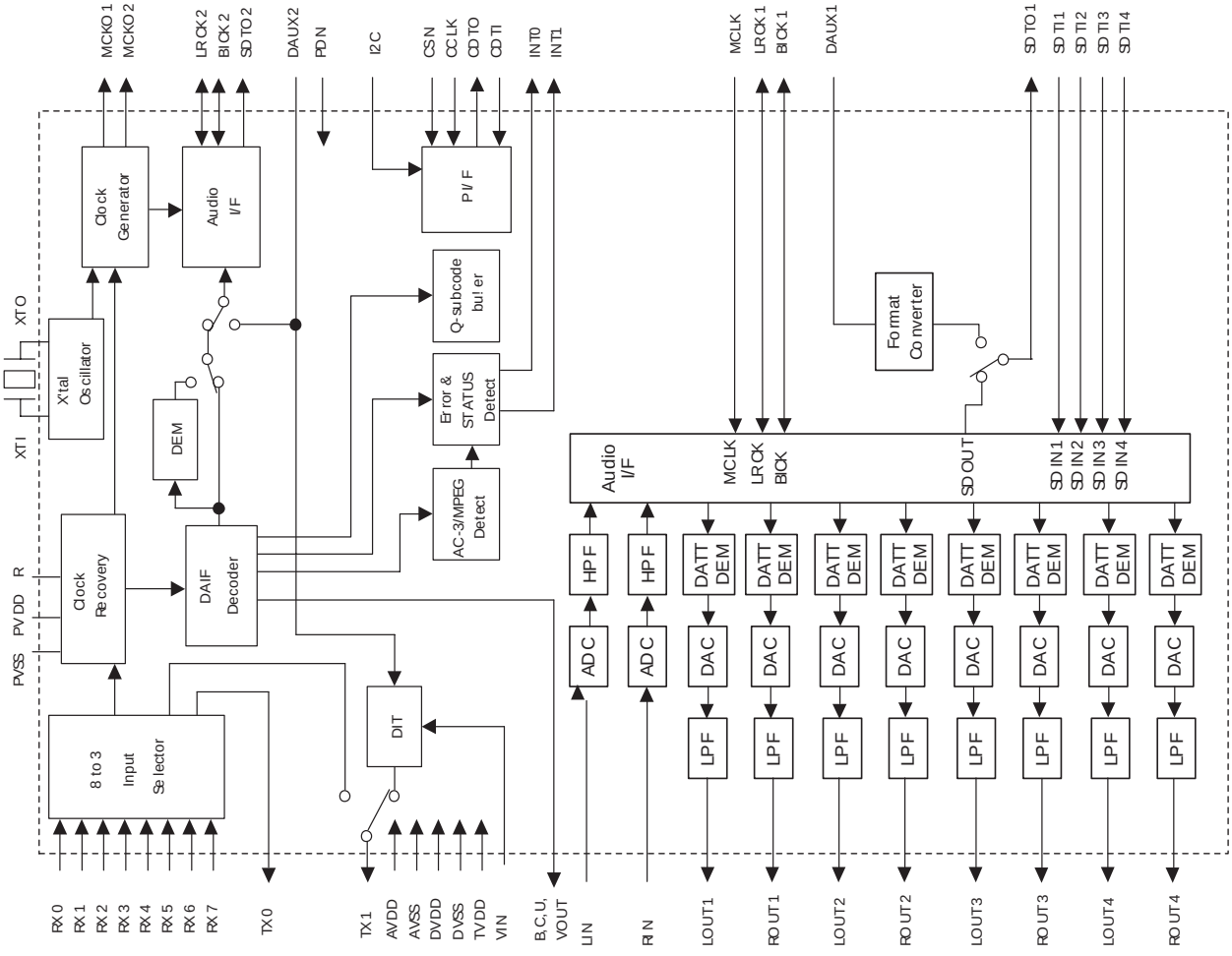
Pin Name	Pin Function
A2, A1, A0	Device Address Inputs
SDA	Serial Data Input / Open Drain Output
SCL	Serial Clock Input
WP	Write Protect
NC	No-Comnect

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 "H" 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	RO UT 3	O	DA C3 Rch An alog Outpu t Pin
42	NC	-	No Connect pin No internal bonding. This pin should be opened.
43	LO UT 2	OD	AC 2 Lch An alog Outpu t Pin
44	NC	-	No Connect pin No internal bonding. This pin should be opened.
45	RO UT 2	O	DA C2 Rch An alog Outpu t Pin
46	NC	-	No Connect pin No internal bonding. This pin should be opened.
47	LO UT 1	OD	AC 1 Lch An alog Outpu t Pin
48	NC	-	No Connect pin No internal bonding. This pin should be opened.
49	RO UT 1	O	DA C1 Rch An alog Outpu t Pin
50	NC	-	No Connect pin No internal bonding. This pin should be opened.
51	LI N	IL	ch An alog Input Pin
52	RI N	I	Rch An alog Input Pin
53	VC OM	-	Co mmon Vo ltage Outpu t Pin 2.2F capacitor should be connected to AV SS externally.
54	VR EF H-		Positive Vo ltage Reference Input Pin , AVDD
55A	VDD	-	An alog Power Supply Pin, 4.5V~ 5.5V
56	AV SS	-	An alog Ground Pin, 0V
57	RX 0	I	Receiver Chan nel 0 Pin (Internal biased pin. Internally biased at PV DD/ 2)
58	NC	-	No Connect pin No internal bonding. This pin should be connected to PV SS.
59	RX 1	I	Receiver Chan nel 1 Pin (Internal biased pin. Internally biased at PV DD/ 2)
60	TE ST 1I		Test 1 Pin This pin should be connected to PV SS.
61	RX 2	I	Receiver Chan nel 2 Pin (Internal biased pin. Internally biased at PV DD/ 2)
62	NC	-	No Connect pin No internal bonding. This pin should be connected to PV SS.
63	RX 3	I	Receiver Chan nel 3 Pin (Internal biased pin. Internally biased at PV DD/ 2)
64	PV SS	-P	LL Ground pin
65	R	-	Ex ternal Resistor Pin 12k +/-1% resistor should be connected to PV SS externally.
66P	VDD	-	PL L Power supply Pin, 4.5V~ 5.5V
67	RX 4	I	Receiver Chan nel 4 Pin (Internal biased pin. Internally biased at PV DD/ 2)
68	TE ST 2I		Test 2 Pin This pin should be connected to PV SS.
69	RX 5	I	Receiver Chan nel 5 Pin (Internal biased pin. Internally biased at PV DD/ 2)
70C	AD0	I	Chip Address 0 Pin (ADC/ DAC part)
71	RX 6	I	Receiver Chan nel 6 Pin (Internal biased pin. Internally biased at PV DD/ 2)
72C	AD1	I	Chip Address 1 Pin (ADC/ DAC part)
73	RX 7I	R	eceiver Chan nel 7 Pin (Internal biased pin. Internally biased at PV DD/ 2)
74	I2CI		Co ntrol Mo de Select Pin. "L": 4-wire Serial, "H": I^2C Bus
75D	AUX2	I	Au xiliary Au dio Data Input Pin (DI R/DI T part)
76	VI NI		V-bit Input Pin for Transmitter Outpu t
77	MC LK	I	Ma ster Cl ock Input Pin
78	TX0	OT	ransmit Chan nel (Through Data) Outpu t 0 Pin
79	TX 1	O	Transmit Chan nel Outpu t1 pin Wh en TX bit = "0", Transmit Ch annel (Through Data) Outpu t 1 Pin. Wh en TX bit = "1", Transmit Ch annel (DAUX2 Data) Outpu t Pin (Default).
80	INT0	OI	nterrupt 0 Pin

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

ALIGNMENT PROCEDURES

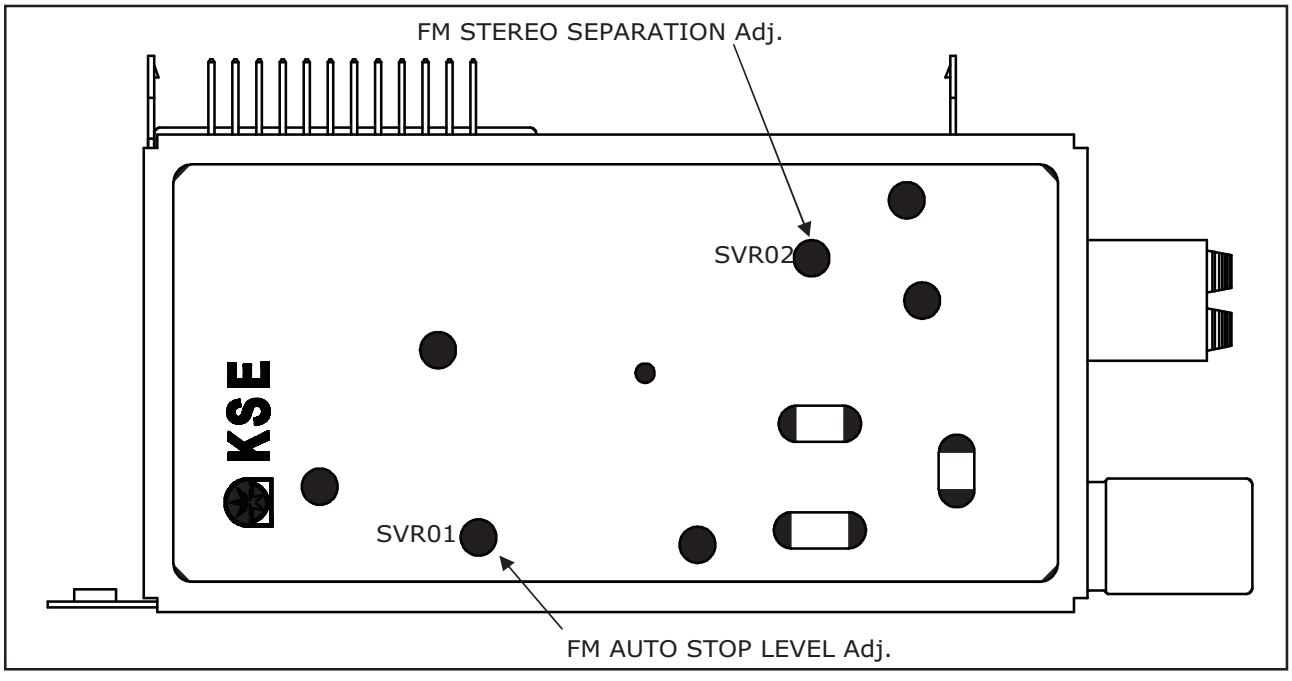
1.Electrical specification.

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	47Ω 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	47Ω Load	999	74	30	180 ±60	mV	Non Adjust
	Auto Stop Level		999	--	30	55 ±15	dBu	Non Adjust

3.Adjust Point.



<KST-MU004MV1-0 Adj POINT>

TROUBLESHOOTING

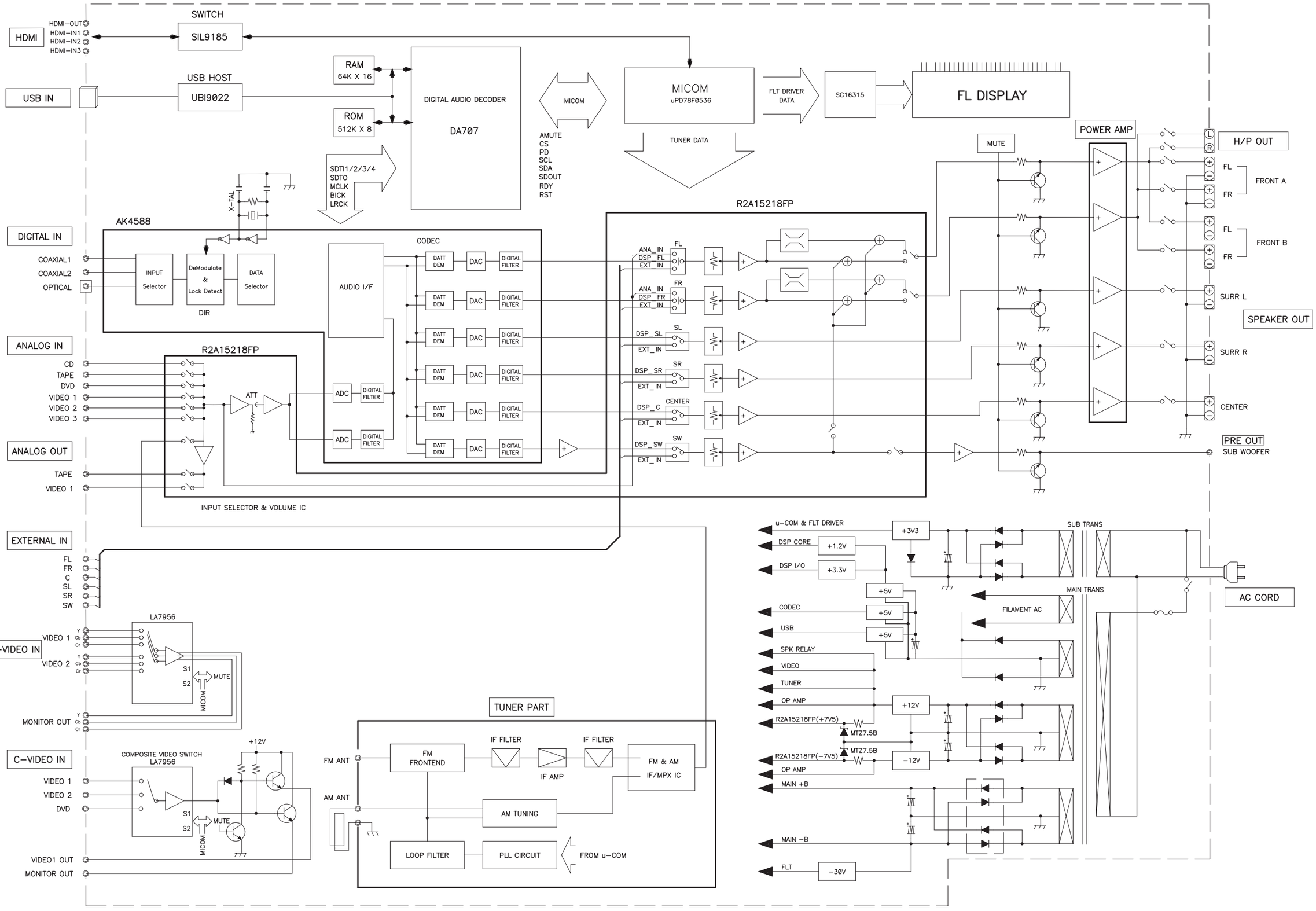
Symptom	Cause and Remedy	Ref No.
Power On Failure 1. FLT does not light up. 2. STANDBY LED does not light up.	A) AC-Cord check. B) PowerTrans (Main/Standby) check. C) Fuse's disconnection check. D) Connector's disconnection or disjuction. Change or close insertion of the connector. E) Inferior Standby switch. F) VFD Driver I.C & Resonator check. 1. VFD Driver I.C & Resonator 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 transfomer. B) AMP drive TR out. (POWER TR) C) AMP drive TR out. (POWER TR) D) Voltage check. 1. B+(47V)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 I.C VCC +3.3V check.	 I.C101 Pin No. (49, 50, 51) I.C101 Pin No. (49, 50, 51)
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.C300 (LM1117S_3.3V) Q205(FL, FR, C, SL, SR) Q206(FL, FR, C, SL, SR) μ-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) I.C101 Pin No. (28) Q(107) I.C101 Pin No. (26) Q(109) I.C101 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. Resistor/Capacitor correction figure check. (Bass) 2. Resistor/Capacitor correction figure check. (Treble)	I.C 109 I.C 109 PIN No.(26, 27, 32, 33) I.C 109 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) IC 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 Pin 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(MONITOR, 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.	I.C NO. (1) / I.C Pin No. (8, 21)
	2. PLL control data check.(Data/CE/Clock)	
	E) TUNER B+voltage inferior.	
	F) μ-COM I.C & Resonator inferior.	I.C No. (101)
	1. μ-COM I.C B+(3.3)V check.	
	2. Micom control data check.	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.	I.C NO. (1) / I.C Pin No. (8, 21)
	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.	I.C No. (101)
	1. μ-COM I.C B+(3.3)V check.	
	2. Micom control data check.	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. PLL control data check.(Data/CE/Clock)	
	C) μ-COM I.C & Resonator inferior.	I.C No. (101)
	1. μ-COM I.C B+(3.3)V check.	
	2. Micom control data check.	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)
HDMI Output Dead.	A) I.C Regulator check.	
	1. DC voltage check. +(1.8)V	I.C03 (HDMI)
	2. DC voltage check. +(3.3)V	I.C04 (HDMI)
	3. DC voltage check. +(5)V	I.C112 (MAIN)
	B) Micom control data check.	
	Selector control data check.	I.C01 Pin No. (14, 15)

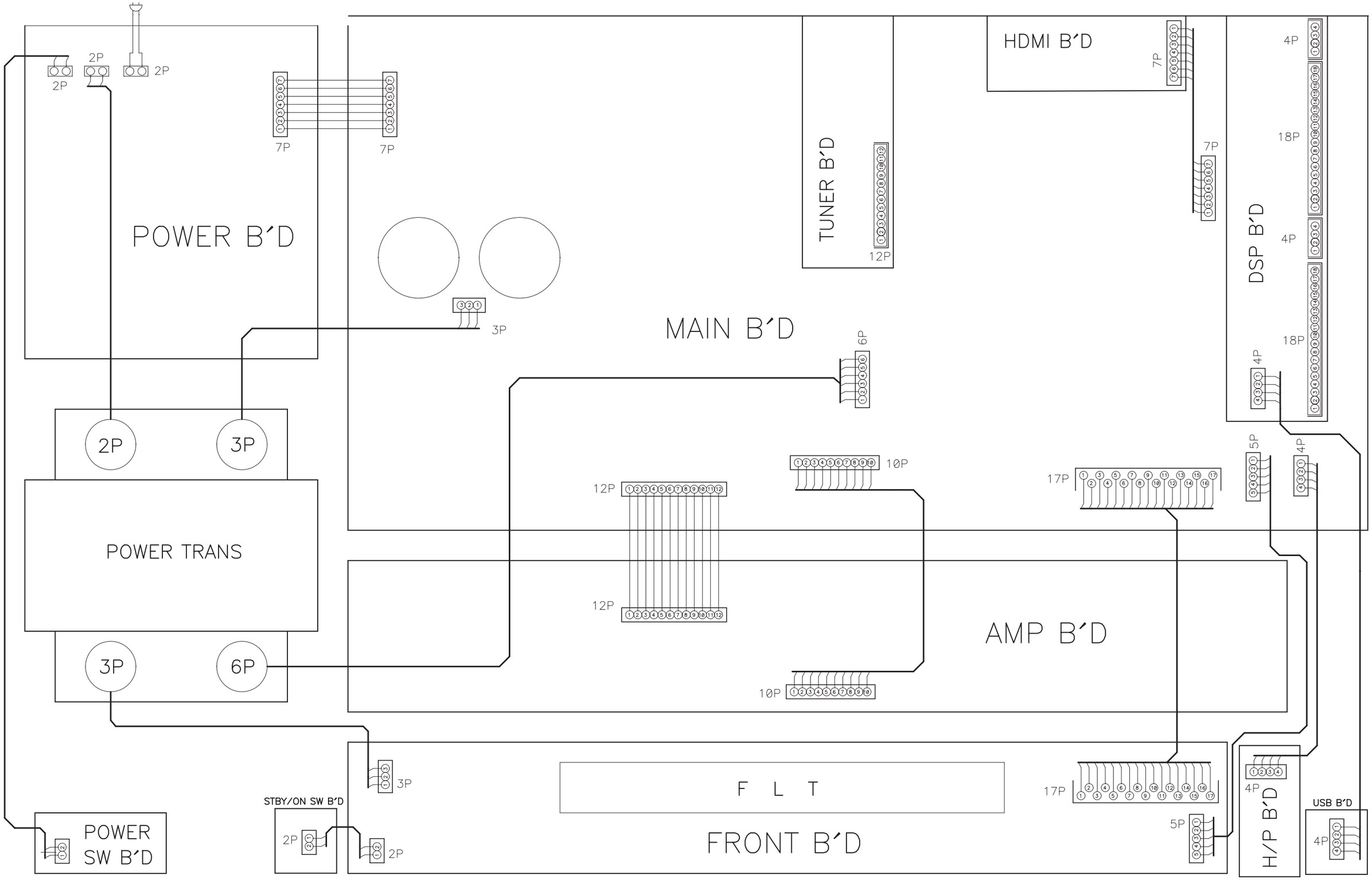
BLOCK DIAGRAM

Model : AVR-134



WIRING DIAGRAM

Model : AVR-134



Parts without Parts No. are not supplied.
Parts without version mentioned are common ones.

