



**AKAI**

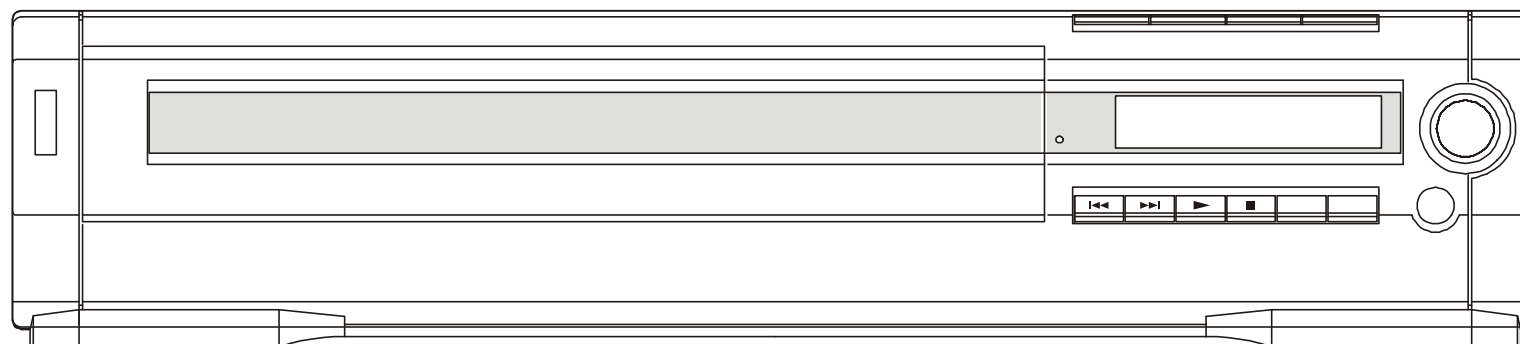
**3 DVD / CD  
HOME THEATRE SYSTEM**

Model:  
DV-R3500SS

**SERVICE MANUAL**

# Service Manual

## 3 DVD / CD HOME THEATRE SYSTEM



**DV-R3500SS**

### CONTENTS

	Page
Specifications .....	1
Performance Specifications .....	2
Electrical Parts List .....	8
Printed Circuit Boards .....	27
Wiring Diagrams .....	39
Schematic Diagrams .....	43
Alignment Set-up Procedures .....	60
Equipment Connection Diagram .....	60
Voltage Chart .....	61
IC Block Diagrams & IC Pins Description .....	69
Block Diagrams .....	87
Exploded Drawing Parts List .....	95
Exploded Drawing .....	100

### PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety characteristics. These safety characteristics 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.

## SPECIFICATIONS

<b>Unit</b>	
Power supply	AC 230V ~ 50Hz
Power consumption	25 W
Signal system	Standard PAL
Laser	Semiconductor laser, wavelength 650/780nm
Signal-to-noise	More than 95dB
Audio dynamic range	More than 93dB
Harmonic distortion	Less than 1%
Operating temperature	41°F to 95°F (+5°C to 35°C)
Operating humidity	5% to 85% (no condensation)
<b>Video Output / Input</b>	
Output level	1 Vp-p (75 Ω)
Input level	750mV input (5W 10% THD output)
Jack	Pin jack
<b>Audio Output / Input</b>	
Output level	1.80 ± 0.2 Vrms (1 kHz, 0dB)
Input level	750mV input (5W 10% THD output)
Jack	RCA/Pin jack
<b>Speakers Section</b>	
Speakers (Front/Center/Rear)	
Speaker system	Bass reflex
Speaker unit	70 mm dia. cone type
Rated impedance	8 ohms
<b>Subwoofer Section</b>	
Power supply	AC 230V ~ 50 Hz
Power consumption	230 W
Speaker system	Bass reflex
Speaker unit	165 mm dia. cone type
Rated impedance	4 ohms

**Specifications and external appearance are subject to change without notice.**

## PERFORMANCE SPECIFICATIONS

### GENERAL TEST CONDITION

Power Supply	: AC 230V 50Hz
Output Load	: 8 ohm Non-reactive x5 Subwoofer 4ohm x1
Reference Output	: 500mW
Input Signal Source	: External AM Loop Antenna 75 ohm Dummy Antenna for FM
Modulation	: 30% 400Hz for AM 80% for Power 75kHz Deviation 1000Hz for FM 7.5kHz Pilot Tone 67.5kHz L+R 1000Hz