MECHANICAL PARTS LIST

Model : AVR-134

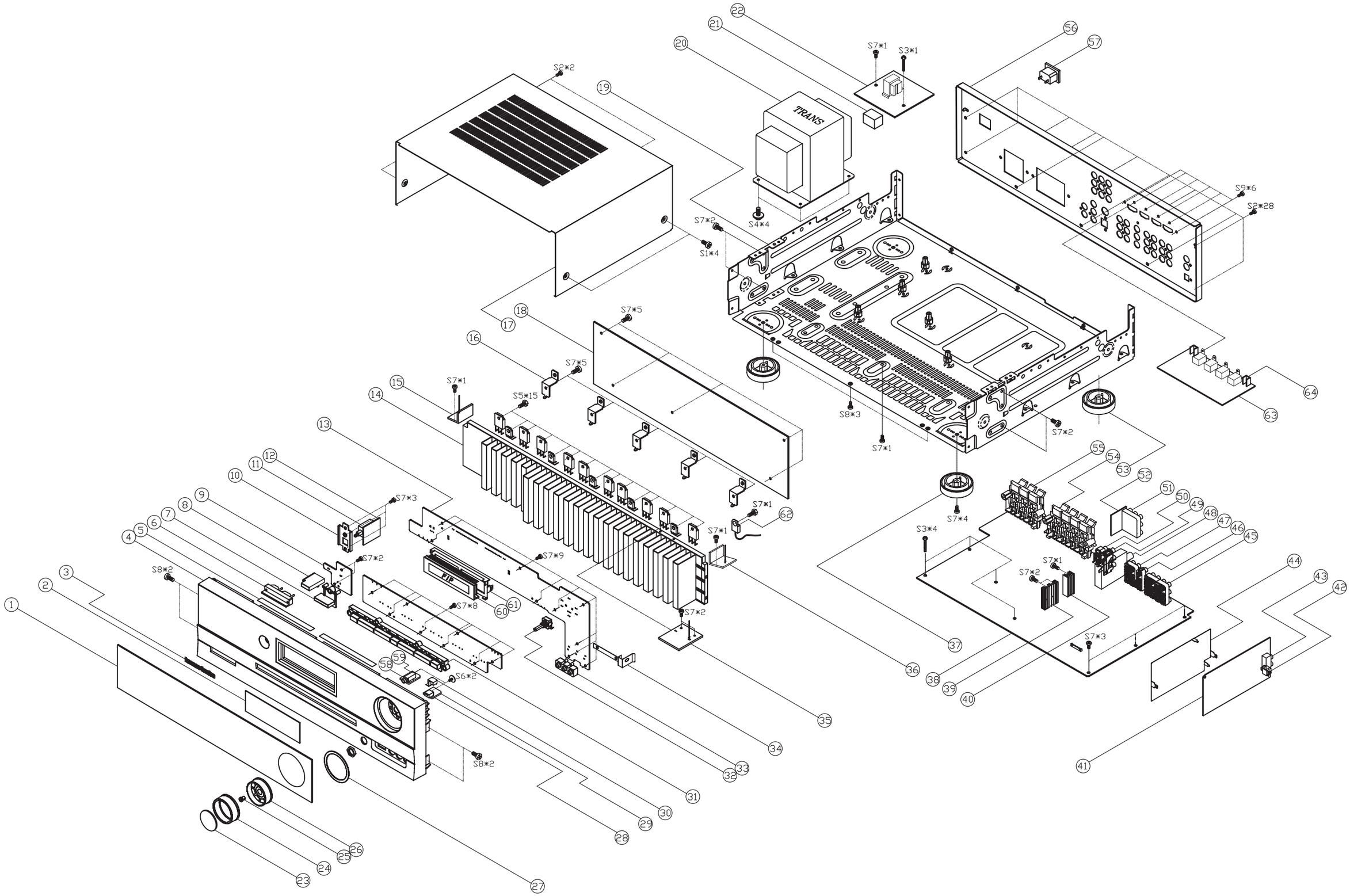
	DESCRIPTION	Q'TY	PARTS NO.	VER.
	PACKAGE			
	INSTRUCTION MANUAL	1	5707000001980S	
	BOX,GIFT	1	6007211180080S	
	CUSHION,SNOW	2	6230212064000S	
	CLIP	4	6250040020010S	
	PE,SHEET	1	6327040059000S	
	POLY BAG	1	6337040062010S	
	POLY BAG	1	6337210242000S	
	REMOCON	1	8300310000020S	
	ANTENNA,LOOP	1	E601016000010S	
	ANTENNA,WIRE(FM)	1	E605010070001S	
	BATTERY,DRY	3	G670001R50210S	
	CORD ASSY	1	L068250160020S	
	CASING ASSY	1	1018HK0814010	
	CABINET & CHASSIS			
1	WINDOW	1	5077212543010S	
2	FILTER	1	5200210262000S	
3	BADGE	1	5630210548000S	
4	PANEL FRONT	1	3067213971010S	
5	FELT	2	2690040057010S	
6	LENS	1	3710210793000S	
7	BUTTON	1	5097213641000S	
8	BUTTON	1	5097213631000S	
9	P.C.B SUB ASSY (STANDBY SW)	1	7028066854010	
10	BRACKET	1	4010213546000S	
11	SW,PUSH	1	G000122006060S	
12	P.C.B SUB ASSY (POWER SWITCH)	1	7028066853010	
13	P.C.B SUB ASSY (FRONT)	1	7028066851010	
14	HEAT SINK	1	2120210538100S	
15	PCB GUIDE	1	7028066832010	
16	BRACKET	5	4010056906010S	
17	CABINET	1	3007041236061S	
18	PCB AMP	1	7028064971010	
19	CHASSIS	1	3200200026020S	
20	POWER TRANS	1	8200858630220S	
21	CUSHION	1	4050044345010S	
22	PCB STANDBY	1	7028066901010	
23	PLATE	1	4470211422000S	
24	KNOB	1	5087211781000S	
25	BUSHING	1	2410210061000S	
26	KNOB	1	5080211793000S	
27	PLATE	1	4470211432000S	
28	CN,PLUG CONTACT	1	G480040100010S	
29	PCB USB	1	7028066862010	
30	SHIELD	1	3070210456000S	
31	BUTTON	1	5097213651000S	

	DESCRIPTION	Q'TY	PARTS NO.	VER.
32	SW,ENCODER	1	G121123070020S	
33	TER,RCA 3PIN	1	G606040320020S	
34	SHIELD	1	3070210466000S	
35	PCB GUIDE 3	1	7028066834010	
36	PCB GUIDE 2	1	7028066833010	
37	FOOT	2	4007040201060S	
38	PCB MAIN	1	7028066831010	
39	HEAT SINK	1	2120043538030S	
40	HEAT SINK	1	2120044298010S	
41	PCB DSP	1	7028066861010	
42	MODULE OPTICAL	1	E100116500040S	
43	TER,RCA 2PIN	1	G601206A0200YS	
44	SHIELD PLATE DSP	1	3070210476000S	
45	TER,RCA 12PIN	1	G6081201A120YS	
46	TER,RCA 3PIN	1	G60631901B20YS	
47	TER,RCA 6PIN	1	G603610A0041YS	
48	TUNER,FM/AM	1	E903004100010S	
49	TER,RCA 3PIN	1	G606305A1400YS	
50	TER,RCA 2PIN	1	G601207BE050YS	
51	TER,RCA 9PIN	1	G6070902C016YS	
52	PCB COMPONENT	1	7028066835010	
53	FOOT	2	4000040201010S	
54	TER,BOARD PUSH 8P	1	G598801SA090YS	
55	TER,BOARD PUSH 6P	1	G596601SA090YS	
56	CHASSIS	1	3207212506400S	
57	SOCKET,POWER AC	1	G430040550010S	
58	JACK,D6.5	1	G402PJ619A01YS	
59	P.C.B SUB ASSY	1	7028066852010	
60	DISPLAY,FLT	1	K530080300010S	
61	HOLDER	1	432004078301AS	
62	POSISTOR	1	F320161020240S	
63	P.C.B	1	7020067770000S	
64	SHIELD	2	3070045526010S	
	SCREWS			
S1	SCREW	4	1500040083B10S	
S2	SCREW,TAP TITE	2	B020030103B11S	30
S2	SCREW,TAP TITE	28	B020030103B11S	
S3	SCREW,TAP TITE	5	B020030181B10S	
S4	SCREW,TAP TITE ASSY	4	B028940101B10S	
S5	SCREW	15	1507041146010S	
S7	SCREW,TAP TITE	13	B020030081B10S	
S7	SCREW,TAP TITE	11	B020030081B10S	
S7	SCREW,TAP TITE	22	B020030081B10S	
S7	SCREW,TAP TITE	3	B020030081B10S	
S8	SCREW,TAP TITE	7	B020030083B10S	
S9	SCREW,TAP TITE	6	B020930083B10S	

	DESCRIPTION	Q'TY	PARTS NO.	VER.
	MISCELLANEOUS			
Q204C	KTC3964, NPN	1	J5023964000010S	
Q204FL	KTC3964, NPN	1	J5023964000010S	
Q204FR	KTC3964, NPN	1	J5023964000010S	
Q204SL	KTC3964, NPN	1	J5023964000010S	
Q204SR	KTC3964, NPN	1	J5023964000010S	
Q205C	KTD1510, NPN	1	J5031510000020S	
Q205FL	KTD1510, NPN	1	J5031510000020S	
Q205FR	KTD1510, NPN	1	J5031510000020S	
Q205SL	KTD1510, NPN	1	J5031510000020S	
Q205SR	KTD1510, NPN	1	J5031510000020S	
Q206C	KTB2510, PNP	1	J5012510000010S	
Q206FL	KTB2510, PNP	1	J5012510000010S	
Q206FR	KTB2510, PNP	1	J5012510000010S	
Q206SL	KTB2510, PNP	1	J5012510000010S	
Q206SR	KTB2510, PNP	1	J5012510000010S	

EXPLODED VIEW

Model : AVR-134



Parts without Parts No. are not supplied.
Parts without version mentioned are common ones.

ELECTRICAL PARTS LIST

Model : AVR-134

REF NO.	DESCRIPTION		Q'TY	PART NO.
PCB	P.C.B TOTAL ASSY	MAIN	1	7025HK0814010
PCB	P.C.B SUB ASSY	MAIN	1	7028067681010
PCB	P.C.B INS ASSY	MAIN-AXIAL	1	7027067681A10
PCB	P.C.B	MAIN	1	7020067800001S
PCB	P.C.B INS ASSY	MAIN-MANUAL	1	7027067681M10
PCB	P.C.B INS ASSY	MAIN-RADIAL	1	7027067681R10
PCB	P.C.B INS ASSY	MAIN-SMD	1	7027067681S10
COILS				
BD103/BD104	COIL,BEAD	120 ohm	2	D340160811210S
BD106-BD110	COIL,BEAD	120 ohm	5	D340160811210S
BD113-BD115	COIL,BEAD	120 ohm	3	D340160811210S
BD116-BD119	COIL,LINE FILTER	BFS2550A0F1	4	D320255000520S
J189	COIL,LINE FILTER	BFS2550A0F1	1	D320255000520S
J193/J197	COIL,LINE FILTER	BFS2550A0F1	2	D320255000520S
CAPACITOR				
C101L/R	C,CERAMIC CHIP T.C	100pF 50V	2	D010101167160S
C102L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C103L/R	C,CERAMIC CHIP T.C	100pF 50V	2	D010101167160S
C104L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C105L/R	C,CERAMIC CHIP T.C	220pF 50V	2	D010221167160S
C106L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C107L/R	C,CERAMIC CHIP T.C	220pF 50V	2	D010221167160S
C108L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C109L/R	C,CERAMIC CHIP T.C	220pF 50V	2	D010221167160S
C110L/C110R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C111L/R	C,CERAMIC CHIP T.C	220pF 50V	2	D010221167160S
C112L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C113L/R	C,CERAMIC CHIP T.C	220pF 50V	2	D010221167160S
C114L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C115C/L/R/SL/SR/SW	C,CERAMIC CHIP T.C	100pF 50V	6	D010101167160S
C116C/L/R/SL/SR/SW	C,ELECT GE 85C	10uF 50V	6	D040100087070S
C117L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C118/C119	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C120/C134	C,CERAMIC CHIP HIK	0.022uF 25V	2	D011223777160S
C121	C,CERAMIC CHIP HIK	0.047uF 16V	1	D011473773160S
C133	C,CERAMIC CHIP HIK	0.047uF 16V	1	D011473773160S
C220	C,CERAMIC CHIP HIK	0.047uF 16V	1	D011473773160S
C260	C,CERAMIC CHIP HIK	0.047uF 16V	1	D011473773160S
C122/C132	C,CERAMIC CHIP HIK	0.15uF 10V	2	D011154792160S
C131/C139	C,ELECT GE 85C	47uF 16V	2	D040470083080S
C135/C136	C,CERAMIC CHIP T.C	0.01uF 50V	2	D010103777160S
C137/C138	C,CERAMIC CHIP T.C	100pF 50V	2	D010101167160S
C140SW	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C141SW/C144SW	C,CERAMIC CHIP T.C	0.01uF 50V	2	D010103777160S
C142SW	C,CERAMIC CHIP HIK	1000pF 50V	1	D011102777160S
C143SW	C,CERAMIC CHIP T.C	47pF 50V	1	D010470167160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
C145SW/C146SW	C,ELECT GE 85C	47uF 16V	2	D0404700830805
C147SW	C,CERAMIC CHIP HIK	3300pF 50V	1	D011332777160S
C149SW	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C150SW	C,CERAMIC CHIP T.C	330pF 50V	1	D010331167160S
C151SW	C,CERAMIC CHIP T.C	680pF 50V	1	D010681167160S
C154C/L/R/SL/SR	C,CERAMIC CHIP HIK	3300pF 50V	5	D011332777160S
C158C/L/R/SL/SR	C,ELECT GE 85C	47uF 50V	5	D0404R7087250S
C158SW	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C159C/F/S/SW	C,CERAMIC CHIP T.C	0.01uF 50V	4	D010103777160S
C160C/L/R/SL/SR	C,FILM POLYESTER	0.1uF 100V	5	D02010406C060S
C161C/L/L1/R/R1/SL/SR	C,FILM POLYESTER	0.01uF 100V	7	D02010306C060S
C162C/L/R/SL/SR	C,FILM POLYESTER	0.01uF 100V	5	D02010306C060S
C164SW	C,CERAMIC CHIP T.C	100pF 50V	1	D010101167160S
C165L/R	C,FILM POLYESTER	0.01uF 100V	2	D02010306C060S
C167	C,ELECT GE 85C	2.2uF 50V	1	D0402R2087160S
C168-C170	C,CERAMIC CHIP T.C	0.01uF 50V	3	D010103777160S
C171-C174	C,CERAMIC CHIP T.C	100pF 50V	4	D010101167160S
C175	C,ELECT GE 85C	47uF 16V	1	D040470083080S
C176/C178	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C179/C180	C,ELECT GE 85C	10000uF 63V	2	D040103088380S
C182-C186	C,FILM POLYESTER	0.1uF 250V	5	D02010407H080S
C187/C188	C,ELECT GE 85C	1uF 50V	2	D040010087150S
C189	C,ELECT GE 85C	330uF 63V	1	D040331088230S
C190	C,ELECT GE 85C	47uF 100V	1	D0404R708C060S
C191	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C192/C194/C196	C,CERAMIC CHIP HIK	0.1uF 50V	3	D011104577160S
C193/C195	C,ELECT GE 85C	330uF 10V	2	D040331082070S
C198/C199	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C200	C,ELECT GE 85C	6800uF 16V	1	D040682083000S
C201-C203	C,FILM POLYESTER	0.1uF 100V	3	D02010406C060S
C204/C205	C,ELECT GE 85C	1uF 50V	2	D040010087150S
C206	C,ELECT GE 85C	4700uF 25V	1	D040472084020S
C207	C,ELECT GE 85C	1000uF 25V	1	D040102084060S
C208-C210	C,FILM POLYESTER	0.1uF 100V	3	D02010406C060S
C211	C,ELECT GE 85C	0.47uF 50V	1	D040R47087050S
C212/C214/C217	C,CERAMIC CHIP T.C	0.01uF 50V	3	D010103777160S
C213	C,ELECT GE 85C	3.3uF 50V	1	D0403R3087050S
C215/C216	C,CERAMIC CHIP T.C	100pF 50V	2	D010101167160S
C218	C,ELECT GE 85C	47uF 16V	1	D040470083080S
C219	C,ELECT GE 85C	4.7uF 50V	1	D0404R7087250S
C221	C,ELECT GE 85C	47uF 6.3V	1	D040471081070S
C222/C223	C,ELECT GE 85C	4.7uF 50V	2	D0404R7087250S
C224-C228	C,CERAMIC CHIP HIK	0.1uF 50V	5	D011104577160S
C230	C,CERAMIC CHIP HIK	0.1uF 50V	1	D011104577160S
C231-C234	C,CERAMIC CHIP T.C	0.01uF 50V	4	D010103777160S
C244/C245	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
C251/C253/C256	C,CERAMIC CHIP T.C	220pF 50V	3	D010221167160S
C252	C,ELECT GE 85C	47uF 16V	1	D040470083080S
C254/C255	C,ELECT GE 85C	47uF 16V	2	D040470083080S
C257/C258	C,ELECT GE 85C	470uF 10V	2	D040471082060S
C264	C,ELECT GE 85C	100uF 16V	1	D040101083070S
C266/C267	C,CERAMIC CHIP HIK	1000pF 50V	2	D011102777160S
C268-C270	C,CERAMIC CHIP HIK	0.1uF 50V	3	D011104577160S
C354/C355	C,CERAMIC SEMI DISC	0.1uF 50V	2	D006104597050S
C407/C408	C,FILM POLYESTER	0.1uF 100V	2	D02010406C060S
C414-C416	C,CERAMIC CHIP HIK	0.1uF 50V	3	D011104577160S
C417/C419	C,CERAMIC CHIP T.C	470pF 50V	2	D010471167160S
C418/C420	C,CERAMIC CHIP T.C	0.01uF 50V	2	D010103777160S
C467/C468	C,CERAMIC CHIP T.C	0.01uF 50V	2	D010103777160S
CONNECTOR				
CP101	CN.WAFER	7.92MM	1	L108353280360S
CP102	CN.WAFER	2.5MM	1	L102526700600S
CP103	CN.FPC	1.25MM	1	L1310071000105
CP104/CP115	CN.WAFER	2.0MM	2	L101200100510S
CP105	CN.WAFER	2.0MM	1	L101100040410S
CP106	CN.WAFER	2.0MM	1	L101200100910S
CP107CP108	CN.WAFER	2.0MM	2	L101100041810S
CP110	CN.WAFER	2.0MM	1	L1012001010105
CP111	CN.WAFER	2.0MM	1	L102526701200S
CP116	CN.WAFER	2.0MM	1	L1012001004105
CP117	CN.WAFER	2.0MM	1	L1012001002105
FPC101	CN.FPC	1.25MM	1	L1311117000105
DIODES				
D101-D110	D,SWITCHING CHIP	1N4148WS	10	K005041483230S
D111/D112	D,RECTIFIER BRIDGE	KBPC604 6A	2	K047604000020S
D113/J117	R,CHIP THICK	0 ohm 1/16W	2	C20000006M160S
D116-D119	D,SWITCHING	1SS133T	4	K000013300520S
D120/D121/D123	D,SWITCHING CHIP	1N4148WS	3	K005041483230S
D122	D,SWITCHING	1N4007	1	K000400700010S
D124/D125	D,SWITCHING	1SS133T	2	K000013300520S
D126-D128	D,SWITCHING CHIP	1N4148WS	3	K005041483230S
D129-D134	D,SWITCHING	1N4007	6	K000400700010S
D135/D136	D,SWITCHING CHIP	1N4148WS	2	K005041483230S
D137	D,SWITCHING	1SS133T	1	K000013300520S
D142	D,SWITCHING CHIP	1N4148WS	1	K005041483230S
D201/D202	D,SWITCHING CHIP	1N4148WS	2	K005041483230S
INTEGRATED CIRCUITS				
IC101	IC,CPU MICRO PROCESS	UPD78F0536GK(T)	1	J020780536000S
IC103	IC,LINEAR-REGULATOR	KIA7812API	1	J1267812000405
IC104	IC,LINEAR-REGULATOR	KIA7912PI	1	J1267912000605
IC105	IC,LINEAR OP	CF4558CB	1	J1214558001505
IC106	IC,MONITOR SW	LA7956	1	J1717956000105