### (AM) SECTION, AMPLITUDE, MODULATION

	TEST ITEMS	UNIT	NOMINAL	LIMIT
1.	Tuning Range	kHz	531 - 1602	-
2.	I. F.	kHz	450	±3
3.	S/N 10mV/m	1MHz dB	36	30
4.	Sens. (at S/N 20dB)	0.6MHz	60	64
		1MHz	60	64
		1.4MHz	60	64
5.	I. F. Rej.	0.6MHz	50	46
6.	Image Rej.	1.4MHz	30	24
7.	Spurious Rejection		35	25
8.	Bandwidth, (Max. Sens. +6 dB)	1MHz	6	4 - 9
9.	ACA (±9kHz) Input	1MHz	20	15
10.	AGC Figure Merit	100mV/m	45	40
11.	Distortion, 5mV/m, 30%		1	3
		80%	3	6
12.	a. 10% THD Power AC	DEV 80%	30	26
	b. Woofer 10%	DEV 80%	50	45
13.	a. Tweet (2nd 910kHz & 3rd 1350kHz) at 75 dB I/P		15	10
14.	Audio Fidelity, Centre ±(6) dB	Hz	60/2200	120/2000
15.	Low Voltage AC	%	80	85
16.	a. Mod. Hum 10mV/M	dB	36	30
	b. Hum at Min. Vol.	mV	1	3
17.	Auto Stop Sens.	dB	64	70
18.	Step Frequency	kHz	-	10

REMARKS:

NOTE: All measurement should be done at bypass mode without EQ effects.

**PERFORMANCE SPECIFICATIONS - CONTINUED**

<b>(FM) SECTION, FREQUENCY, MODULATION</b>					
	TEST ITEMS	UNIT	NOMINAL	LIMIT	
1.	Tuning Range	MHz	87.5 - 108	-	
2.	I. F.	MHz	10.7	±0.3	
3.	30dB S/N	90MHz	μV	20	25
		98MHz	μV	20	25
		106MHz	μV	20	25
4.	-3dB Limit Sens.	dB	16	30	
5.	I. F. Rej.	98MHz	dB	60	50
6.	Image Rej.	106MHz	dB	30	26
7.	Spurious Rejection (F + 0.535 MHz) (Max. Sens. + 6dB)		dB	40	35
8.	AM Suppression (60dB I/P)		dB	45	30
9.	Mod. Hum (60dB I/P)		dB	48	42
10.	Distortion at 1mV/m (Mono) 100mV/m	22.5kHz	%	1	2
		75kHz	%	3	5
11.	Audio Fidelity, (-3dB) (Pre-emphass) (75μS) (FR,FL) Subwoofer 1K = 0	Hz	60/9000	120/6000	
		100 Hz	36	30	
12.	Power Out, 10% THD (75K DEV) 1K=1mV Subwoofer 'Power out, 10% THD (75K DEV) 100Hz=1mV	W	30	26	
		W	50	45	
13.	Low Voltage AC	%	80	85	
14.	S/N Ratio at 1mV (Stereo) Dev. 10% Pilot with "19" Filter	98MHz	dB	50	42
			dB	-	-
15.	Alternate Channel Selective ±400kHz	dB	25	18	
16.	Stereo Separation	dB	26	22	
17.	19kHz Leak Carrier	dB	32	27	
18.	Stereo LED Indication	dB	26	30	
19.	Step Frequency	kHz	-	100	
20.	Auto Stop Sens.	dB	26	32	
21.	Minimum Vol Hum	mV	1.0	3.0	
REMARKS:  NOTE: All measurement should be done at bypass mode without EQ effects.					

**PERFORMANCE SPECIFICATIONS - CONTINUED**

<b>DVD AUDIO SECTION (LINE OUTPUT)</b>					
	TEST ITEMS	UNIT	NOMINAL	LIMIT	
1.	THD+N ( LT2-1, 3-1 20kHz LPF On )	%		0.05	
2.	Output Level (LT2-1, 3-1)	V	2	±0.3	
3.	S/N ( LT2-1, 3-20 JIS-A Filter On )	dB	80	70	
4.	Crosstalk ( LT2-1, 3-21.22 1kHz, BPF On )	dB		70	
5.	Frequency Range (48kHz / 24BIT ) (LT2-1. 3-1~19) (FL, FR)	31Hz	dB	0	±1.0
		499Hz	dB	0	±1.0
		1kHz	dB	0	±1.0
		10kHz	dB	0	±1.0
		22kHz	dB	0	±1.0
6.	Frequency Range (96kHz / 24BIT LT2-1, 6-1~12) (FL, FR)	20Hz	dB	0	±3.0
		400Hz	dB	0	±3.0
		1kHz	dB	0	±3.0
		12.8kHz	dB	0	±3.0
		20kHz	dB	0	±3.0
7.	Digital Output Level (LT2-1, 1-1 75Ω Loading On )	mV	500	±100	
8.	Dynamic Range	dB	-	80	
9.	Black Band (TDV 545)	μM	-	600	
10.	Finger Print (TDV545)	μM	-	No.13	
11.	Eccentric (MDVD142 TEAC)	μM	-	200	
12.	Vertical (MDVD151 TEAC)	mm	-	0.6	
<b>CD SECTION</b>					
1.	Interruption (PHILIPS SBC444A)	μM	-	600	
2.	Black Dot	μM	-	600	
3.	Finger Print	μM	-	No.18	
4.	Eccentric (TCO-712 ABEX)	μM	-	140	
5.	Vertical (TCO-713R ABEX))	mm	-	0.8	
<b>CD- R SECTION</b>					
1.	Black Band (TCD-R025W )	μM	800	600	
2.	Finger Printers (TCD-R025W )	μM	-	65	
3.	Scratch (TCD-R021W )	mm	1.8	1.6	
4.	Eccentric (TCD-R012W )	μM	-	140	
5.	Deviation (TCD-R032W )	μM	-	810	
<b>CD- RW SECTION</b>					
1.	Black Band (TCD-W025W )	μM	600	500	
2.	Finger Printers (TCD-W025W )	μM	-	65	
3.	Scratch (TCD-W021W )	mm	-	1.0	
4.	Eccentric (TCD-W012W )	μM	-	140	
5.	Deviation (TCD-W032W )	μM	-	810	



**PERFORMANCE SPECIFICATIONS - CONTINUED**

VIDEO SECTION					
	TEST ITEMS		UNIT	NOMINAL	LIMIT
1.	Signal Level (LT2-1)	COMPOSITE	V(pp)	1.0	±0.2
	75Ω Terminated	S-Y	V(pp)	0.714	±0.2
	Oscilloscope	S-C (BURST)	V(pp)	0.286	±0.05
	75% Color Bar	COMPONENT-Y	V(pp)	0.714	±0.2
2.	Frquency Char. Composite (LT2-1, REF=0dB 0.5MHz, L156 VM700A Composite)	1.0/0.5MHz	dB	0	±2.0
		2.0/0.5MHz	dB	0	±2.0
		4.0/0.5MHz	dB	0	±2.5
		4.75/0.5MHz	dB	0	±3.5
		5.75/0.5MHz	dB	-2.0	+3-4
3.	Frquency Chap. S-Y (LT2-1, REF=0dB 0.5MHz, L156 VM700A S-Y)	1.0/0.5MHz	dB	0	±2.0
		2.0/0.5MHz	dB	0	±2.0
		4.0/0.5MHz	dB	0	±2.5
		4.75/0.5MHz	dB	0	±2.5
		5.75/0.5MHz	dB	-2.0	+3-4
4.	Composite VIDEO-S/N (LT2-1) One Line Only L131 VM700A	100K-4.2MHz (SC TR ON)	dB	60	50
5.	S-Y S/N (LT2-1 One Line Only)	100K-4.2MHz (SC TR ON)	dB	60	50
6.	COLOR-AM COLOR-PM (One Lone Only) (LT2-1, L131 VM700A)	100Hz -500KHz	dB		>40
			dB		>40

**MW/FM STEREO & RDS TUNING WITH DVD PLAYER**

FM STEREO & RDS SECTION 37.5kHz (MAIN+SUB 75kHz (PILOT)1 .2K (RDS) DEV & 1kHz INPUT						
			UNIT	NOR	LIMIT	
1.	Stereo Separation 1mV Input	MOD FREQ 100Hz	L/R	dB	30	25
			R/L	dB	30	25
		MOD FREQ 1KHz	L/R	dB	30	25
			R/L	dB	30	25
		MOD FREQ 10KHz	L/R	dB	25	18
			R/L	dB	25	18
2.	Stereo on Sensitivity	98MHz	dB	5	<18	
3.	S.N.C (SEP=10dB)	98MHz	dB	34	34±8	
4.	RDS Indicator Sensitivity	98MHz	dB	28	<36	
5.	RDS Seek Sensitivity	98MHz	dB	28	<36	
6.	TA Indicator Sensitivity	98MHz	dB	28	<36	
7.	TA Seek Sensitivity	98MHz	dB	28	<36	