REF NO.	DESCRIPTION		Q'TY	PART NO.
IC107	IC,MEMORY-EEPROM	FT24C08	1	J000240800020S
IC108	IC,LINEAR-REGULATOR	KIA78R05PI	1	J1267805000370S
IC109	IC,ELECT VR	R2A15218FP	1	J0841521800010S
IC111/IC112	IC,LINEAR-REGULATOR	KIA7805API	2	J1267805001105
JACKS				
JACK101	TER,RCA		1	G6081201A120YS
JACK102	TER,RCA 3PIN		1	G60631901B20YS
JACK103	TER,RCA 6PIN		1	G603610A0041YS
JACK104	TER,RCA 3PIN		1	G606305A1400YS
JACK105	TER,RCA 2PIN		1	G601207BE050YS
JACK106	TER,BOARD PUSH 8P		1	G598801SA090YS
JACK107	TER,BOARD PUSH 6P		1	G596601SA090YS
TRANSISTOR				
Q103/Q104	SEMI,CHIP TR/NPN 2SC	KTC2875B(MB)	2	J5222875B0010S
Q105/Q107/Q109/Q111	SEMI,CHIP TR/PNP 2SA	KRA105S(PE)	4	J5200105002105
Q106/Q108/Q110	SEMI,CHIP TR/NPN 2SC	KTC2875B(MB)	3	J5222875B0010S
Q114/Q115	SEMI,CHIP TR/NPN 2SC	KTC2875B(MB)	2	J5222875B0010S
Q116-Q120 Q204 Q205	SEMI,CHIP TR/NPN 2SC	KRC105S	2	J5220105002105
Q121/Q123	SEMI,TR/GE PNP 2SA	KTA1268BL	2	J5001268B0050S
Q124/Q126/Q128	SEMI,TR/GE PNP 2SA	KTA1268BL	3	J5001268B0050S
Q122/Q127/Q129	SEMI,TR/GE NPN 2SC	KTC3198Y	3	J5023198Y0000S
Q125	SEMI,TR/GE PNP 2SA	KSA916Y	1	J5000916Y0050S
Q130/Q132	SEMI,TR/GE NPN 2SC	KTC3198Y	5	J5023198Y0000S
Q133/Q135/Q136	SEMI,TR/GE NPN 2SC	KTC3198Y	5	J5023198Y0000S
Q131/Q134	SEMI,TR/GE PNP 2SA	KTA1268BL	2	J5001268B0050S
Q137	SEMI,CHIP TR/NPN 2SC	KRC102S	1	J5220102002105
Q138	SEMI,CHIP TR/NPN 2SC	KTC2875B(MB)	1	J5222875B0010S
Q201/Q202	SEMI,TR/GE NPN 2SC	KTC3198Y	2	J5023198Y0000S
Q204/Q205	SEMI,CHIP TR/NPN 2SC	KRC105S	5	J5220105002105
RESISTOR				
R101L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R102L/R102R	R,CHIP THICK	220 kohm 1/16W	2	C20002246M160S
R103L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R104L/R104R	R,CHIP THICK	220 kohm 1/16W	2	C20002246M160S
R105L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R106L/R	R,CHIP THICK	100 kohm 1/16W	2	C20001046M160S
R107L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R108L/R	R,CHIP THICK	100 kohm 1/16W	2	C20001046M160S
R109L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R110L/R	R,CHIP THICK	100 kohm 1/16W	2	C20001046M160S
R111L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R112L/R	R,CHIP THICK	100 kohm 1/16W	2	C20001046M160S
R113L/R	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R114L/R	R,CHIP THICK	100 kohm 1/16W	2	C20001046M160S
R115C/L/R/SL/SR/SW	R,CHIP THICK	330 ohm 1/16W	6	C20003316M160S
R116C/L/R/SL/SR/SW	R,CHIP THICK	2.2 Mohm 1/16W	6	C20002256M160S
R117	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S
R120-R122	R,CHIP THICK	100 kohm 1/16W	3	C20001046M160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
R123	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S
R124/R125	R,CARBON FILM	470 ohm 1/5W	2	C00004716P520S
R125SW	R,CHIP THICK	1 kohm 1/16W	1	C20001026M160S
R126SW	R,CHIP THICK	47 kohm 1/16W	1	C20004736M160S
R127SW	R,CHIP THICK	3.3 kohm 1/16W	1	C20003326M160S
R128SW	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S
R131SW	R,CHIP THICK	1 kohm 1/16W	1	C20001026M160S
R132SW/R137SW	R,CHIP THICK	100 kohm 1/16W	2	C20001046M160S
R133SW/135SW	R,CHIP THICK	4.7 kohm 1/16W	2	C20004726M160S
R134SW	R,CHIP THICK	2 kohm 1/16W	1	C20002026M160S
R136SW	R,CARBON FILM	4.7 kohm 1/5W	1	C00004726P520S
R138C/L/R/SL/SR	R,CHIP THICK	1 kohm 1/16W	5	C20001026M160S
R139C/L/R/SL/SR	R,CHIP THICK	47 kohm 1/16W	5	C20004736M160S
R140SW/R141SW	R,CHIP THICK	2.2 kohm 1/16W	2	C20002226M160S
R142/R143	R,METAL FILM 100PPM	68 ohm 1W	2	C060068065060S
R148C/L/R/SL/SR/SW	R,CARBON FILM	1 kohm 1/5W	6	C00001026P520S
R149C/L/R/SL/SR	R,CHIP THICK	470 ohm 1/16W	5	C20004716M160S
R150C/F/S/SW	R,CHIP THICK	470 kohm 1/16W	4	C20004746M160S
R151C/L/R/SR	R,CHIP THICK	2.2 kohm 1/16W	4	C20002226M160S
R151SL	R,CARBON FILM	2.2 kohm 1/5W	2	C00002226P520S
R152C/F/S/SW	R,CHIP THICK	1 kohm 1/16W	4	C20001026M160S
R153C/F/S	R,CHIP THICK	470 kohm 1/16W	3	C20004746M160S
R153SW	R,CHIP THICK	1.2 kohm 1/16W	1	C20001226M160S
R154C/L/R/SL/SR	R,CHIP THICK	100 kohm 1/16W	5	C20001046M160S
R155C/L/R/SL/SR	R,CARBON FILM	22 kohm 1/5W	5	C00002236P520S
R156C/L/R/SL/SR	R,METAL FILM 100PPM	10 ohm 1W	5	C060010065050S
R157/R158	R,METAL FILM 100PPM	470 ohm 2W	2	C060047166520S
R159SW	R,CHIP THICK	220 ohm 1/16W	1	C20002216M160S
R160SW	R,CHIP THICK	100 kohm 1/16W	1	C20001046M160S
R162/R182	R,CHIP THICK	560 kohm 1/16W	2	C20005646M160S
R164	R,CHIP THICK	220 ohm 1/16W	1	C20002216M160S
R165	R,CHIP THICK	33 kohm 1/16W	1	C20003336M160S
R166	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S
R167	R,CHIP THICK	2.2 kohm 1/16W	1	C20002226M160S
R168-R170	R,CHIP THICK	47 kohm 1/16W	3	C20004706M160S
R171	R,METAL FILM 100PPM	10 ohm 1W	1	C060010065050S
R172/R173	R,CHIP THICK	47 kohm 1/16W	2	C20004706M160S
R174-R176	R,METAL FILM 100PPM	2.2 kohm 1W	3	C060022265050S
R177	R,CARBON FILM	22 kohm 1/5W	1	C00002236P520S
R178/R179	R,CEMENT RADIAL FORM	0.1 ohm 5W	2	C141R10069010S
R180	R,CARBON FILM	1 kohm 1/5W	1	C00001026P520S
R181	R,CARBON FILM	180 ohm 1/5W	1	C00001816P520S
R183	R,CARBON FILM	100 ohm 1/5W	1	C00001016P520S
R184	R,METAL FILM 100PPM	4.7 ohm 1W	1	C0604R7065050S
R185	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R186	R,METAL FILM 100PPM	22 ohm 1/4W	1	C060022063050S
R187	R,CHIP THICK	15 kohm 1/16W	1	C20001536M160S
R188/R189	R,CHIP THICK	47 kohm 1/16W	2	C20004736M160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
R190	R,METAL FILM 100PPM	47 kohm 1/4W	1	C0600473630505
R191/R193/R195	R,CHIP THICK	100 kohm 1/16W	3	C20001046M160S
R192/R194	R,CHIP THICK	43 kohm 1/16W	2	C20004336M160S
R196	R,CHIP THICK	33 kohm 1/16W	1	C20003336M160S
R197	R,CARBON FILM	2.2 kohm 1/5W	2	C00002226P520S
R198-R200	R,CARBON FILM	51 kohm 1/5W	3	C00005136P520S
R201/R203	R,CARBON FILM	27 kohm 1/5W	2	C00002736P520S
R202	R,CHIP THICK	27 kohm 1/16W	1	C20002736M160S
R204/R215	R,CEMENT RADIAL FORM	0.1 ohm 5W	2	C141R10069010S
R205-R208	R,METAL FILM 100PPM	0.22 ohm 1W	4	C060R22065050S
R209	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S
R210	R,CHIP THICK	33 kohm 1/16W	1	C20003336M160S
R211/R221/R228/R244	R,CHIP THICK	1 kohm 1/16W	4	C20001026M160S
R212/R214	R,CARBON FILM	33 kohm 1/5W	2	C00003336P520S
R213	R,CARBON FILM	1 kohm 1/5W	1	C00001026P520S
R217/R218	R,CARBON FILM	10 kohm 1/5W	2	C00001036P520S
R219	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R220	R,CHIP THICK	100 kohm 1/16W	1	C20001046M160S
R222	R,CHIP THICK	220 kohm 1/16W	1	C20002246M160S
R223	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R224	R,CARBON FILM	33 kohm 1/5W	1	C00003336P520S
R225	R,CHIP THICK	47 kohm 1/16W	1	C20004736M160S
R226/R227	R,CHIP THICK	4.7 kohm 1/16W	2	C20004726M160S
R229	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S
R230	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S
R231/R232	R,CHIP THICK	33 kohm 1/16W	2	C20003336M160S
R233/R234	R,CARBON FILM	33 kohm 1/5W	2	C00003336P520S
R235	R,CHIP THICK	20 kohm 1/16W	1	C20002036M160S
R236	R,CARBON FILM	47 ohm 1/5W	1	C00004706P520S
R237	R,CHIP THICK	100 kohm 1/16W	1	C20001046M160S
R238	R,CARBON FILM	1 kohm 1/5W	1	C00001026P520S
R239	R,CARBON FILM	3.3 kohm 1/5W	1	C00003326P520S
R240	R,CARBON FILM	33 kohm 1/5W	1	C00003336P520S
R243	R,CARBON FILM	10 kohm 1/5W	1	C00001036P520S
R251-R254	R,CHIP THICK	75 ohm 1/16W	4	C20007506M160S
R255/R258	R,CHIP THICK	22 kohm 1/16W	2	C20002236M160S
R256/R259	R,CHIP THICK	390 ohm 1/16W	2	C20003916M160S
R257	R,CHIP THICK	75 ohm 1/16W	1	C20007506M160S
R260	R,CHIP THICK	3.3 kohm 1/16W	1	C20003326M160S
R261/R262	R,CHIP THICK	330 ohm 1/16W	2	C20003316M160S
R263	R,CARBON FILM	4.7 ohm 1/5W	1	C0004R706P520S
R265/R266	R,CARBON FILM	4.7 ohm 1/5W	2	C00004706P520S
R267	R,CHIP THICK	4.7 ohm 1/16W	1	C20004706M160S
R268-R270	R,CARBON FILM	4.7 ohm 1/5W	3	C00004706P520S
R271-R274	R,CHIP THICK	4.7 ohm 1/16W	4	C20004706M160S
R275	R,CHIP THICK	3.3 kohm 1/16W	1	C20003326M160S
R415/R416	R,METAL FILM 100PPM	10 ohm 1W	2	C060010065050S

REF NO.	DESCRIPTION		Q'TY	PART NO.
MISCELLANEOUS				
GND101	TERMINAL		1	3790040886000S
GND102	TERMINAL		1	3790040886000S
GND103/GND104	TERMINAL		2	3790040886000S
HSINK101	HEAT SINK		1	2120044298010S
HSINK102	HEAT SINK		1	2120043538030S
J102-J116	CN,WIRE 1P		15	L045084006040S
J118-J123	CN,WIRE 1P		6	L045084006040S
J125/J127	CN,WIRE 1P		2	L045084006040S
J129-J132	CN,WIRE 1P		4	L045084006040S
J134/J135	CN,WIRE 1P		2	L045084006040S
J137/J139/J140	R,CHIP THICK	0 ohm 1/8W	3	C200000061300S
J138	CN,WIRE 1P		1	L045084006040S
J141-J161	CN,WIRE 1P		21	L045084006040S
J163	R,CHIP THICK	0 ohm 1/8W	1	C200000061300S
J205	R,CHIP THICK	0 ohm 1/8W	1	C200000061300S
J277	R,CARBON FILM	20 kohm 1/5W	1	C00002036P520S
J283	R,CHIP THICK	0 ohm	1	C20000006M160S
J334/J335	R,CHIP THICK	0 ohm 1/8W	2	C200000061300S
J346-J350	R,CHIP THICK	0 ohm 1/8W	5	C200000061300S
J356	R,CHIP THICK	0 ohm 1/8W	1	C200000061300S
J384/J385	R,CHIP THICK	0 ohm 1/16W	2	C20000006M160S
J387/J388	R,CHIP THICK	0 ohm 1/16W	2	C20000006M160S
PACK101	TUNER,FM/AM		1	E9030041000010S
RLY101-105	RELAY	12V 5A	5	G6801205020050S
WIRE100	CN,WIRE	90MM 1P	1	L000900010010S
WIRE10AB	CN,WIRE	100MM 2P	1	L0001410201505O
ZD101/ZD102	D,ZENER CHIP	0.2W 7.5V	2	K06607R54P400S
ZD103/ZD104	D,ZENER CHIP	0.2W 16V	2	K06616R04P400S
ZD105	D,ZENER CHIP	0.2W 3.3V	1	K06603R34P400S
ZD106	D,ZENER	MTZJ2.4B	1	K06002R444520S
ZD107	D,ZENER CHIP	0.2W 3.6V	1	K06603R64P400S
PCB GUIDE	P.C.B SUB ASSY	GUIDE1	1	7028067682010
PCB GUIDE	P.C.B INS ASSY	GUIDE1-AXIAL	1	7027067682A10
PCB GUIDE	P.C.B INS ASSY	GUIDE1-MANUAL	1	7027067682M10
CLAMP201	CLAMP		1	43300001200000S
J270-J273	CN,WIRE 1P		4	L045084006040S
J278-J281	CN,WIRE 1P		4	L045084006040S
PCB GUIDE	P.C.B SUB ASSY	GUIDE2	1	7028067683010
PCB GUIDE	P.C.B INS ASSY	GUIDE2-AXIAL	1	7027067683A10
PCB GUIDE	P.C.B INS ASSY	GUIDE2-MANUAL	1	7027067683M10
CLAMP301	CLAMP		1	43300001200000S
J286-J293	CN,WIRE 1P		8	L045084006040S
PCB GUIDE	P.C.B SUB ASSY	GUIDE3	1	7028067684010
PCB GUIDE	P.C.B INS ASSY	GUIDE3-MANUAL	1	7027067684M10
CLAMP401	CLAMP		1	43300001200000S
PCB	P.C.B SUB ASSY	COMPONENT	1	7028067685010
PCB	P.C.B INS ASSY	COMPONENT-AXIAL	1	7027067685A10

REF NO.	DESCRIPTION		Q'TY	PART NO.
PCB	P.C.B INS ASSY	COMPONENT-MANUAL	1	7027067685M10
PCB	P.C.B INS ASSY	COMPONENT-RADIAL	1	7027067685R10
PCB	P.C.B INS ASSY	COMPONENT-SMD	1	7027067685S10
C235-C242	C,ELECT GE 85C	10uF 50V	8	D040100087070S
C243	C,ELECT GE 85C	470uF 6.3V	1	D040471081070S
C258A	C,ELECT GE 85C	47uF 16V	1	D040470083080S
C259A	C,CERAMIC CHIP HIK	0.01uF 50V	1	D011103597160S
C274	C,ELECT GE 85C	100uF 10V	1	D040101082090S
C275	C,CERAMIC CHIP HIK	0.1uF 50V	1	D011104597160S
CN115	CN,WIRE	2MM	1	L002800050100S
D203/D204	D,SWITCHING CHIP	1N4148WS	2	K005041483230S
IC110	IC,MONITOR SW	NJM2585M	1	J1712585000105
J298/J339/J341	CN,WIRE 1P	0.6/52MM	3	L045084006040S
J327	R,CHIP THICK	0 ohm 1/8W	1	C200000061300S
J340	R,CHIP THICK	0 ohm 1/16W	1	C20000006M160S
JACK201	TER,RCA 9PIN		1	G6070902C016YS
Q210/Q211	SEMI,CHIP TR/NPN 2SC	KRC114S	2	J5220114002105
Q212	SEMI,CHIP TR/NPN 2SC	KRC105S	1	J5220105002105
R245	R,CHIP THICK	75 ohm 1/16W	1	C20007506M160S
R251A/R252A	R,CHIP THICK	75 ohm 1/16W	2	C20007506M160S
R253A-R255A	R,CHIP THICK	5.1 kohm 1/16W	3	C20005126M160S
R265A	R,CHIP THICK	75 ohm 1/16W	1	C20007506M160S
R270A/R271A	R,CHIP THICK	75 ohm 1/16W	2	C20007506M160S
R276-R278	R,CHIP THICK	75 ohm 1/16W	3	C20007506M160S
R288	R,METAL FILM 100PPM	82 ohm 1W	1	C060082065050S
R290/R291	R,CHIP THICK	100 ohm 1/16W	2	C20001016M160S
R293/R295/R296	R,CHIP THICK	47 kohm 1/16W	3	C20004736M160S
ZD201	D,ZENER	MTZJ9.1B 0.5W	1	K06009R144520S
PCB	P.C.B TOTAL ASSY	AMP	1	7025HK0814011
PCB	P.C.B SUB ASSY	AMP	1	7028066841010
PCB	P.C.B INS ASSY	AMP-AXIAL	1	7027066841A10
PCB	P.C.B	AMP	1	70200668400005
PCB	P.C.B INS ASSY	AMP-MANUAL	1	7027066841M10
PCB	P.C.B INS ASSY	AMP-RADIAL	1	7027066841R10
C201C/FL/FR/SL/SR	C,ELECT GE 85C	10uF 50V	5	D040100087070S
C202C/FL/FR/SL/SR	C,CERAMIC HIK AXIAL	UP025	5	D005681177521S
C203C/FL/FR/SL/SR	C,CERAMIC-UNKNOWN	220pF 500V	5	D009092212500S
C204C/FL/FR/SL/SR	C,CERAMIC T.C DISC	33pF 500V	5	D00033006D050S
C205C/FL/FR/SL/SR	C,ELECT GE 85C	100uF 10V	5	D040101082090S
C206C/FL/FR/SL/SR	C,CERAMIC HIK AXIAL	UP025	5	D005102177531S
C207C/FL/FR/SL/SR	C,ELECT GE 85C	47uF 50V	5	D040470087070S
C208C/FL/FR/SL/SR	C,ELECT GE 85C	10uF 50V	5	D040100087070S
C209C/FL/FR/SL/SR	C,CERAMIC HIK DISC	100pF 500V	5	D00410106D050S
C210C/FL/FR/SL/SR	C,CERAMIC HIK DISC	100pF 500v	5	D00410106D050S
C211C/FL/FR/SL/SR	C,CERAMIC HIK AXIAL	UP025	5	D005223594521S
C212	C,ELECT GE 85C	10uF 100V	1	D04010008C050S
CN101	CN,WIRE 2MM	100MM	1	L002101100060S
CN102	CN,WIRE	80MM	1	L000800120050S