**PERFORMANCE SPECIFICATIONS - CONTINUED**

AMPLIFIER SECTION					
	TEST ITEMS		UNIT	NOMINAL	LIMIT
1.	10% THD Power AC (FL, FR)		W	30	26
2.	Frequency Response (CT) 1K=0dB	20Hz	dB	-10	±5
		100Hz	dB	0	±3
		10kHz	dB	0	±3
		20kHz	dB	0	±6
3.	Frequency Response (RR, RL) 1K=0dB	20Hz	dB	-10	±5
		100Hz	dB	0	±3
		10kHz	dB	0	±3
		20kHz	dB	0	±5
4.	Frequency Response (FL, FR) 1K=0dB	20Hz	dB	-10	±3
		100Hz	dB	0	±3
		10kHz	dB	0	±3
		20kHz	dB	0	±3
5.	Frequency Response (Subwoofer) 1K=0dB	20Hz	dB	36	30
		100Hz	dB	36	30
6.	10% THD Power AC (Subwoofer)		W	50	45
7.	Subwoofer THD (100Hz Ref O/P)		%	0.5	1.0
8.	THD (1kHz, Ref O/P) FR, FL		%	0.5	0.8
9.	Channel Unbalance (L&R)	1kHz	dB	±1	±3
10.	Minimum Vol Hum (UNWGTD/WGTD)		mV	5	8
11.	Maximium Vol Hum (UNWGTD/WGTD)		mV	8	15
12.	S/N (UNWGTD/CCIR-ARM2K) (L&R)	1kHz	dB	60	55
13.	Bass Effect FL, FR		dB	±10	±4
14.	Treble Effect FL, FR		dB	±10	±4
15.	Middle Effect FL, FR		dB	±10	±4
16.	Separation (FL & FR)		dB	-	45
17.	Cross Talk for Input (AUX/CD-REF) w/BPF		dB	-	45
REMARKS:					
Level Matching					
CD -10dB REF					
AM 55% 5mV ±3					
FM 40kHz 1mV ±3					
AUX IN 750mV ±3					
NOTE: All measurement should be done at bypass mode without EQ effects.					
Audio others: 6ch					
More audio prologic: on					
ITEM 1.2.3.4. Set up Subwoofer as off Speaker as large.					

**PERFORMANCE SPECIFICATIONS - CONTINUED**

<b>AUX IN DOLBY PRO LOGIC SECTION</b>					
	<b>TEST ITEMS</b>	<b>UNIT</b>	<b>NOMINAL</b>	<b>LIMIT</b>	
1.	10% THD Power AC (FL, FR)	W	30	26	
2.	Frequency Response (CT) 1K=0dB	20Hz	dB	-10	±5
		100Hz	dB	0	±3
		10kHz	dB	0	±3
		20kHz	dB	0	±6
		20kHz	dB	0	±6
3.	Frequency Response (RR, RL) 1K=0dB	20Hz	dB	-10	±5
		100Hz	dB	0	±3
		10kHz	dB	0	±3
		20kHz	dB	0	±5
		20kHz	dB	0	±5
4.	Frequency Response (FL, FR) 1K=0dB	20Hz	dB	-10	±5
		100Hz	dB	0	±3
		10kHz	dB	0	±3
		20kHz	dB	0	±3
		20kHz	dB	0	±3
5.	Frequency Response (Subwoofer) 1K=0dB	20Hz	dB	43	35
		100Hz	dB	43	35
6.	10% THD Power AC (Subwoofer)	W	50	45	
7.	Subwoofer THD (100Hz Ref O/P)	%	0.5	1.0	
8.	THD (1kHz, Ref O/P) FR, FL	%	0.5	0.8	
9.	Channel Unbalance (L&R)	1kHz	dB	±1	±3
10.	Minimum Vol Hum (UNWGTD/WGTD)	mV	3	8	
11.	Maximum Vol Hum (UNWGTD/WGTD)	mV	8	15	
12.	S/N (UNWGTD/CCIR-ARM2K) (L&R)	1kHz	dB	60	55
13.	Separation (FL & FR)	dB	48	±5	
<b>REMARKS:</b>  NOTE: All measurement should be done at bypass mode without EQ effects. More audio prologic: on ITEM 1.2.3.4. Should be set up at DVD mode, and set subwoofer as off, speaker as large.					

**ELECTRICAL PARTS LIST**

<b>Ref. No.</b>	<b>Description</b>	<b>Mfr's Part No.</b>	<b>Qty.</b>
<b>PCB</b>			
TUNER BOARD	PCB STS131-30-01-02 144x147x1.6mm/2 (94V0)	033-ST1313-100	1
DISPLAY & KEY BOARD	PCB STS131-30-01-03 120x135.5x1.6mm/2 (94HB)	033-ST1313-101	1
MOTOR DRIVER BOARD	PCB STS131-30-01-04 170x167x1.6mm/2 (94V0)	033-ST1313-102	1
MAIN BOARD	PCB STS131-30-01-01 (94V0)	033-ST1313-300	1
FUSE BOARD	PCB STS131-30-01-05 (94V0)	033-ST1313-300	1
DISC INDICATION BOARD	PCB STS131-30-01-06 (94V0)	033-ST1313-300	1
MPEG+SERVO BOARD	PCB STS21AAS-01-02 150x120x1.6mm (FR4)	033-ST21A-101	1
SENSOR BOARD	PCB 3CD3-01-01 97x150x1.6mm/20 (94HB)	033-003CD3-100	1
POWER AMPLIFIER BOARD	PCB SWT1-01-01,02,03 (94V0)	033-00SWT1-600	1
CONNECTION BOARD	PCB SWT1-01-04 (94V0)	033-00SWT1-600	1
SUB-WOOFER RECTIFIER BOARD	PCB SWT1-01-05 (94V0)	033-00SWT1-600	1
LED BOARD	PCB SWT1-01-06 (94V0)	033-00SWT1-600	1
SHIELDING BOARD	PCB SWT1-01-07 200x86x0.8mm (94HB)	033-00SWT1-100	1
<b>REMOTE PORTION</b>			
	REMOTE CONTROL HANDSET (STS131) w/SILVER SPY (FOR AKAI/DV-R3500SS)	043-R15453-030	1
<b>ACCESSORY PORTION</b>			
<b>WIRE</b>			
	JP WIRE AWG26#UL1007 1500mm BLK CRIMPED w/TERMINAL SHS #STV8-TE AND TUBE (75ohm)	054-010A50-090	1
<b>MISCELLANEOUS</b>			
	AV CABLE 1.5M COAXIAL BK CABLE w/3 RCA PLUG R,W,Y#3C RCA&RCA-1500BK (#9863800700)	122-004220-151	1
	SCART CABLE 2000mm w/3 PIN RCA HS02038-20-20	122-00A020-200	1
	BATTERY #GP15G 1.5V 'AA' SIZE (GP)	130-615004-001	2
	MERCURY & CADMIUM FREE (2PCS/PACKAGE) AM LOOP ANT. 388-88 & 388-89 MOLD BK (ABS) 5264-2 2.54mm w/5750mm BK AWG26#UL1007	132-020388-882	1
<b>AUDIO PORTION</b>			
<b>RESISTORS [All are +5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R510,534,580,609,690	*CdF RESISTOR 10 Kohm	001-010351-016	5
R663,665,667,669,671,673	*CdF RESISTOR 2.2 Kohm	001-022251-016	6
R618,619,624,625,634,635,664, 666,668,670,672,674	*CdF RESISTOR 22 Kohm	001-022351-016	12
R687,688	RESISTOR 27 Kohm	001-027351-016	2
R661,675	*CdF RESISTOR 3.3 Kohm	001-033251-016	2
R535,536,683,684	*CdF RESISTOR 4.7 Kohm	001-047251-016	4
R501,502,503,504,505,506,681,682	*CdF RESISTOR 47 Kohm	001-047351-016	8
R649	RESISTOR 56 ohm	001-056051-016	1
R662,676	RESISTOR 6.2 Kohm	001-062251-016	2
R507,508,509,511,512	RESISTOR 8.2 Kohm	001-082251-016	5
<b>CAPACITORS</b>			
C584	CERAMIC CAP 0.02 uF/50V +80%-20%	003-020380-050	1
C660,680	#MYLAR CAP 0.01 uF/100V +-10%	004-010310-100	2
C661,663,681,682	#MYLAR CAP 0.1 uF/50V +-10%	004-010410-050	4
C662,679	#MYLAR CAP 0.015 uF/100V +-5%	004-015350-100	2
C664,678	#MYLAR CAP 0.0022 uF/100V +-10%	004-022210-100	2
C614,615,627,638,639,671,672,674, 665,666,668,669,670,675,676	ELECT CAP 1 MFD/50V +-20% (5x11)	006-001000-50D	15