REF NO.	DESCRIPTION		Q'TY	PART NO.
D201C/FL/FR/SL/SR	D,SWITCHING	1SS133T	5	K000013300520S
J204/J206/J208	CN,WIRE 1P	0.6/52MM	3	L045084006040S
J210-J214	CN,WIRE 1P	0.6/52MM	5	L045084006040S
J216/J218	CN,WIRE 1P	0.6/52MM	2	L045084006040S
J222-J231	CN,WIRE 1P	0.6/52MM	10	L045084006040S
J233/J234	CN,WIRE 1P	0.6/52MM	2	L045084006040S
J238	CN,WIRE 1P	0.6/52MM	1	L045084006040S
J240-J242	CN,WIRE 1P	0.6/52MM	3	L045084006040S
J246-J253	CN,WIRE 1P	0.6/52MM	8	L045084006040S
J255-J264	CN,WIRE 1P	0.6/52MM	10	L045084006040S
J265/J266	CN,WIRE 1P	0.6/52MM	2	L045084006040S
J268/J269	CN,WIRE 1P	0.6/52MM	2	L045084006040S
J271-J273	CN,WIRE 1P	0.6/52MM	3	L045084006040S
L201C/FL/FR/SL/SR	COIL,FILTER-INDUCTOR	SP-2507	5	D3309000013305
Q201C/FL/FR/SL/SR	SEMI,TR/GE PNP 2SA	KSA992F 0.5W	5	J5000992F0050S
Q202C/FL/FR/SL/SR	SEMI,TR/GE PNP 2SA	KSA992F 0.5W	5	J5000992F0050S
Q203C/FL/FR/SL/SR	SEMI,TR/GE NPN 2SC	KTC3200BL 0.6W	5	J5023200B0050S
Q207C/FL/FR/SL/SR	SEMI,TR/GE NPN 2SC	KTC3200BL 0.6W	5	J5023200B0050S
R201C/FL/FR/SL/SR	R,CARBON FILM	220 ohm 1/5W	5	C00002216P520S
R203C/FL/FR/SL/SR	R,CARBON FILM	7.5 kohm 1/5W	5	C00007526P520S
R204C/FL/FR/SL/SR	R,CARBON FILM	39 kohm 1/5W	5	C00003936P520S
R205C/FL/FR/SL/SR	R,CARBON FILM	470 kohm 1/5W	5	C00004746P520S
R206C/FL/FR/SL/SR	R,CARBON FILM	33 kohm 1/5W	5	C00003336P520S
R207C/FL/FR/SL/SR	R,CARBON FILM	1.5 kohm 1/5W	5	C00001526P520S
R208C/FL/FR/SL/SR	R,CARBON FILM	47 kohm 1/5W	5	C00004736P520S
R209C/FL/FR/SL/SR	R,CARBON FILM	1.2 kohm 1/5W	5	C00001226P520S
R210C/FL/FR/SL/SR	R,CARBON FILM	470 ohm 1/5W	5	C00004716P520S
R211C/FL/FR/SL/SR	R,METAL FILM 100PPM	47 ohm 1/4W	5	C060047063050S
R212C/FL/FR/SL/SR	R,CARBON FILM	910 ohm 1/5W	5	C00009116P520S
R213C/FL/FR/SL/SR	R,CARBON FILM	56 ohm 1/4W	5	C000056063520S
R214C/FL/FR/SL/SR	R,CARBON FILM	3 kohm 1/5W	5	C00003026P520S
R216C/FL/FR/SL/SR	R,METAL FILM 100PPM	5.6 kohm 1W	5	C060056265050S
R217C/FL/FR/SL/SR	R,METAL FILM 100PPM	5.6 kohm 1W	5	C060056265050S
R218C/FL/FR/SL/SR	R,METAL FILM 100PPM	47 ohm 1/4W	5	C0604R7063050S
R219C/FL/FR/SL/SR	R,METAL FILM 100PPM	47 ohm 1/4W	5	C0604R7063050S
R220C/FL/FR/SL/SR	R,METAL FILM 100PPM	0.47 ohm 2W	5	C060R47066050S
R221C/FL/FR/SL/SR	R,METAL FILM 100PPM	0.47 ohm 2W	5	C060R47066050S
R222C/FL/FR/SL/SR	R,METAL FILM 100PPM	0.47 ohm 2W	5	C060R47066050S
R223C/FL/FR/SL/SR	R,METAL FILM 100PPM	0.47 ohm 2W	5	C060R47066050S
R224C/FL/FR/SL/SR	R,CARBON FILM	27 kohm 1/5W	5	C00002736P520S
R225C/FL/FR/SL/SR	R,CARBON FILM	330 kohm 1/5W	5	C00003346P520S
R226C/FL/FR/SL/SR	R,CARBON FILM	75 kohm 1/5W	5	C00007536P520S
R227C/FL/FR/SL/SR	R,CARBON FILM	2.2 kohm 1/5W	5	C00002226P520S
R228C/FL/FR/SL/SR	R,METAL FILM 100PPM	10 ohm 1W	5	C060010065520S
R229	R,METAL FILM 100PPM	10 ohm 1W	1	C060010065050S

REF NO.	DESCRIPTION		Q'TY	PART NO.
PCB	P.C.B TOTAL ASSY	FRONT	1	7025HK0814012
PCB	P.C.B SUB ASSY	FRONT	1	7028066851010
PCB	P.C.B INS ASSY	FRONT	1	7027066851A10
PCB	P.C.B	FRONT	1	70200668500001S
PCB	P.C.B INS ASSY	FRONT MANUAL	1	7027066851M10
PCB	P.C.B INS ASSY	FRONT RADIAL	1	7027066851R10
PCB	P.C.B INS ASSY	FRONT SMD	1	7027066851S10
C703/C717	C,ELECT GE 85C	47uF 16V	2	D040470083060S
C704	C,CERAMIC CHIP HIK	0.1uF 50V	1	D011104577160S
C705/C706	C,CERAMIC CHIP HIK	820pF 50V	2	D011821777160S
C707/C710	C,FILM POLYESTER	0.047uF 100v	2	D02047306C060S
C708/C709	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C713L/R	C,CERAMIC CHIP HIK	470pF 50V	2	D011471767160S
C714-C719	C,CERAMIC CHIP HIK	0.1uF 50V	5	D011104577160S
C721	C,ELECT GE 85C	100uF 10V	1	D040101082070S
C726/C727	C,CERAMIC CHIP T.C	0.01uF 50V	2	D010103777160S
C731	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C734	C,CERAMIC CHIP T.C	0.01uF 50V	1	D010103777160S
C735L/R	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C743-C745	C,CERAMIC CHIP T.C	100pF 50V	3	D010101167160S
CB701-CB704	COIL,BEAD	120ohm	4	D340160811210S
CN707	CN,WIRE 2MM	250/5P	1	L0022510500705
CP701	CN.WAFER 2.0MM		1	L101200100410S
CP704	CN.WAFER 2.5MM		1	L1025268030105
D701-D704	D,SWITCHING CHIP	1N4148WS	4	K005041483230S
DZ705	D,ZENER	MTZJ7.5B 0.5W	1	K06007R544520S
FLT701	HOLDER		1	432004078301AS
FLT701	DISPLAY,FLT		1	K5300803000105
FPC701	CN.FPC 1.25MM		1	L1311017000105
IC701	IC,LINEAR-DRIVER		1	J1271631501005
J700-J712	CN,WIRE 1P	0.6/52MM	13	L0450840060405
JACK700	TER,RCA 3PIN		1	G6060403200205
L700	COIL,FILTER-INDUCTOR	100uH	1	D3301010010205
L702	COIL,FILTER-INDUCTOR	10uH	1	D3301007005205
L703/L704	COIL,FILTER-INDUCTOR	2.2uH	2	D3302R2000520S
LED701/LED703/LED704	LED,ROUND		3	K5000560001005
LUG701	RING,TER WIRE		1	84101410100705
Q701/Q704	SEMI,CHIP TR/NPN 2SC	0.2W	2	J5220105002105
Q703	SEMI,CHIP TR/PNP 2SA	0.2W	1	J5200105002105
R702/R703	R,CHIP THICK	68 kohm 1/16W	2	C20006836M160S
R704-R731	R,CHIP THICK	56 kohm 1/16W	28	C20005636M160S
R732/R733	R,CHIP THICK	68 kohm 1/16W	2	C20006836M160S
R737	R,CHIP THICK	82 kohm 1/16W	1	C20008236M160S
R739/R740/R774	R,CARBON FILM	470 ohm 1/5W	3	C00004716P520S
R742/R760	R,CHIP THICK	4.7 kohm 1/16W	2	C20004726M160S
R743	R,CHIP THICK	75 ohm 1/16W	1	C20007506M160S
R744/R747	R,CHIP THICK	3.3 kohm 1/16W	2	C20003326M160S
R748	R,CHIP THICK	82 ohm 1/16W	1	C20008206M160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
R749/R751	R,CHIP THICK	2.2 kohm 1/16W	2	C20002226M160S
R752/R754	R,CHIP THICK	1.5 kohm 1/16W	2	C20001526M160S
R755/R757	R,CHIP THICK	1 kohm 1/16W	2	C20001026M160S
R758/R759	R,CHIP THICK	82 ohm 1/16W	2	C20008206M160S
R771	R,CARBON FILM	15 kohm 1/5W	1	C00001536P520S
R782L/R	R,CHIP THICK	220 kohm 1/16W	2	C20002246M160S
R784L/R	R,CHIP THICK	470 ohm 1/16W	2	C20004716M160S
RMC701	MODULE,REMOCON	2.54MM	1	E9403438000105
SW705/SW706	SW,TACT	SKHV10920A 5MM	2	G1800002700105
SW708/SW709	SW,TACT	SKHV10920A	2	G1800002700105
SW711/SW712	SW,TACT	SKHV10920A	2	G1800002700105
SW714/SW715	SW,TACT	SKHV10920A	2	G1800002700105
SW718-SW720	SW,TACT	SKHV10920A	3	G1800002700105
VR701	SW,ENCODER		1	G1211230700205
PCB	P.C.B SUB ASSY	HEADPHONE	1	7028066852010
PCB	P.C.B INS ASSY	HEADPHONE AXIAL	1	7027066852A10
PCB	P.C.B INS ASSY	HEADPHONE MANUAL	1	7027066852M10
PCB	P.C.B INS ASSY	HEADPHONE RADIAL	1	7027066852R10
PCB	P.C.B INS ASSY	HEADPHONE SMD	1	7027066852S10
C711	C,CERAMIC CHIP HIK	0.1uF 50V	1	D011104577160S
C712	C,CERAMIC CHIP HIK	470pF 50V	1	D011471767160S
C712L/R	C,CERAMIC CHIP T.C	0.01uF 50V	2	D010103777160S
C713	C,CERAMIC CHIP T.C	0.01uF 50V	1	D010103777160S
CB707-CB709	COIL,BEAD	120 ohm	3	D340160811210S
CN702	CN,WIRE 2MM		1	L0023310400105
JACK701	JACK,PHONE	D6.5	1	G402PJ619A01YS
LUG703	RING,TER WIRE		1	8410600010060S
PCB	P.C.B SUB ASSY	POWER SW	1	7028066853010
PCB	P.C.B INS ASSY	POWER SW AXIAL	1	7027066853A10
PCB	P.C.B INS ASSY	POWER SW MANUAL	1	7027066853M10
PCB	P.C.B INS ASSY	POWER SW RADIAL	1	7027066853R10
PCB	P.C.B INS ASSY	POWER SW SMD	1	7027066853S10
CN705	CN,WIRE		1	L0004210200305
SW701	SW,PUSH		1	G0001220060605
PCB	P.C.B SUB ASSY	STANDBY SW	1	7028066854010
PCB	P.C.B INS ASSY	STANDBY SW AXIAL	1	7027066854A10
PCB	P.C.B INS ASSY	STANDBY SW MANUAL	1	7027066854M10
PCB	P.C.B INS ASSY	STANDBY SW RADIAL	1	7027066854R10
PCB	P.C.B INS ASSY	STANDBY SW SMD	1	7027066854S10
CN701	CN,WIRE 2MM		1	L0026000400605
LED702/LED705	LED,ROUND		2	K5000330000405
Q702	SEMI,CHIP TR/NPN 2SC	KRC105S 0.2W	1	J5220105002105
R746/R750	R,CHIP THICK	120 ohm 1/16W	2	C20001216M160S
SW700	SW,TACT	SKHV10920A 5MM	1	G1800002700105

REF NO.	DESCRIPTION		Q'TY	PART NO.
PCB	P.C.B TOTAL ASSY	DSP	1	7025HK0814013
PCB	P.C.B SUB ASSY	DSP	1	7028067771010
PCB	P.C.B INS ASSY	DSP-AXIAL	1	7027067771A10
PCB	P.C.B INS ASSY	DSP-MANUAL	1	7027067771M10
PCB	P.C.B INS ASSY	DSP-RADIAL	1	7027067771R10
PCB	P.C.B INS ASSY	DSP-SMD	1	7027067771S10
PCB	P.C.B	DSP	1	7020066860002S
C100	C,ELECT GE 85C	220uF 10V	1	D040221082080S
C101-C115	C,CERAMIC CHIP HIK	0.1uF 50V	15	D011104577160S
C116	C,ELECT GE 85C	220uF 10V	1	D040221082080S
C117-C129	C,CERAMIC CHIP HIK	0.1uF 50V	13	D011104577160S
C130	C,ELECT GE 85C	100uF 10V	1	D040101082090S
C131-C137	C,CERAMIC CHIP HIK	0.1uF 50V	7	D011104577160S
C138/C139	C,ELECT GE 85C	100uF 10V	2	D040101082090S
C140/C142	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C141	C,ELECT GE 85C	100uF 10V	1	D040101082090S
C143	C,CERAMIC CHIP T.C	470pF 50V	1	D010471167160S
C148	C,CERAMIC CHIP HIK	0.01uF 50V	1	D011103777160S
C149/C150	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C151/C154/C157	C,ELECT GE 85C	220uF 10V	3	D040221082080S
C152/C153	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C155/C156	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C158/C160	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C159	C,CERAMIC CHIP T.C	16pF 50V	1	D010160167160S
C161	C,CERAMIC CHIP T.C	16pF 50V	1	D010160167160S
C162	C,ELECT GE 85C	220uF 10V	1	D040221082080S
C163/C164	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C165/C166	C,CERAMIC CHIP T.C	220pF 50V	2	D010221167160S
C167	C,ELECT GE 85C	47uF 16V	1	D040470083080S
C168	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C169	C,CERAMIC CHIP HIK	0.01uF 50V	1	D011103777160S
C170/C177	C,CERAMIC CHIP T.C	22pF 50V	2	D010220167160S
C171/C172	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C173/C178	C,ELECT GE 85C	0.1uF 50V	2	D040R10087080S
C175/C176	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C180/C183	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577160S
C181	C,CERAMIC CHIP T.C	22pF 50V	1	D010220167160S
C182/C184/C186	C,ELECT GE 85C	100uF 10V	3	D040101082090S
C185	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C191/C192	C,ELECT GE 85C	100uF 10V	2	D040101082090S
C195-C197	C,CERAMIC CHIP T.C	12pF 50V	3	D010120167160S
C198-C203	C,ELECT GE 85C	10uF 50V	6	D040100087070S
CN101/CN102	CN.WAFER 2.0MM		2	L1011000318105
CN105	CN.WAFER 2.0MM		1	L1011000304105
CP104	CN.WAFER 2.0MM	20010WS	1	L1012001004105
D100-D103	D,SWITCHING CHIP	1N4148WS	4	K005041483230S
IC100	IC,MEMORY-RAM	AT3664164P	1	J0013664164105
IC101	IC,MEMORY FLASH	ES29LV800ET	1	J0052980001205

REF NO.	DESCRIPTION		Q'TY	PART NO.
IC102	IC,ANALOG	TMS320DA787	1	J080320787010S
IC103	IC,ANALOG	AK4588	1	J080458800010S
IC104	IC,LOGIC	SN74AHCU04PWR	1	J040740400290S
IC105	IC,LOGIC	SN74LV00APW	1	J040740000170S
IC106	IC,LINEAR-DRIVER	UBI9022	1	J127902200010S
JACK100	MODULE		1	E100116500040S
JACK302	TER,RCA 2PIN		1	G601206A0200YS
L100-L115	COIL,BEAD	120 ohm	16	D340160811210S
L116	COIL,FILTER-INDUCTOR	4.7uH	1	D3304R7000150S
L117/L118	COIL,FILTER-INDUCTOR	2.2uH	2	D3302R2000150S
L119/L121	COIL,BEAD	120ohm	2	D340160811210S
L122	COIL,CHIP	3.3uH	1	D311201203320S
L123-L126	COIL,BEAD	120 ohm	4	D340160811210S
L128-L145	COIL,BEAD	120 ohm	18	D340160811210S
LUG100	RING,TER WIRE		1	84106000010030S
R100-R102	R,CHIP THICK	4.7 kohm 1/16W	3	C20004726M160S
R103-R122	R,CHIP THICK	33 ohm 1/16W	20	C20003306M160S
R123	R,CHIP THICK	470 ohm 1/16W	1	C20004716M160S
R124-R135	R,CHIP THICK	33 ohm 1/16W	22	C20003306M160S
R136-R138	R,CHIP THICK	1 kohm 1/16W	3	C20001026M160S
R139	R,CHIP THICK	33 ohm 1/16W	1	C20003306M160S
R140/R141	R,CHIP THICK	1 kohm 1/16W	2	C20001026M160S
R142/R143	R,CHIP THICK	33 ohm 1/16W	2	C20003306M160S
R144/R145	R,CHIP THICK	1 kohm 1/16W	2	C20001026M160S
R146	R,CHIP THICK	33 ohm 1/16W	1	C20003306M160S
R147	R,CHIP THICK	1 kohm 1/16W	1	C20001026M160S
R148-R150	R,CHIP THICK	33 ohm 1/16W	3	C20003306M160S
R153-R156	R,CHIP THICK	33 ohm 1/16W	4	C20003306M160S
R157	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R158	R,CHIP THICK	1 kohm 1/16W	1	C20001026M160S
R159-R163	R,CHIP THICK	33 ohm 1/16W	5	C20003306M160S
R164	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S
R165-R167	R,CHIP THICK	33 ohm 1/16W	3	C20003306M160S
R179/R180	R,CHIP THICK	0 ohm 1/16W	2	C20000006M160S
R183	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R184	R,CHIP THICK	0 ohm 1/16W	1	C20000006M160S
R185	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S
R186	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R188/R189	R,CHIP THICK	10 kohm 1/16W	2	C20001036M160S
R191-R193	R,CHIP THICK	10 kohm 1/16W	3	C20001036M160S
R194	R,CHIP THICK	12 kohm 1/16W	1	C20001236M160S
R195	R,CHIP THICK	750 ohm 1/16W	1	C20007516M160S
R196	R,CHIP THICK	220 ohm 1/16W	1	C20002216M160S
R197	R,CHIP THICK	1 Mohm 1/16W	1	C20001056M160S
R199/R200	R,CHIP THICK	150 ohm 1/16W	2	C20001516M160S
R202	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S
R214	R,CHIP THICK	47 kohm 1/16W	1	C20004736M160S
R215	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
R216	R,CHIP THICK	0 ohm 1/16W	1	C20000006M160S
R217/R218	R,CHIP THICK	10 kohm 1/16W	2	C20001036M160S
R220/R221	R,CHIP THICK	1 kohm 1/16W	2	C20001026M160S
R222-R244	R,CHIP THICK	0 ohm 1/16W	3	C20000006M160S
R225	R,CHIP THICK	75 ohm 1/16W	1	C20007506M160S
R227	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R229	R,CHIP THICK	47 kohm 1/16W	1	C20004736M160S
R230	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S
R233	R,CHIP THICK	75 ohm 1/16W	1	C20007506M160S
R238	R,CHIP THICK	1M ohm 1/16W	1	C20001056M160S
R239	R,CHIP THICK	100 kohm 1/16W	1	C20001046M160S
R242	R,CHIP THICK	470 ohm 1/16W	1	C20004716M160S
R243	R,CHIP THICK	100 kohm 1/16W	1	C20001046M160S
R247	R,CHIP THICK	0 ohm 1/16W	1	C20000006M160S
R250/R251	R,CHIP THICK	0 ohm 1/8W	2	C2000000061300S
REG100/REG101	IC,LINEAR-REGULATOR	BA33BC0FP 3.3V	2	J12603R300040S
REG102	IC,LINEAR-REGULATOR	IL1117 1.2V	1	J126111712040S
REG103	IC,LINEAR-REGULATOR	IL1117 3.3V	1	J126111700041S
XTAL100	CRYSTAL CHIP	12.288MHz	1	E80512R288010S
XTAL101	CRYSTAL CHIP	48.000MHz	1	E80548R000010S
PCB	P.C.B SUB ASSY	USB	1	7028067772010
PCB	P.C.B INS ASSY	USB-AXIAL	1	7027067772A10
PCB	P.C.B INS ASSY	USB-MANUAL	1	7027067772M10
PCB	P.C.B INS ASSY	USB-RADIAL	1	7027067772R10
PCB	P.C.B INS ASSY	USB-SMD	1	7027067772S10
C204/C205	C,CERAMIC CHIP T.C	47pF 50V	2	D010470167160S
C207-C209	C,CERAMIC CHIP HIK	0.1uF 50V	3	D011104577160S
CN103	CN,PLUG CONTACT		1	G480040100010S
CN104	CN,WIRE 2MM		1	L002301040150S
D702/D703	D,ESD CHIP		2	K067680200010S
L120/L127	COIL,BEAD	120ohm	2	D340160811210S
R236/R237	R,CHIP THICK	20 ohm 1/16W	2	C20002006M160S
R240/R241	R,CHIP THICK	15 kohm 1/16W	2	C20001536M160S
PCB	P.C.B TOTAL ASSY	STANDBY	1	7025HK0814014
PCB	P.C.B SUB ASSY	STANDBY	1	7028066901010
PCB	P.C.B INS ASSY	STANDBY-AXIAL	1	7027066901A10
PCB	P.C.B	STANDBY	1	7020066900000S
PCB	P.C.B INS ASSY	STANDBY-MANUAL	1	7027066901M10
PCB	P.C.B INS ASSY	STANDBY-RADIAL	1	7027066901R10
PCB	P.C.B INS ASSY	STANDBY-SMD	1	7027066901S10
C300	C,ELECT GE 85C	10uF 50V	1	D040100087070S
C301	C,ELECT GE 85C	2200uF 16V	1	D040222083080S
C302/C315	C,ELECT GE 85C	1uF 50V	2	D040010087150S
C304	C,CERAMIC AC(SAFETY)	0.0047uF 250VAC	1	D00847208H010S
CN301	CN.FPC 1.25MM		1	L131007000010S
CP304	CN.WAFER 7.92MM		1	L108353280270S
CP305	CN.WAFER 7.92MM		1	L108353280260S
CP306	CN.WAFER 7.92MM		1	L108202000220S