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
C626,667,673,677,685	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	5
C658	ELECT CAP 1000 MFD/16V +-20% (10x20)	006-010200-16D	1
<b>TRANSISTORS</b>			
Q606,607,608,609,610,611,613	TRLNPNSSST-TAP&TO-092 3DG1815	008-618150-000	7
Q615	TR NPNSSST-RAD&SC-072 DTC114ES (ROHM)	008-801141-000	1
<b>INTEGRATED CIRCUIT</b>			
IC504	ICAUDIOLEVELSENSOR PT2322-S(SOP) 6-CHANNEL AUDIO PROCESSOR (ANGUS)	010-142322-000	1
<b>DIODES</b>			
D601,602,603,604,605,606,607, 608,609,610,611	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	11
<b>INDUCTORS</b>			
L601	INDUCTOR 47uH CEC-470K/708032 +-10% LAL03TB470K/AL0305-470K	018-010476-000	1
FB501,502,503	*CdF FERRITE BEAD INDUCTOR #BL01RN1-A62 0.45 uH/7A (5x3.6mm) (87-008-372-01)	032-101162-000	3
<b>WIRES</b>			
	FFC CABLE 22 PINS L=200mm 4+192+4 P:1mm UL2896 0.035x0.7 (TUNG HING)	040-220200-100	1
JK502 TO JK506GND	JP WIRE AWG26#1007 3x3mm 80mm BLACK	051-673080-009	1
TH1 TO JK506 GND	JP WIRE AWG26#1007 5x5mm 80mm BLACK	051-675080-009	1
TH14 TO TH13	*CdF JP WIRE AWG26#1007 5x5mm 100mm BLACK	051-675100-009	1
WH315	HSG CD1894-6C(C) PEC 2001H-6 w/350mm R, BLK,W,YEL,BLK,BLUE AWG28#UL1571 SLDG.3mm	136-060189-B02	1
<b>MISCELLANEOUS</b>			
JK502	PIN JACK BOARD MSP-244V1-34 NI YEL,ORN,WHT,RED	118-020244-000	1
JK503	DIN JACK HDC-056 (KUNMING)	119-000056-000	1
JK501	MINI DIN SOCKET MD5L-09SC0A (LEOCO)	119-000090-000	1
WH501	FFC CONN 6232 22 PINS w/o LOCK PITCH:1mm 00 6232 022 006 800 VERTICAL TYPE	135-006232-220	1
JK506 TO REAR PANEL	SOLDERING LUG	137-300000-000	1
<b>AUX-IN (2.1CH) PORTION</b>			
<b>RESISTORS [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R572,573	*CdF RESISTOR 1 Kohm	001-010251-016	2
R517,518,523,524,533,574,575, 575,592,593,610	*CdF RESISTOR 10 Kohm	001-010351-016	10
R561,563	*CdF RESISTOR 100 Kohm	001-010451-016	2
R646,647	*CdF RESISTOR 150 ohm	001-015151-016	2
R513,514,521,562	*CdF RESISTOR 22 Kohm	001-022351-016	4
R525,526	RESISTOR 220 Kohm	001-022451-016	2
R515,516,519,520	RESISTOR 27 Kohm	001-027351-016	4
R527,528	*CdF RESISTOR 3.3 Kohm	001-033251-016	2
R541	*CdF RESISTOR 33 Kohm	001-033351-016	1
R529,530,591,905,906	*CdF RESISTOR 4.7 Kohm	001-047251-016	5
<b>CAPACITORS</b>			
C501,502	CERAMIC CAP 100 pF/50V +-10%	003-010110-050	2
C501,502	CERAMIC CAP 220 pF/50V +-10%	003-022110-050	2
C503,504,505,506,513,514,515, 516,525,902,903	ELECT CAP 4.7 MFD/50V +-20% (5x11)	006-004000-50D	11

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
C507,508,517,518,519,520	ELECT CAP 1 MFD/50V +-20% (5x11)	006-001000-50D	6
C891,892	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	2
C654,655	ELECT CAP 100 MFD/10V +-20% (5x11)	006-010100-10D	2
C509	*CdF ELECT CAP 47 MFD/16V +-20% (5x11)	006-047000-16D	1
<b>TRANSISTORS</b>			
Q501,502,522,523,612	TRLNPNSSST-TAP&TO-092 3DG1815	008-618150-000	5
Q604	TRLPNPPWR-TAP&TO-092 3CA8550	008-685500-000	1
Q571,605	TR NPNSSST-RAD&SC-072 DTC114ES (ROHM)	008-801141-000	2
<b>INTEGRATED CIRCUIT</b>			
IC502	IC BA4558N O.AMP	010-404558-000	1
<b>WIRES</b>			
B TO B1, C TO C1	JP WIRE AWG26#1007 5x5mm 60mm BLACK	051-675060-009	2
A TO A1	JP WIRE AWG26#1007 5x5mm 180mm BLACK	051-675180-009	1
<b>MISCELLANEOUS</b>			
JK506	PIN JACK HSP-253V-14 (KUNMING) YELLOW, RED, WHITE/BODY WHITE	118-020253-000	1
RL504	⚠ RELAY 12V 200mW ME-1-12BS 1P2T	128-120112-001	1
RL501,503	⚠ RELAY 12V 200mW ME-2-12 2P2T	128-120212-001	2
WH505	*CdF HEADER CTL 3 PINS PHS-03 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS030-030	1
<b>CPU PORTION</b>			
<b>RESISTORS [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R301,302,303,304,305,306,307, 308,309,316,317,318,319,321,322, 323,325,329,330,331,333,334,337, 338,339,343,344,345,350,361,364, 372,380,381,382,383,384,385,386, 387,388,389	*CdF RESISTOR 10 Kohm	001-010351-016	51
R348	*CdF RESISTOR 15 Kohm	001-015351-016	1
R340	RESISTOR 20 Kohm	001-020351-016	1
R313,314,315	*CdF RESISTOR 220 ohm	001-022151-016	3
R391,392,393,394	*CdF RESISTOR 2.2 Kohm	001-022251-016	4
R341	*CdF RESISTOR 22 Kohm	001-022351-016	1
R324,327	RESISTOR 2.7 Kohm	001-027251-016	2
R332,335,336	*CdF RESISTOR 33 ohm	001-033051-016	3
R560,564	*CdF RESISTOR 3.3 Kohm	001-033251-016	2
R326,328	*CdF RESISTOR 4.7 Kohm	001-047251-016	2
R346,347	*CdF RESISTOR 47 Kohm	001-047351-016	2
R342	RESISTOR 5.6 Kohm	001-056251-016	1
<b>CAPACITORS</b>			
C302	CERAMIC CAP 0.02 uF/50V +80%-20%	003-020380-050	1
C307,308	CERAMIC CAP 68 pF/50V +-10%	003-068010-050	2
C305,306	CERAMIC CAP 30 pF/50V +-5% (NPO) (CC45-CH1H300J/RBU04CH300J-L)	003-430050-050	2
C309	ELECT CAP 4.7 MFD/50V +-20% (5x11)	006-004000-50D	1
C901	ELECT CAP 22 MFD/25V +-20% (5x11)	006-022000-25D	1
C301	ELECT CAP 47000 MFD/5.5V DC +80-20% (STAR CAP) (SC-DA5R5 473 H)	006-747300-05C	1
<b>TRANSISTORS</b>			
Q301	TR NPNSSST-##### 3DG1417	008-601417-000	1
Q853,854,855	TRLNPNSSST-TAP&TO-092 3DG1815	008-618150-000	3

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
Q302	TR NPNSST-RAD&SC-072 DTC114ES (ROHM)	008-801141-000	1
<b>INTEGRATED CIRCUIT</b>			
IC301	ICMCU-48K-LCD TMP87EP26F-3D72 (ALDIAUS-DVD32) FLASH MCU	010-918726-000	1
<b>DIODES</b>			
D301,302,303,304	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	4
<b>RESONATOR</b>			
CX301	CERAMIC RESONATOR 8 MHz CSA 8.00 MTZ (MURATA) (87-A70-120-08C)	020-000800-000	1
<b>INDUCTORS</b>			
	FERRITE CORE #B29 FPL 40x10x6.5mm	032-240010-065	3
<b>WIRES</b>			
WH752 TO WH755	FFC CABLE 16 PINS L=160mm P:1mm UL20624 BNCD-P=1.0-K-16-152 4/8LUL	040-160160-100	1
WH307	HSG (2mm) JST PHR-09 w/290mm R,BK,Y,O,V, GR,BR,BL,WHT AWG28#UL1571 SLDG 4mm	136-F00929-000	1
WH303	HSG(2.54mm)MOLEX 5264-06 TO JST 6P-SAN w/260mm R,BK,Y,OR,GR,BL AWG28#UL1007	136-KZ0626-000	1
<b>MISCELLANEOUS</b>			
WH752	FFC/FPC CONNECTOR 16 PINS PITCH:1mm #D100-SSA-16 VERTICAL/TOP CONTACT	135-D100SS-160	1
WH862	*CdF HEADER CTL 6 PINS PHS-06 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS060-060	1
WH852	*CdF HEADER CTL 8 PINS PHS-08 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS080-080	1
WH301	(F135-000009-090) HEADER CTL 9PINS PHS-09 P:2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS090-090	1
WH304	HEADER CTL 10 PINS PHS-10 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS100-100	1
<b>FRONT PANEL PORTION</b>			
<b>RESISTORS [All are +5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R375,376,377,378	*CdF RESISTOR 100 ohm	001-010151-016	4
R357	*CdF RESISTOR 10 Kohm	001-010351-016	1
R354,359	*CdF RESISTOR 1.5K	001-015251-016	2
R310,311,312,369,373	*CdF RESISTOR 220 ohm	001-022151-016	5
R355,360	*CdF RESISTOR 2.2 Kohm	001-022251-016	2
R353	*CdF RESISTOR 22 Kohm	001-022351-016	1
R371	*CdF RESISTOR 3.3 Kohm	001-033251-016	1
R358	*CdF RESISTOR 33 Kohm	001-033351-016	1
R352	*CdF RESISTOR 4.7 Kohm	001-047251-016	1
R351	*CdF RESISTOR 47 Kohm	001-047351-016	1
R379	RESISTOR 51 Kohm	001-051351-016	1
R380	RESISTOR 68 ohm	001-068051-016	1
R356	RESISTOR 9.1 Kohm	001-091251-016	1
<b>CAPACITORS</b>			
C383	CERAMIC CAP 0.1 uF/16V +80%-20%	003-010480-016	1
C382	ELECT CAP 47 MFD/10V +-20% (SMALL SIZE) (5x7)	006-147000-10D	1
<b>INTEGRATED CIRCUIT</b>			