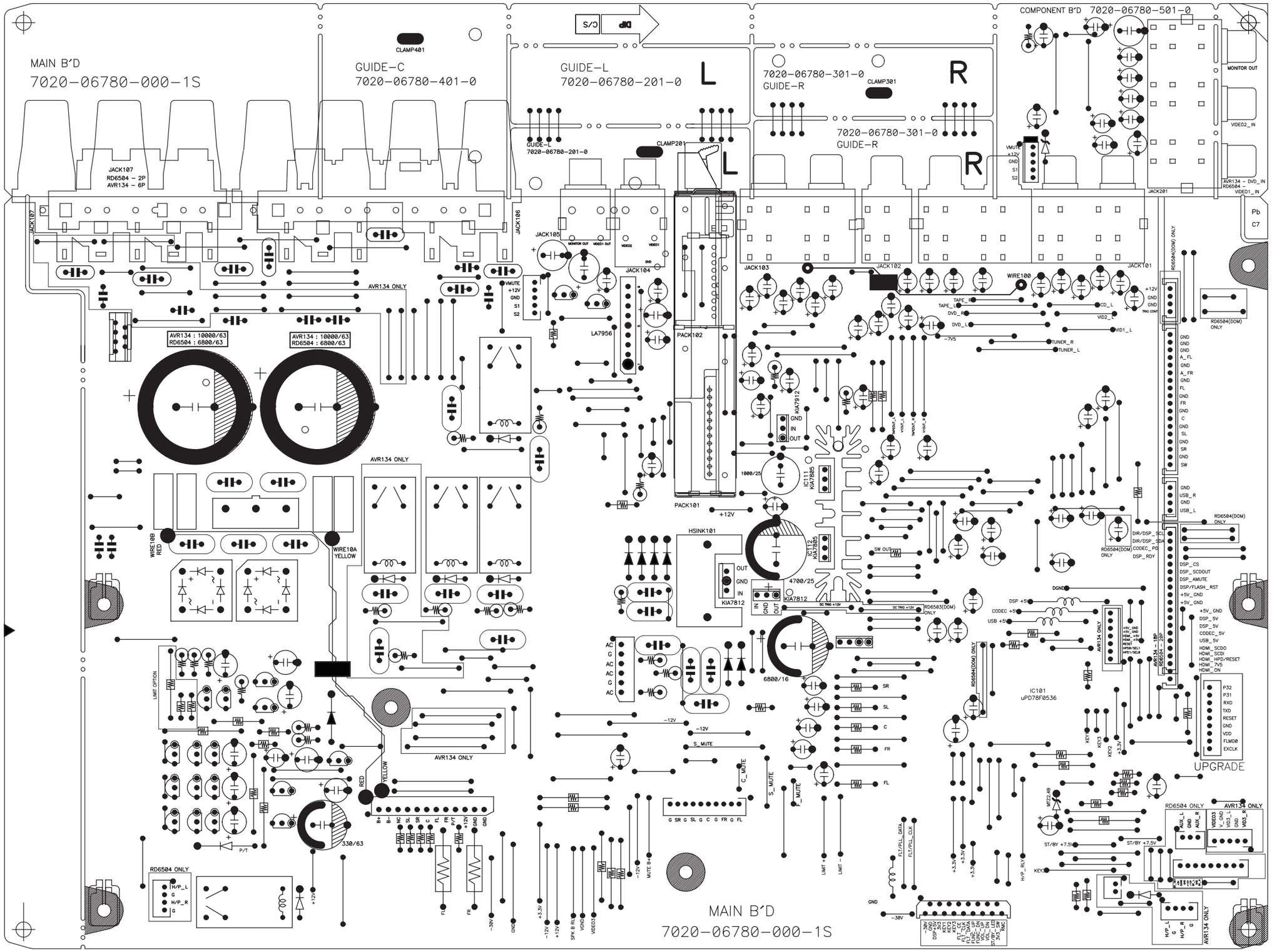
REF NO.	DESCRIPTION		Q'TY	PART NO.
D302-D304	D,SWITCHING CHIP	1N4148WS	3	K005041483230S
D305-D308	D,SWITCHING	1N4007	4	K000400700010S
F301	FUSE GLASS TUBE 20MM	T4A 250V	1	N751224001110S
F301A/B	HOLDER,FUSE CLIP		2	G645000050010S
GT301	TERMINAL		1	3790040886000S
IC300	IC,LINEAR-REGULATOR	IL1117	1	J126111700041S
J301-J303	CN,WIRE 1P	0.6/52MM	3	L045084006040S
J304	R,CHIP THICK	0 ohm 1/8W	1	C200000061300S
PT301	POWER TRANS	240V/50HZ	1	8200280150530S
Q300/Q301	SEMI,CHIP TR/NPN 2SC	KTC3875S 0.15W	2	J522038750210S
R300	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R301	R,CHIP THICK	20 kohm 1/16W	1	C20002036M160S
R302	R,CHIP THICK	3.3 kohm 1/16W	1	C20003326M160S
R303	R,CHIP THICK	2.2 kohm 1/16W	1	C20002226M160S
R304	R,METAL FILM 100PPM	10 ohm 1/4W	1	C060010063050S
R333	R,CHIP THICK	47 kohm 1/16W	1	C20004736M160S
RLY301	RELAY	DC6V 5A	1	G680060502010S
ZD301	D,ZENER	MTZJ4.7B 0.5W	1	K06004R744520S
PCB	P.C.B TOTAL ASSY	HDMI	1	7025HK0814015
PCB	P.C.B SUB ASSY	HDMI	1	7028067691010
PCB	P.C.B INS ASSY	HDMI-MANUAL	1	7027067691M10
PCB	P.C.B INS ASSY	HDMI-RADIAL	1	7027067691R10
PCB	P.C.B INS ASSY	HDMI-SMD	1	7027067691S10
PCB	P.C.B	HDMI	1	7020067770000S
BKT01/BKT02	SHIELD	PLATE GND	2	3070045526010S
CP201	CN.WAFER 2.0MM		1	L101200100710S
JACK01-JACK04	CN.WAFER		4	L109100190020S
R47	R,METAL FILM 100PPM	0.47 ohm 1W	1	C060R47065050S
C24/C25	C,ELECT GE 85C	10uF 50V	2	D040100087070S
C28H-C30H	C,ELECT GE 85C	10uF 50V	3	D040100087070S
C33/C35	C,ELECT GE 85C	10uF 50V	2	D040100087070S
CB03	R,CHIP THICK	0 ohm 1/16W	1	C20000006M160S
R01-R04	R,CHIP THICK	0 ohm 1/16W	4	C20000006M160S
R108	R,CHIP THICK	0 ohm 1/16W	1	C20000006M160S
R13-R17	R,CHIP THICK	0 ohm 1/16W	5	C20000006M160S
R29/R30	R,CHIP THICK	0 ohm 1/16W	2	C20000006M160S
R37-R42	R,CHIP THICK	0 ohm 1/16W	6	C20000006M160S
R45/R46	R,CHIP THICK	0 ohm 1/16W	2	C20000006M160S
R105	R,CHIP THICK	100 ohm 1/16W	1	C20001016M160S
R05/R06	R,CHIP THICK	1 kohm 1/16W	2	C20001026M160S
R106	R,CHIP THICK	1 kohm 1/16W	1	C20001026M160S
R22	R,CHIP THICK	1 kohm 1/16W	1	C20001026M160S
R07/R08	R,CHIP THICK	10 kohm 1/16W	2	C20001036M160S
R23	R,CHIP THICK	10 kohm 1/16W	1	C20001036M160S
R24/R25	R,CHIP THICK	1.5 kohm 1/16W	2	C20001526M160S
R35/R36	R,CHIP THICK	1.8 kohm 1/16W	2	C20001826M160S
R100H/R101H	R,CHIP THICK	470 ohm 1/16W	2	C20004716M160S
R20	R,CHIP THICK	4.7 kohm 1/16W	1	C20004726M160S

REF NO.	DESCRIPTION		Q'TY	PART NO.
R27/R28	R,CHIP THICK	4.7 kohm 1/16W	2	C20004726M160S
R09/R10	R,CHIP THICK	4.7 kohm 1/16W	2	C20004736M160S
R107	R,CHIP THICK	4.7 kohm 1/16W	1	C20004736M160S
R11/R12	R,CHIP THICK	4.7 kohm 1/16W	2	C20004736M160S
R43/R44	R,CHIP THICK	4.7 kohm 1/16W	2	C20004736M160S
C21/C23	C,CERAMIC CHIP T.C	100pF 50V	2	D010101167160S
C01	C,CERAMIC CHIP HIK	1000pF 50V	1	D011102777160S
C06/C07	C,CERAMIC CHIP HIK	1000pF 50V	2	D011102777160S
C15-C17	C,CERAMIC CHIP HIK	1000pF 50V	3	D011102777160S
C20/C22	C,CERAMIC CHIP HIK	1000pF 50V	2	D011102777160S
C37	C,CERAMIC CHIP HIK	1000pF 50V	1	D011102777160S
C26/C27	C,CERAMIC CHIP HIK	0.01uF 50V	2	D011103777160S
C34/C36	C,CERAMIC CHIP HIK	0.01uF 50V	2	D011103777160S
C02-C05	C,CERAMIC CHIP HIK	0.1uF 50V	4	D011104577162S
C08-C14	C,CERAMIC CHIP HIK	0.1uF 50V	7	D011104577162S
C18/C19	C,CERAMIC CHIP HIK	0.1uF 50V	2	D011104577162S
CB01/CB02/CB06	COIL,BEAD	120 ohm	3	D340160811210S
IC01	IC,LOGIC	SIL9185	1	J040918500020S
IC03	IC,LINEAR-REGULATOR	LM1117S 1.8V	1	J126111718020S
IC04	IC,LINEAR-REGULATOR	LM1117S 3.35V	1	J126111733030S
Q01/Q02/Q06	SEMI,CHIP TR/NPN 2SC	KRC102S 0.2W	3	J522010200210S
Q03-Q05	SEMI,CHIP TR/NPN 2SC	KRC104S	3	J522104S00210S
Q07	SEMI,CHIP TR/NPN 2SC	KRC104S	1	J522104S00210S
D44	D,SWITCHING CHIP	KDS4148U	1	K005041480030S
ZD101	D,ZENER CHIP	0.2W 5.1V	1	K06605R14P400S

PRINTED CIRCUIT BOARDS_1

Model : AVR-134

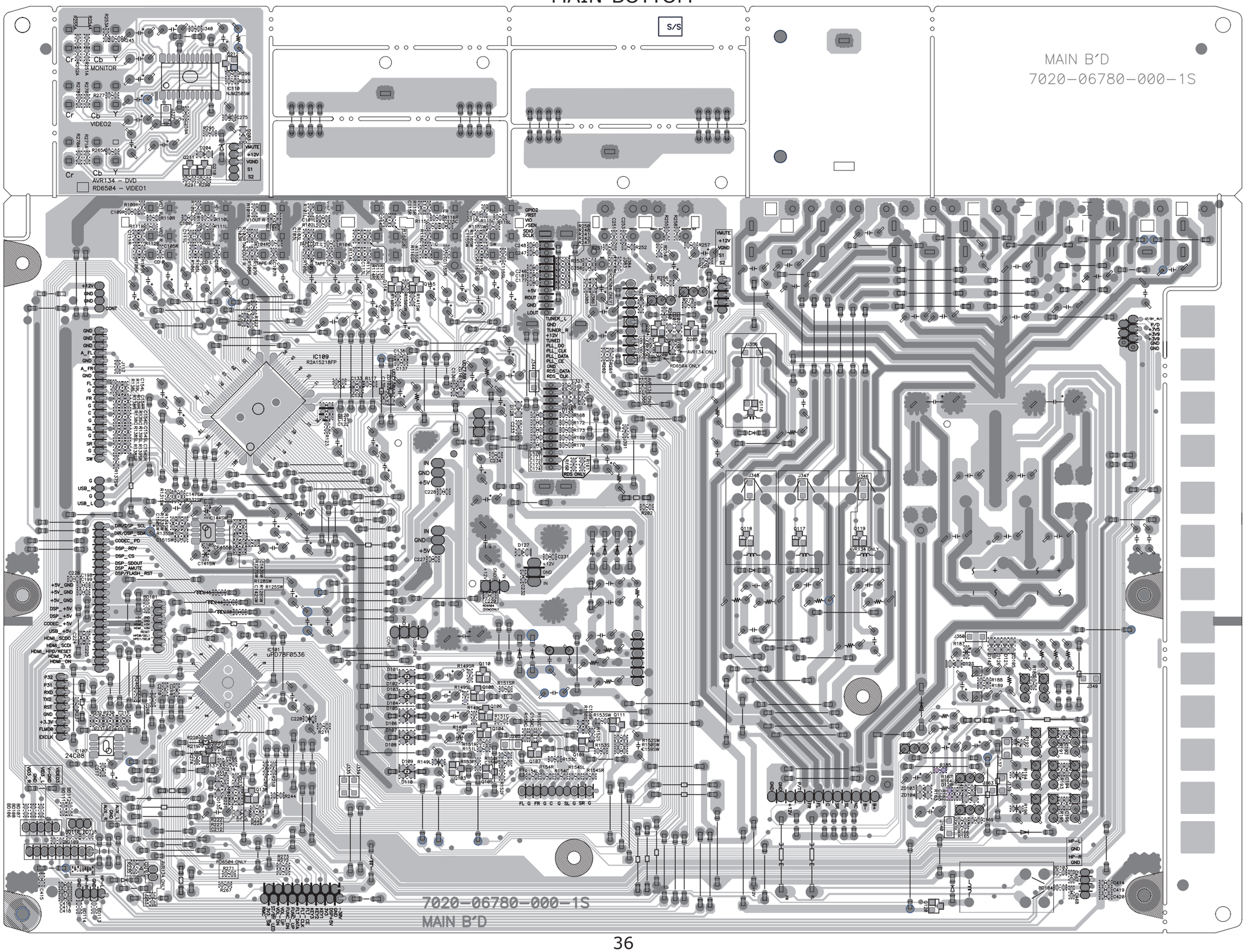
MAIN-TOP



PRINTED CIRCUIT BOARDS_2

Model : AVR-134

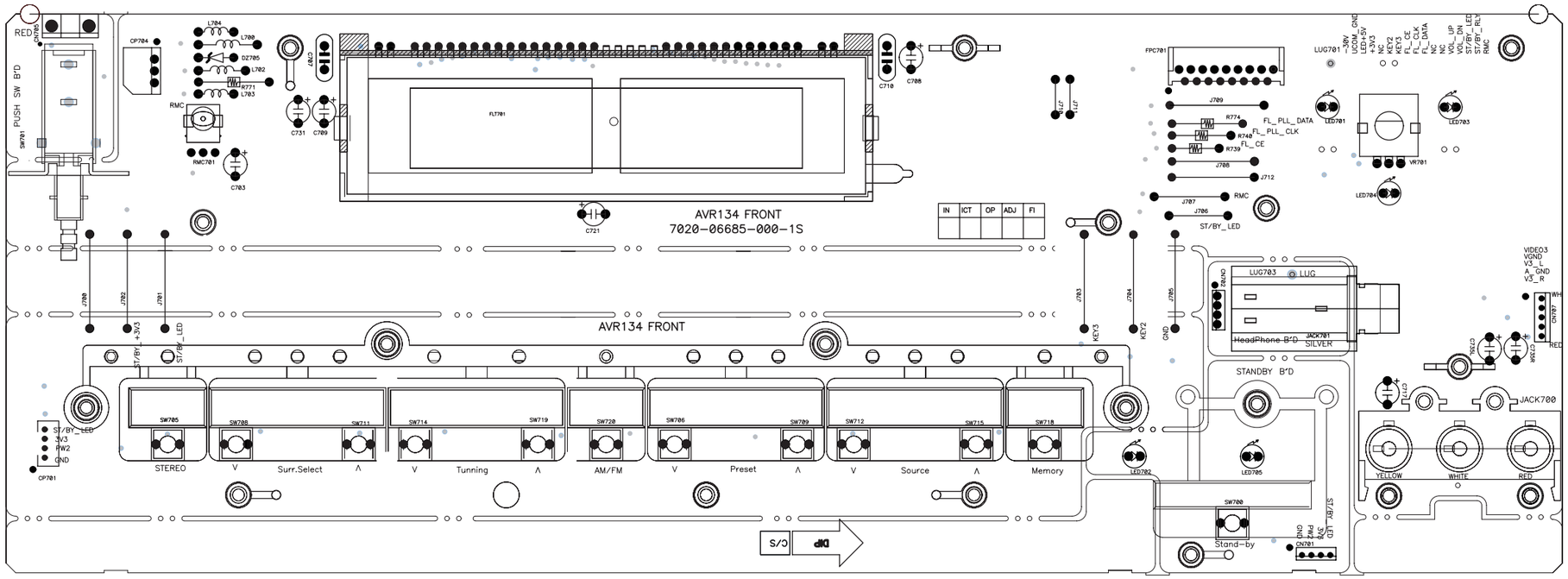
MAIN-BOTTOM



PRINTED CIRCUIT BOARDS_3

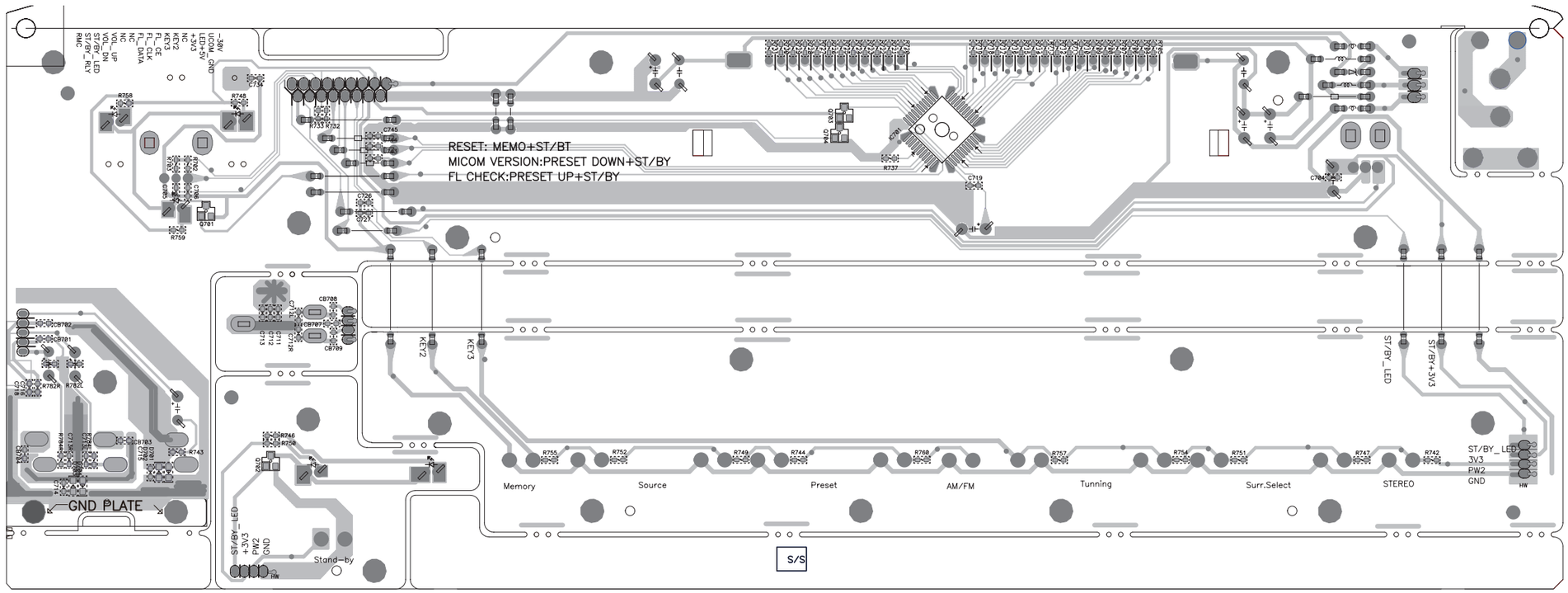
FRONT-TOP

Model : AVR-134



PRINTED CIRCUIT BOARDS_4

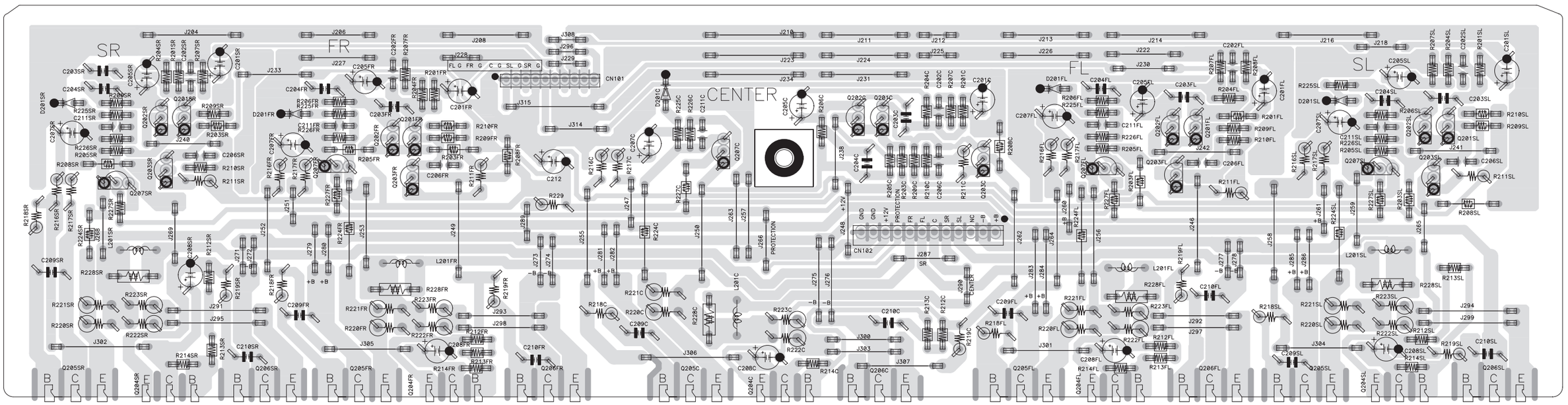
FRONT-BOTTOM



PRINTED CIRCUIT BOARDS_5

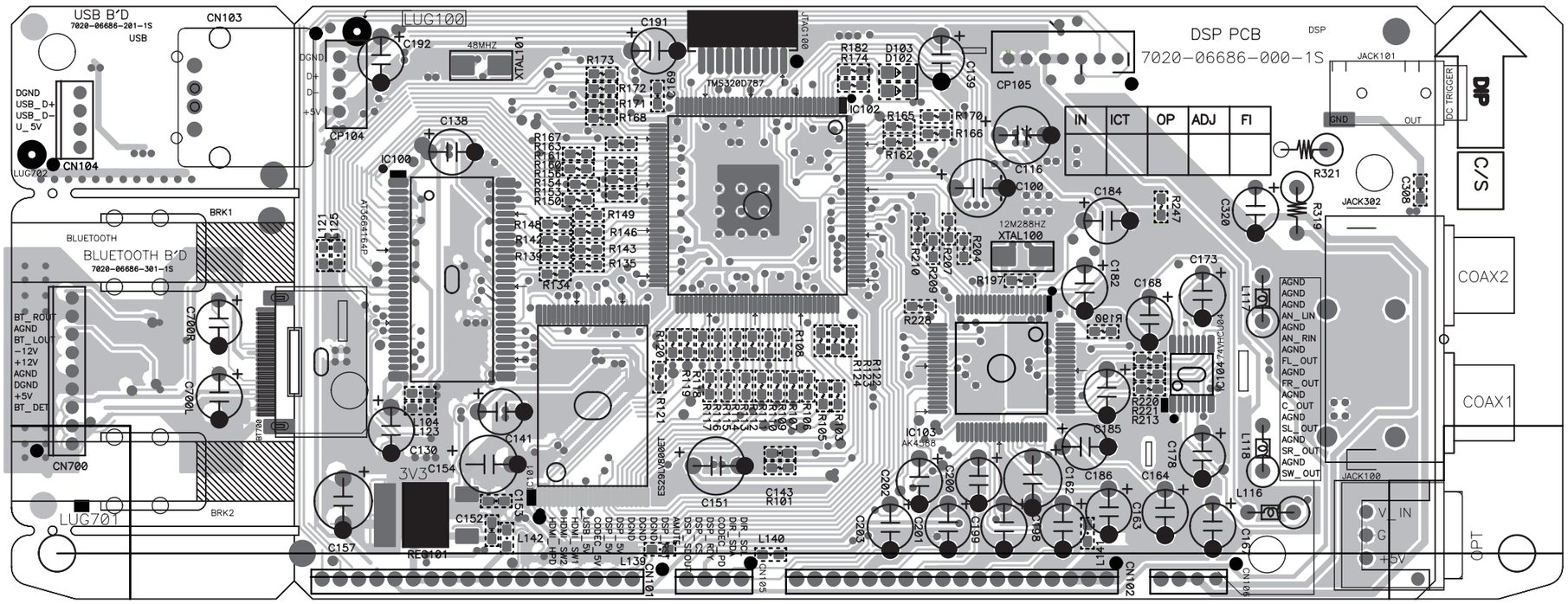
AMP

Model : AVR-134



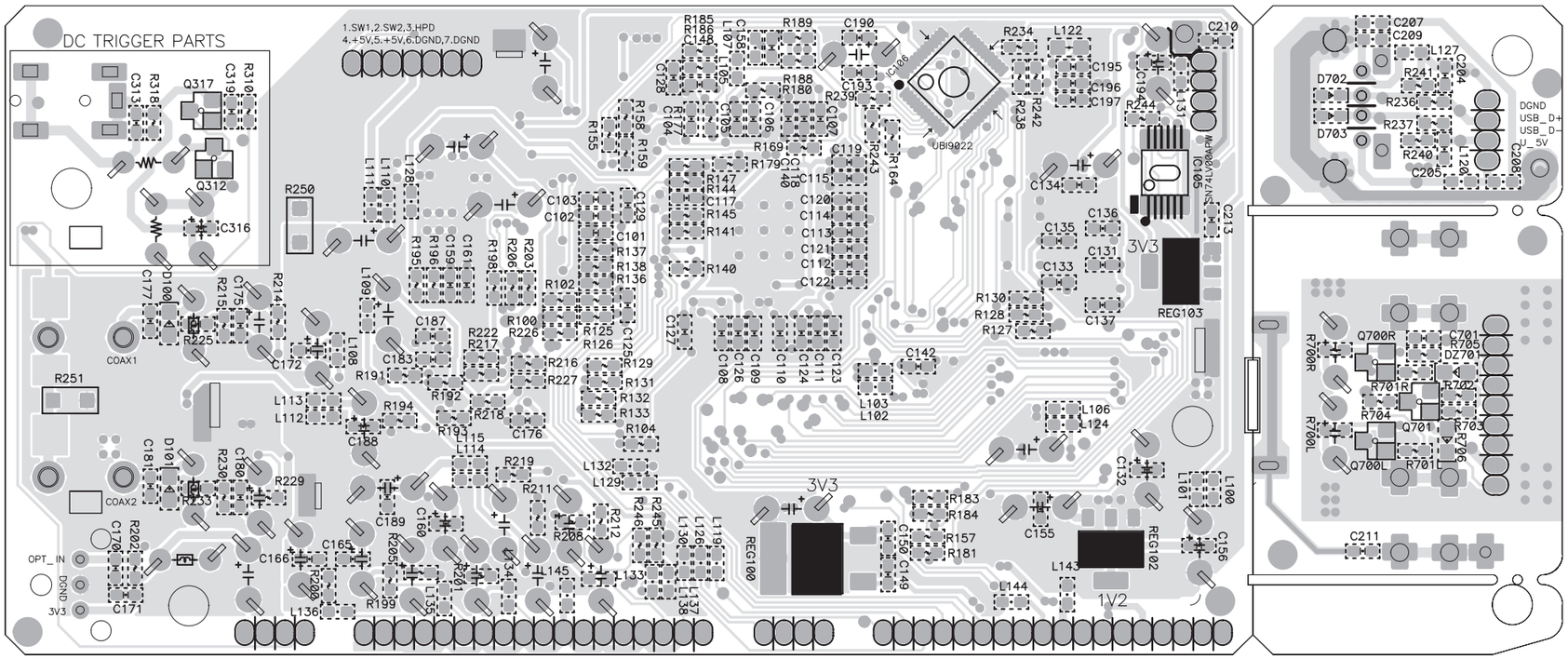
PRINTED CIRCUIT BOARDS_6

DSP-TOP



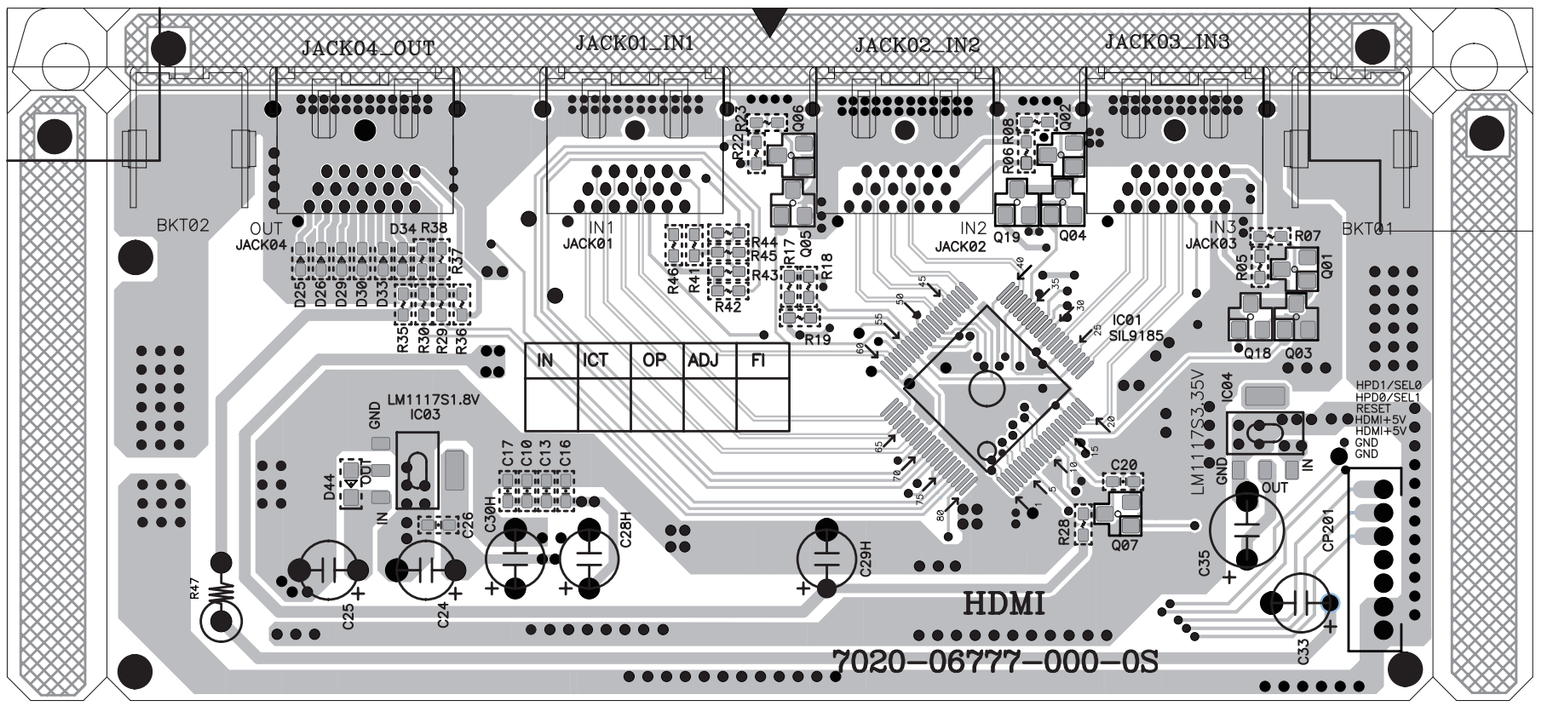
PRINTED CIRCUIT BOARDS_7

DSP-BOTTOM



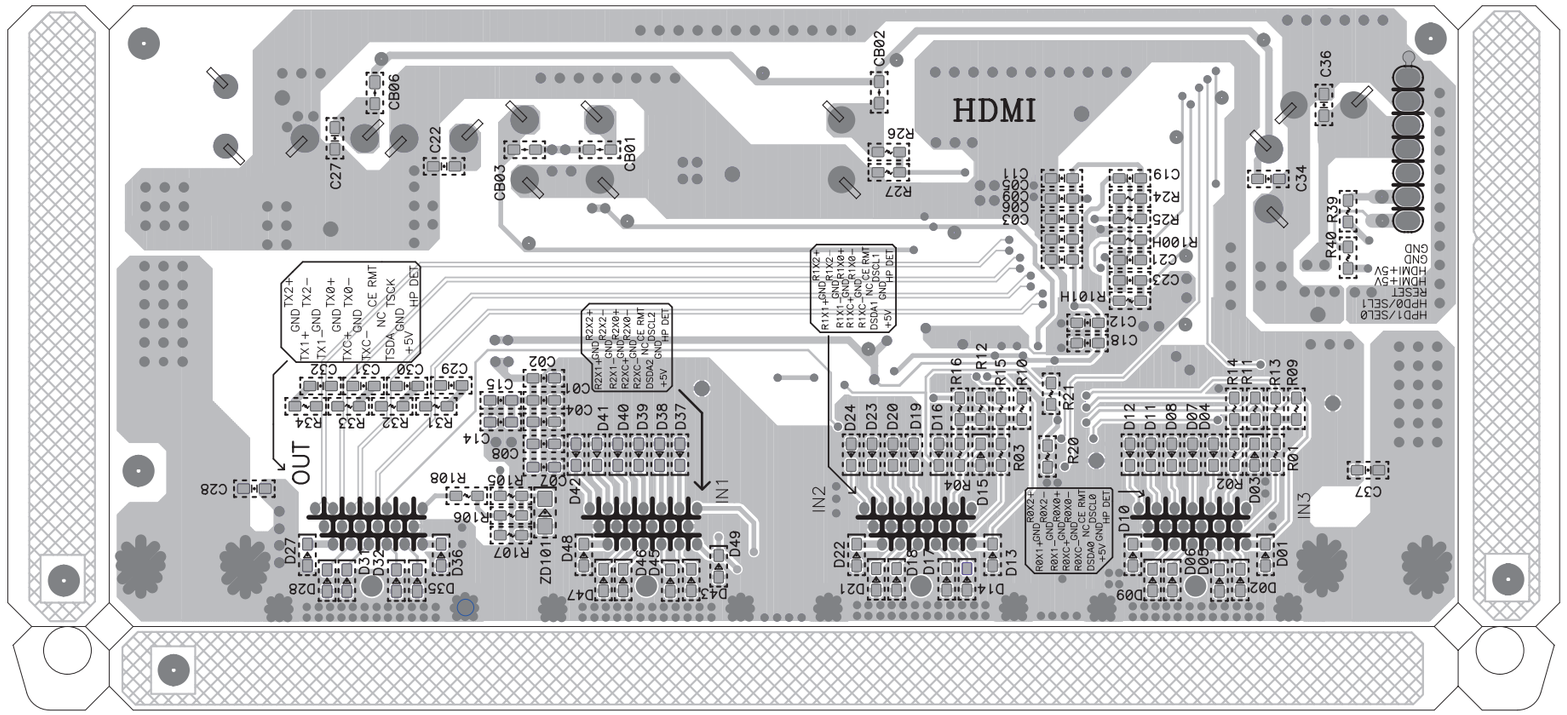
PRINTED CIRCUIT BOARDS_8

HDMI-TOP



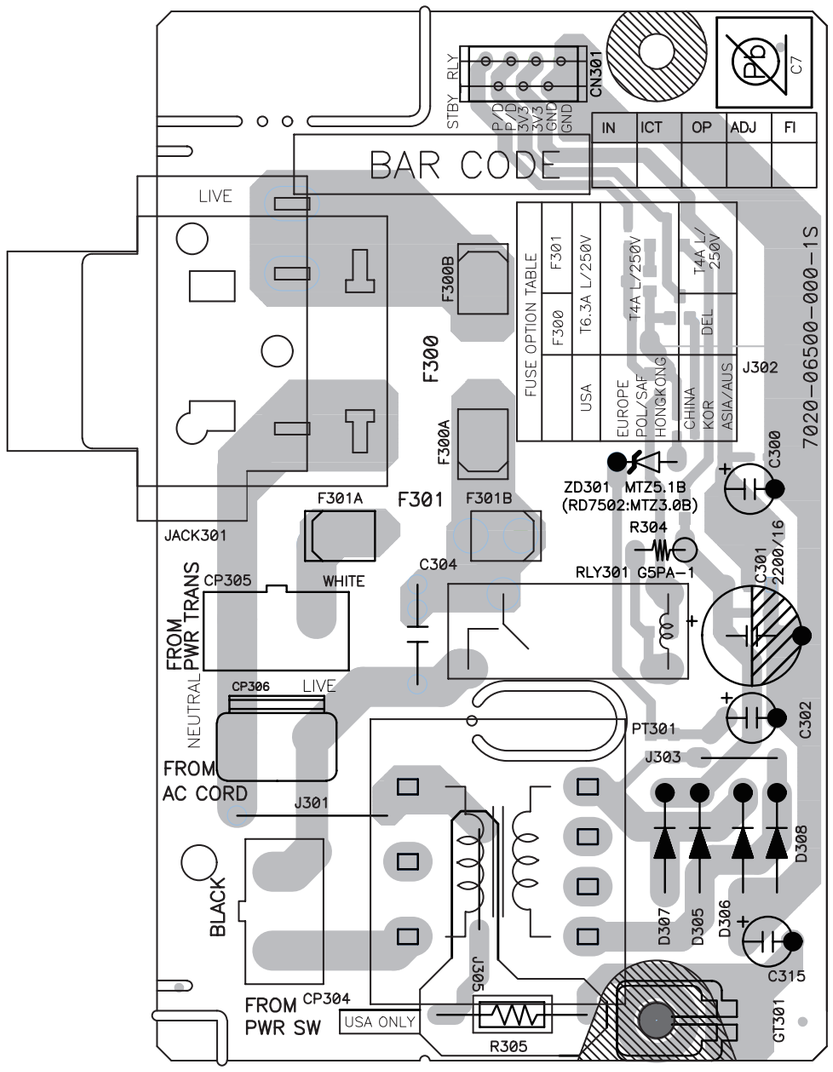
PRINTED CIRCUIT BOARDS_9

HDMI-BOTTOM



PRINTED CIRCUIT BOARDS_10

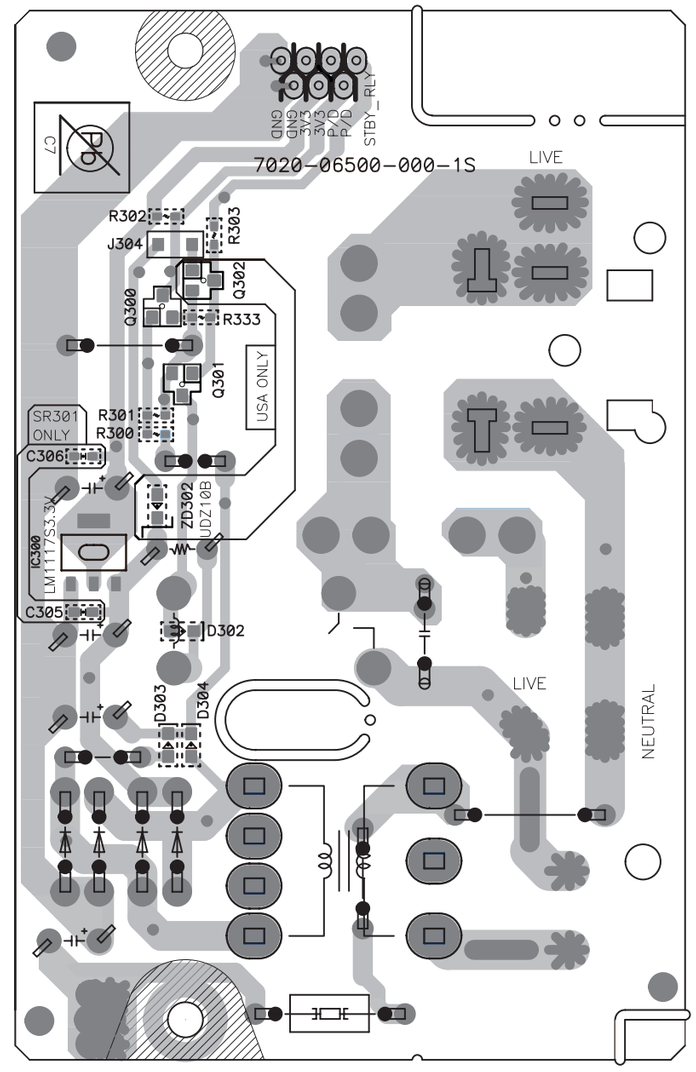
STANDBYI-TOP



PRINTED CIRCUIT BOARDS_11

1STANDBY-BOTTOM

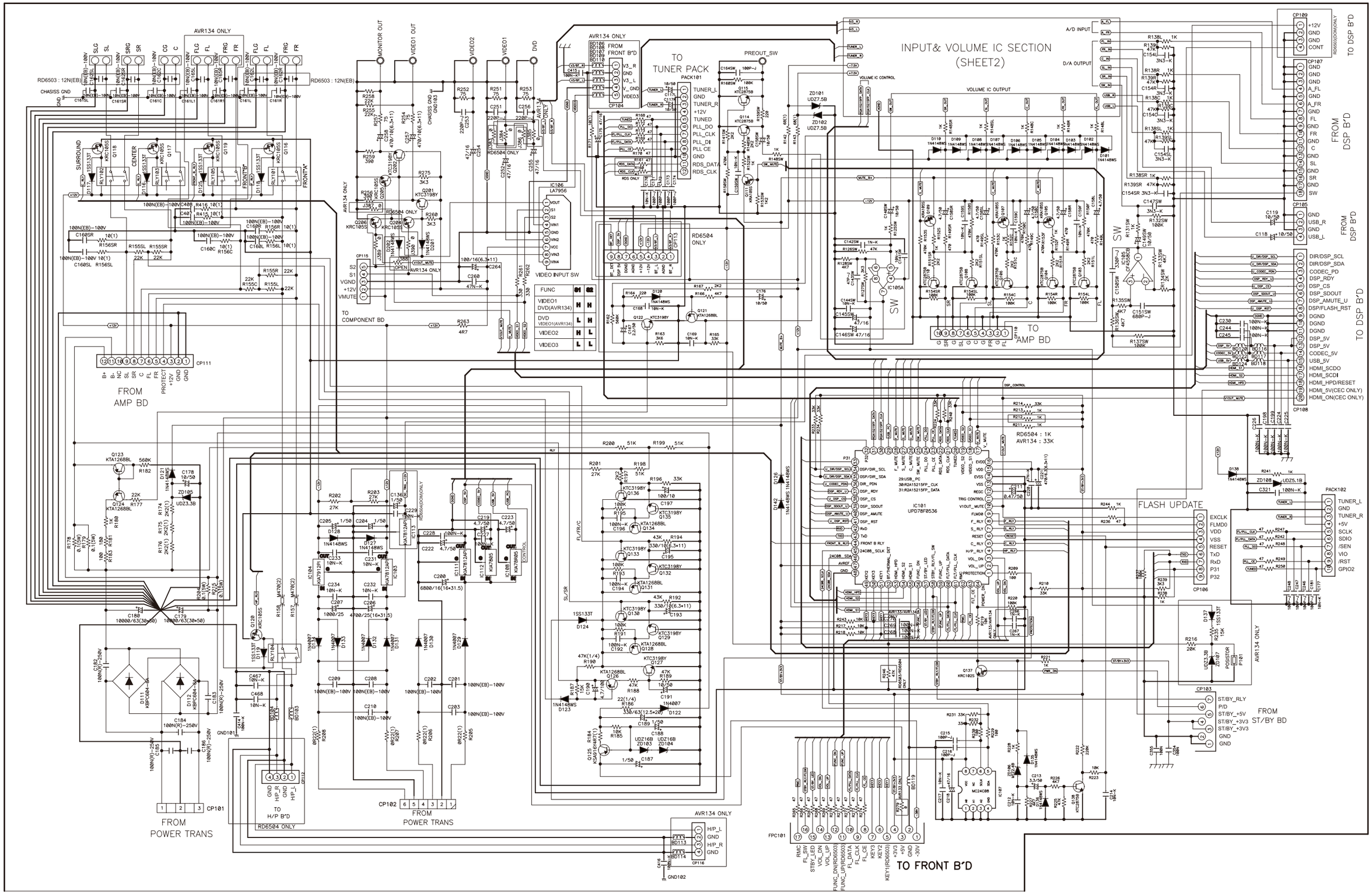
Model : AVR-134



SCHEMATIC DIAGRAMS_1

MAIN_1

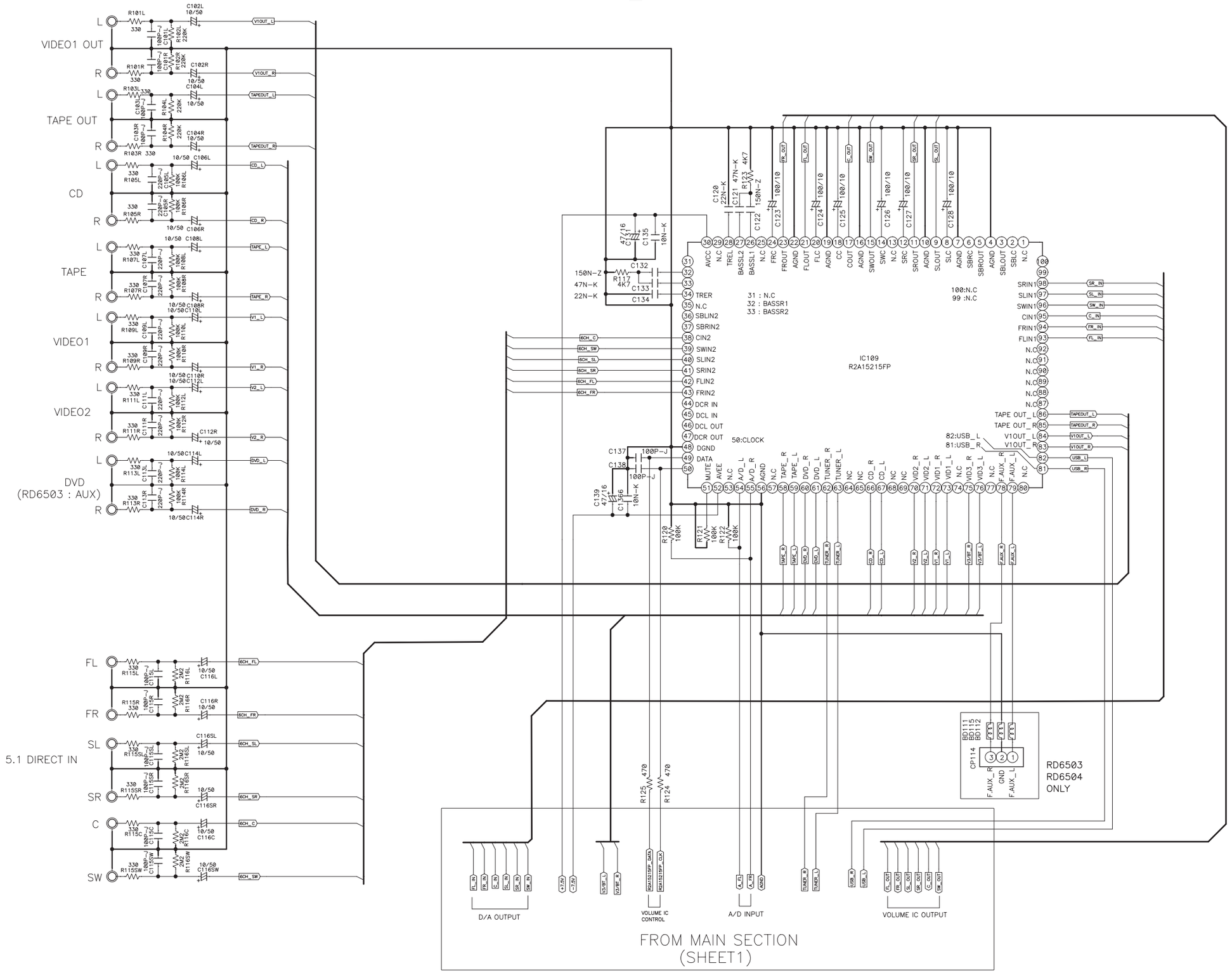
Model : AVR-134



SCHEMATIC DIAGRAMS_2

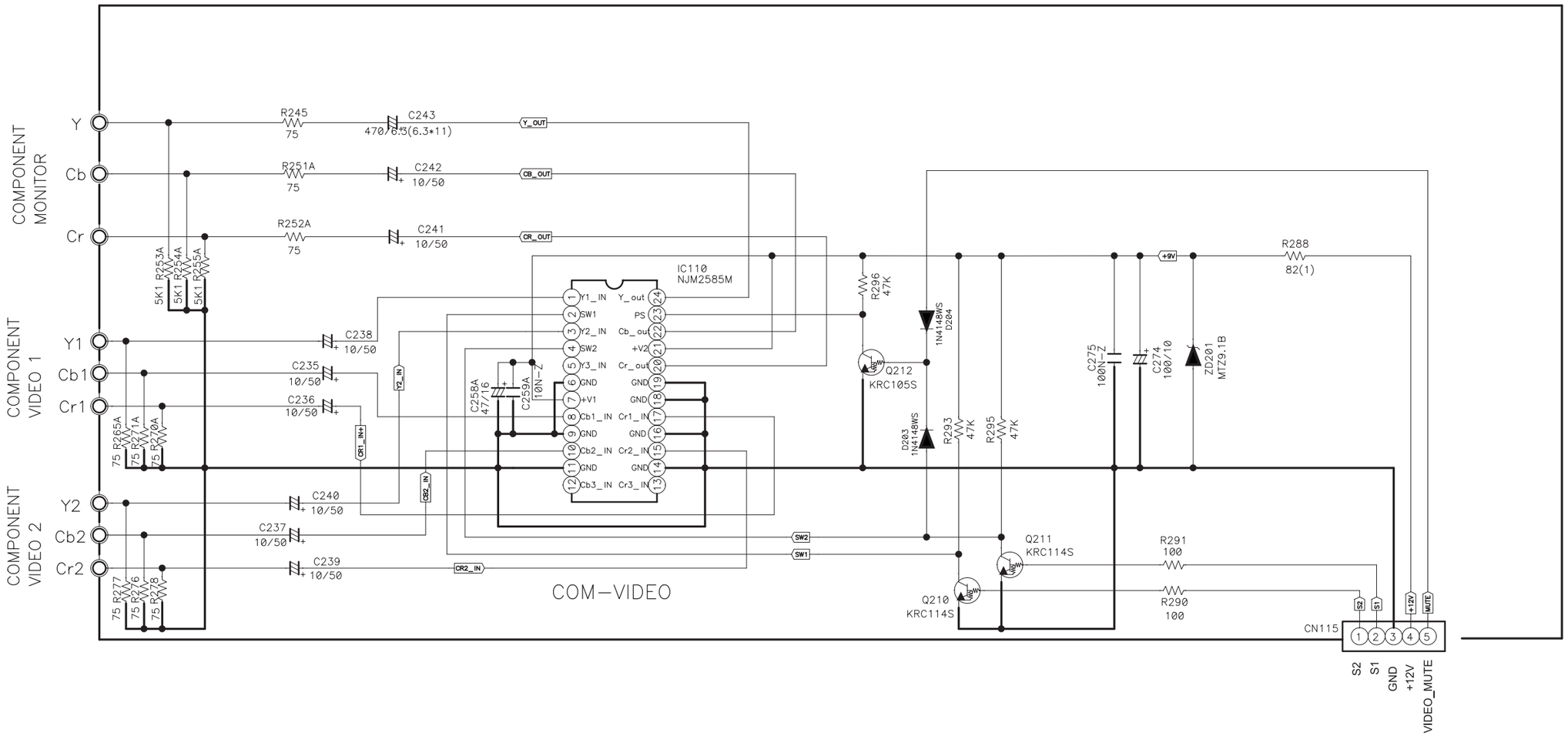
MAIN_2

Model : AVR-134



SCHEMATIC DIAGRAMS_3
COMPONENT

Model : AVR-134



VIDEO INPUT SW

FUNC	S1	S2
——	H	H
VIDEO1	L	H
VIDEO2	H	L
VIDEO3	L	L

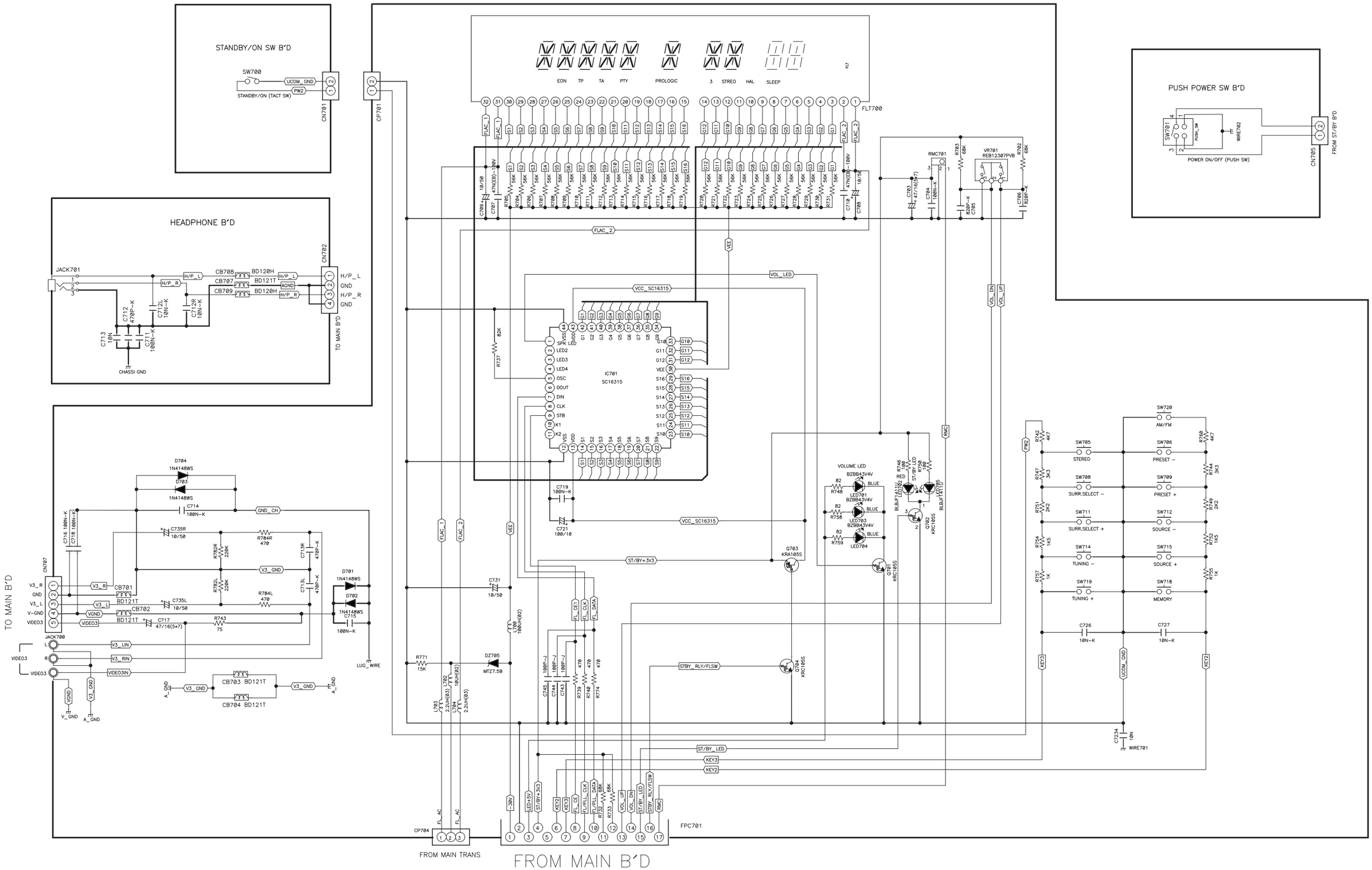
COMPONENT
NJM2585M

SW1	SW2	OUTPUT
0	0	—
0	1	IN1(VID1)
1	0	IN2(VID2)
1	1	—

SCHEMATIC DIAGRAMS_4

FRONT

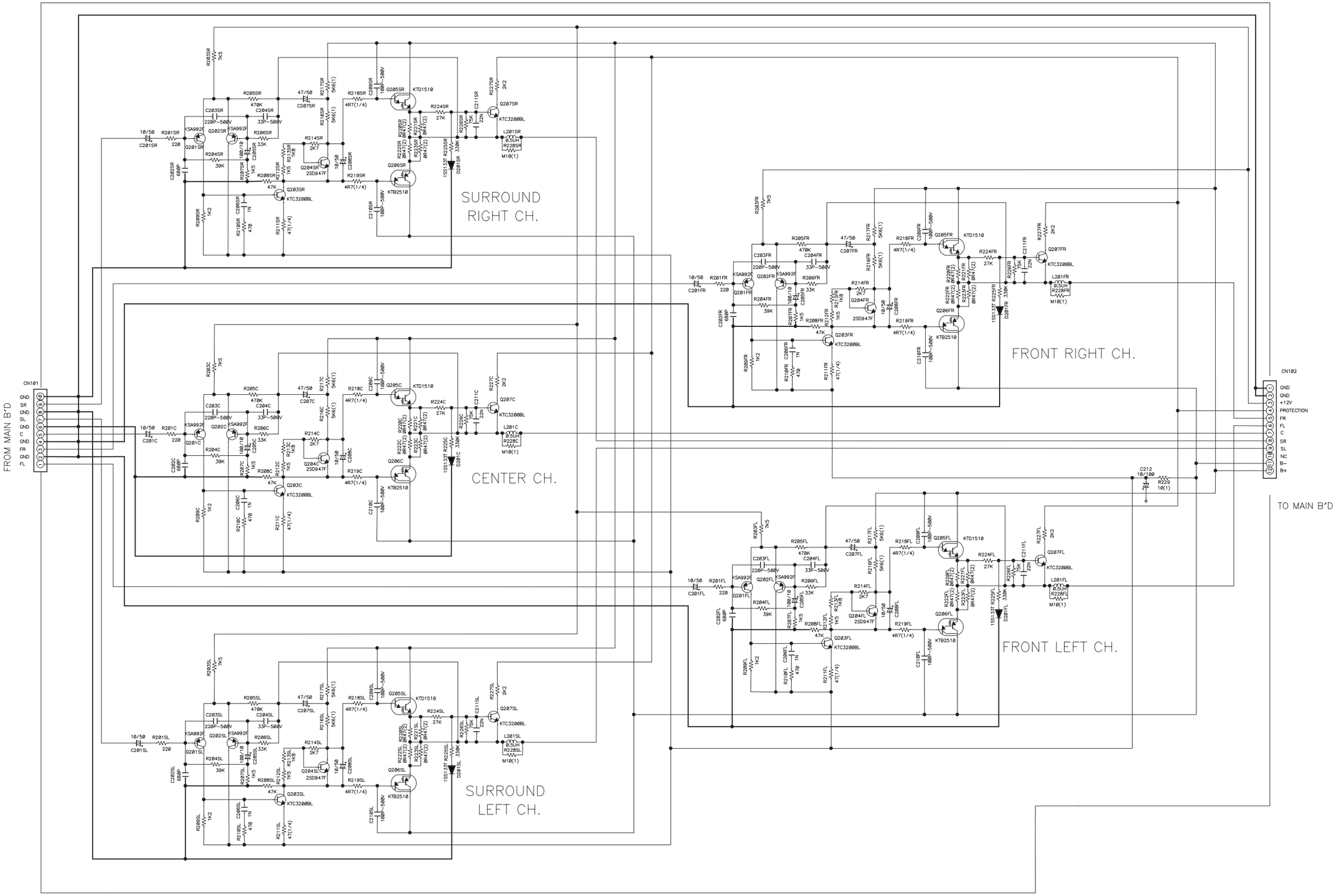
Model : AVR-134



SCHEMATIC DIAGRAMS_5

AMP

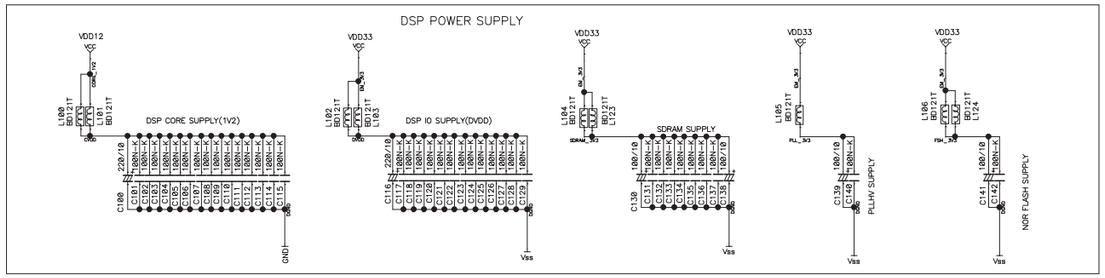
Model : AVR-134

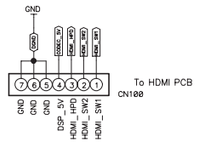


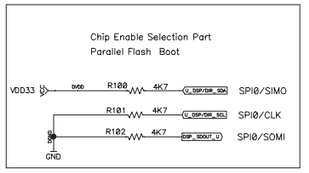
SCHEMATIC DIAGRAMS_6

DSP_DA787

Model : AVR-134







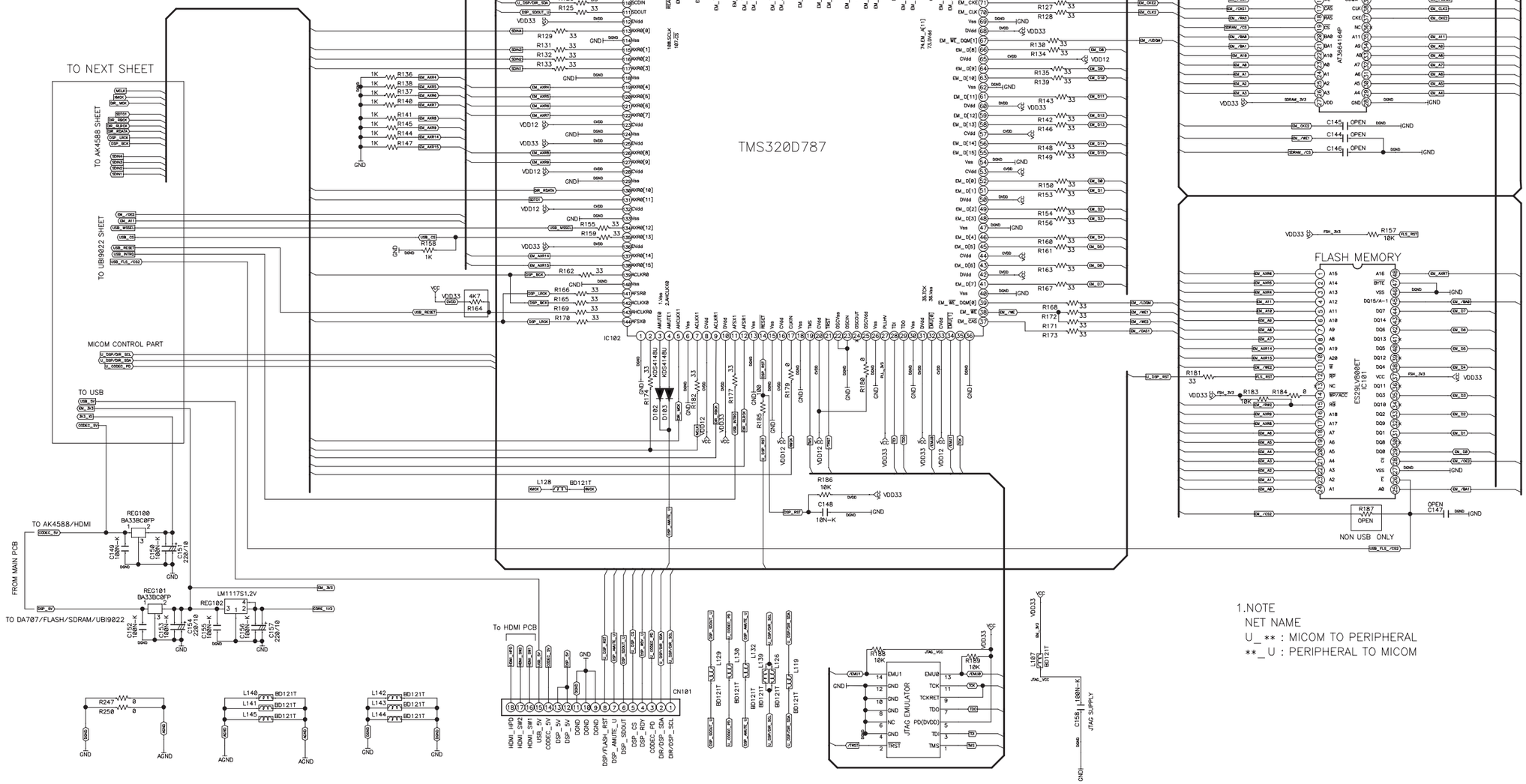
PART No.
R100 to R189
C100 to C158
L100 to L107
IC100 to IC102
CN100 to CN101
REG100 to REG102

DA787 Power Pins

Core Supply(CVDD):Pin8,16,20,33,44,53,57,65,77,85,90,101,123,128,132

IO Supply(DVDD):Pin10,31,42,50,60,68,73,81,92,103,112,125,136

Ground(VSS):Pin1,6,13,15,18,26,30,36,40,47,54,62,69,72,78,82,87,95,99,106,109,114,118,124,129,133,140



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

SCHEMATIC DIAGRAMS_7

DSP-DIR WITH CODEC

Model : AVR-134

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

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

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

IC103
AK4588

TO NEXT SHEET

FROM DSP SHEET

FROM MICOM

TO DSP PIN17

FROM DSP I2S

TO AK4588

ANALOG OUTPUT

TO USB OUT

TO MAIN PCB

TO DIGITAL INPUT

OPT_IN

COAX 1

COAX 2

Digital input

AVSS,DVSS and PVSS of the AK4588 must be connected to analog ground plane.

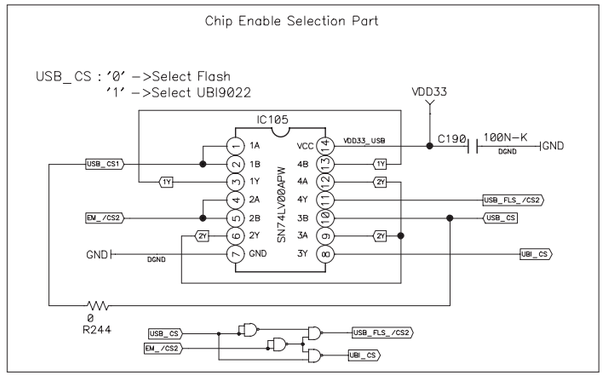
1.NOTE
NET NAME
U_** : MICOM TO PERIPHERAL
**_U : PERIPHERAL TO MICOM

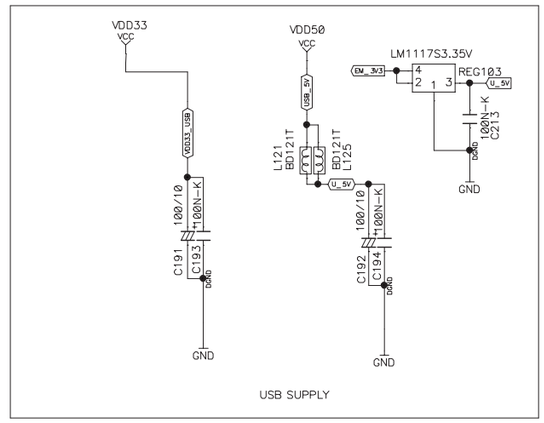
PART No.
R190 to R233
C159 to C189
L108 to L119
IC103 to IC104
CN102
JACK100 to JACK102
XTAL100

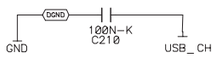
SCHEMATIC DIAGRAMS_8

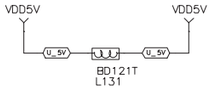
DSP-UBI9022

Model : AVR-134

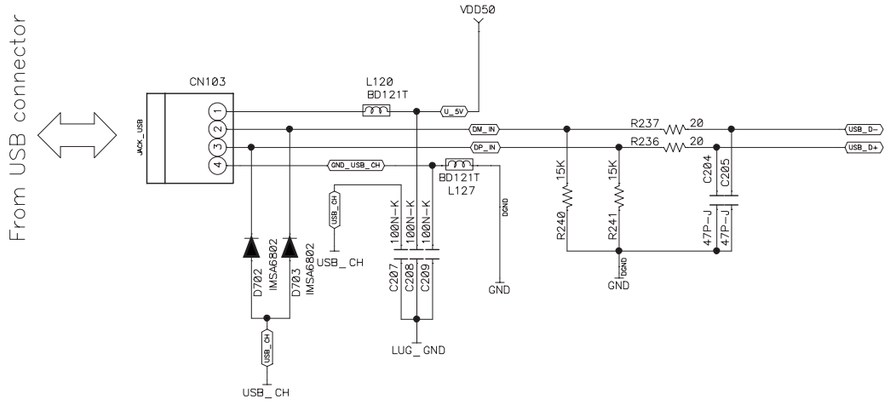


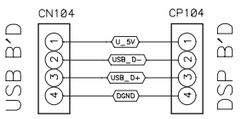


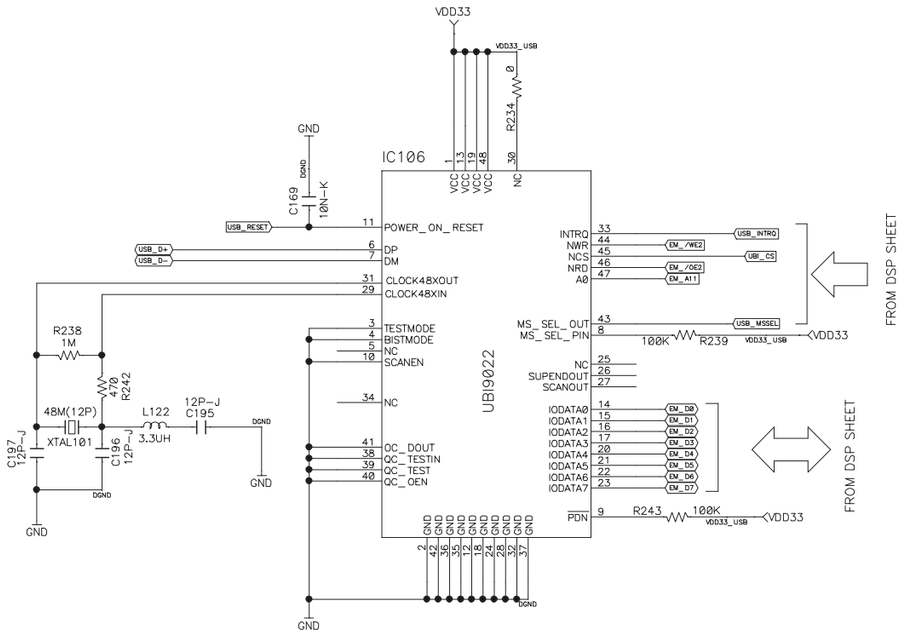




USB_D+/D-: IMPEDANCE MATCHING 90 Ohm







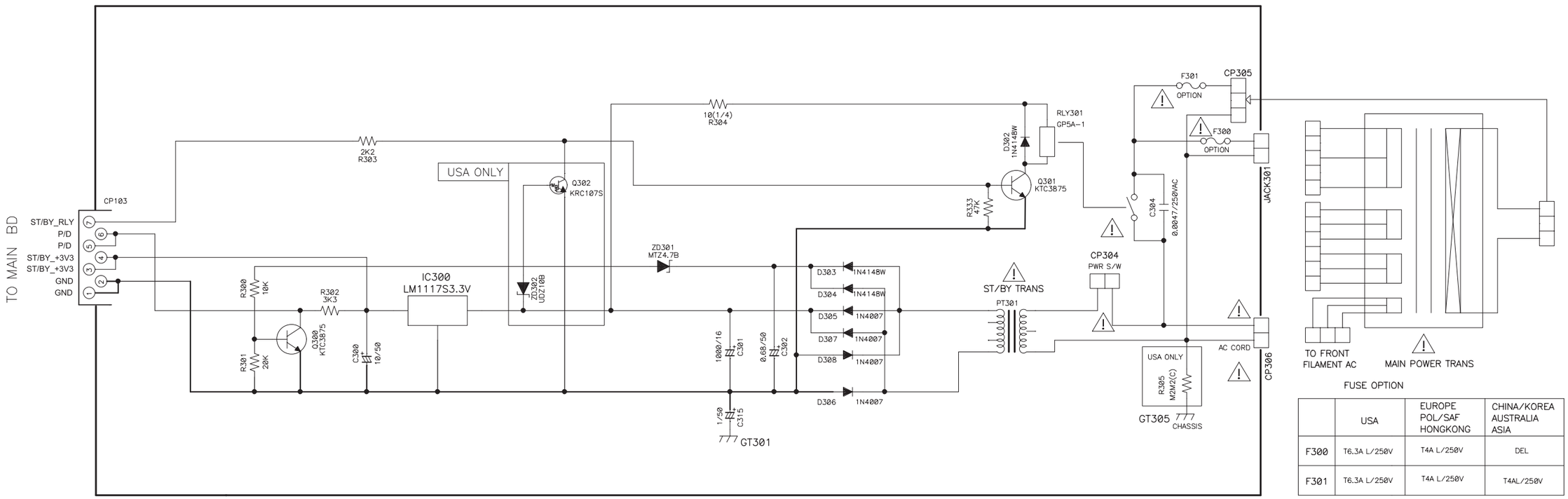
PART No.

R234 to R243
C190 to C197
L119 to L122
IC105 to IC106
CN103

SCHEMATIC DIAGRAMS_9

STANDBY

Model : AVR-134



FUSE OPTION

	USA	EUROPE POL/SAF HONGKONG	CHINA/KOREA AUSTRALIA ASIA
F300	T6.3A L/250V	T4A L/250V	DEL
F301	T6.3A L/250V	T4A L/250V	T4AL/250V

NOTES

1. Resistor values are indicated in ohms unless otherwise specified
   [k = 1.000 m = 1.000.000]
2. Capecitor values are indicated in microfarades unless otherwise specified.
   [p = micro-microfarades]
3. ⊣□⊢ : These resistor are to be segregated from printed wiring board or other acessible parts.

CAUTION

Safety precaution to be followed during servicing ⚠

1] Since those parts marked with are critical parts for safety.
   use only the one described in the parts list

2] Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are prorerly insulated from the supply circuit.

CAUTION

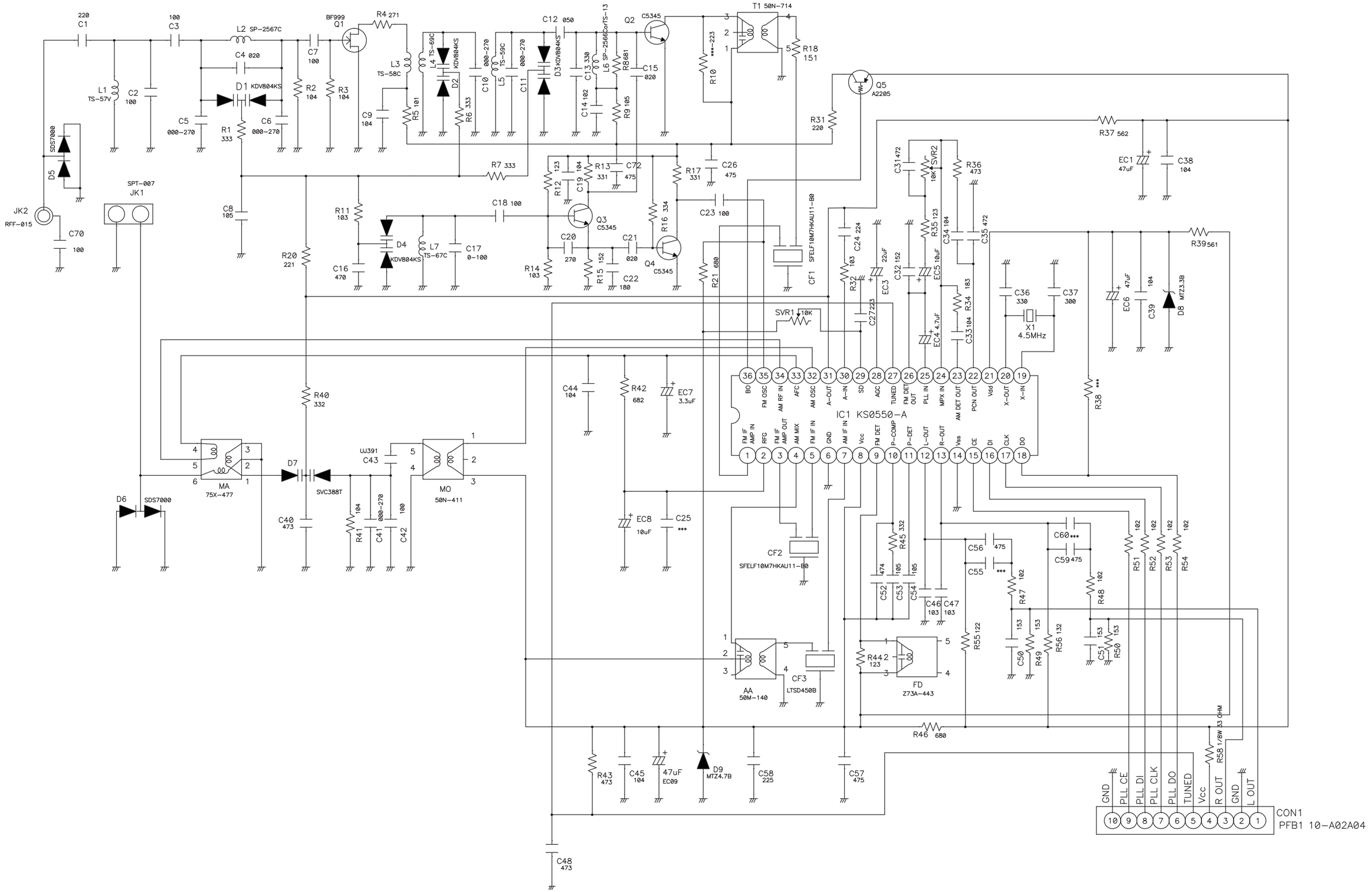
{Value}

⚠ INDICATES SAFETY CRITICAL COMPONENTS.
TO REDUCE THE RISK OF ELECTIC SHOCK, LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS SHALL BE CARRIED OUT (EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT) BEFORE THE APPLIANCE RETURNED TO THE CUSTOMER.

SCHEMATIC DIAGRAMS_10

TUNER ASS'Y

Model : AVR-134



SCHEMATIC DIAGRAMS_11

HDMI

INPUT SEL TABLE

	EPSEL1(15)	EPSEL0(14)
HDMI1	0	1
HDMI2	0	0
HDMI3	1	1
ST/BY MODE	1	0

HDMI_ IN3

HDMI_ IN2

HDMI_ IN1

HDMI_ OUT

ESD DIODE

ESD DIODE

ESD DIODE

FROM DSP B'D