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
IC304	ICDISPLAYDRIVER-VFD PT6311/PT6318 (ANGUS) TP6311Q	010-146311-001	1
<b>WIRE</b>			
WH310	HSG 5CD1-4B JST PHR-04 w/310mm BLACK, RED,BLUE,YELLOW AWG28#UL1571 SLDG 4mm	136-045CD1-201	1
<b>SWITCHES</b>			
SW308,309	TACT SWITCH 4P 3.85mm 100G #1102VA-4 (=021-KHH913-000)	021-110200-000	2
SW301,302,303,304,305,306,310, 311,312,313	TACT SWITCH 4P 5mm 100G #1102A-4/ EVQ PAC 05R (=021-KHH901-000)	021-110200-002	10
<b>MISCELLANEOUS</b>			
LED304,305,306,307	LED WLEDS03304G0HD0 3mm GREEN (HIGH BRIGHT)	110-033041-003	4
SR301	REMOTE/CONTROL PHOTO RECEIVER ROHM/RPM7138-V4	111-007138-000	1
	VFD-2COL100x20.5SM-033P VACUUM FLUORESCENT DISPLAY #VFD20-1002 (ZEC)	115-001002-000	1
HEATSINK TO FNT	SOLDERING LUG	137-300000-000	2
<b>LINEAR POWER SUPPLY PORTION</b>			
<b>RESISTORS [All are +5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R821,822	*CdF RESISTOR 10 ohm	001-010051-016	2
R828,811	*CdF RESISTOR 1 Kohm	001-010251-016	2
R805,807,808,812,813,814,818, 830,843	*CdF RESISTOR 10 Kohm	001-010351-016	9
R820	*CdF RESISTOR 100 Kohm	001-010451-016	1
R802,815,825,835	*CdF RESISTOR 220 ohm	001-022151-016	4
R803	*CdF RESISTOR 22 Kohm	001-022351-016	1
R823,824	*CdF RESISTOR 33 ohm	001-033051-016	2
R829	*CdF RESISTOR 3.3 Kohm	001-033251-016	1
R804,816,826,827	*CdF RESISTOR 470 ohm	001-047151-016	4
R801,819	*CdF RESISTOR 4.7 Kohm	001-047251-016	2
R809,817	RESISTOR 5.6 Kohm	001-056251-016	2
R810	RESISTOR 680 ohm	001-068151-016	1
<b>CAPACITORS</b>			
C815,816	CERAMIC CAP 0.1 uF/16V +80%-20%	003-010480-016	2
JK506 TO GND	CERAMIC CAP 0.002 uF/50V +80%-20%	003-020280-050	2
C801,802,803,804,805,833,806, 807,808,810,812,835,837,814,818, 821,829,831,845,904	CERAMIC CAP 0.02 uF/50V +80%-20%	003-020380-050	20
C827,848	*CdF (F006-010000-16C) ELECT CAP 10 MFD/ 50V +-20% (VX/5x11)	006-010000-50C	2
C840,843,844,847,850	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	5
C813,865	ELECT CAP 100 MFD/35V +-20% (8x11.5)	006-010100-35D	2
C849,855	ELECT CAP 1000 MFD/10V +-20% (10x16)	006-010200-10D	2
C817,820,832,839,851	ELECT CAP 220 MFD/16V +-20% (8x11.5)	006-022100-16D	5
C834	ELECT CAP 220 MFD/25V +-20% (8x11.5)	006-022100-25D	1
C830	ELECT CAP 2200 MFD/10V +-20% (VX/12.5x20)	006-022200-10C	1
C825,894	ELECT CAP 2200 MFD/16V +-20% (12.5x25)	006-022200-16D	2
C811	ELECT CAP 3300 MFD/25V +-20% (16x31.5)	006-033200-25D	1
C819,836	*CdF ELECT CAP 47 MFD/16V +-20% (5x11)	006-047000-16D	2
C828,838,846	ELECT CAP 470 MFD/10V +-20% (8x11.5)	006-047100-10D	3

**ELECTRICAL PARTS LIST - CONTINUED**

Ref.No.	Description	Mfr's Part No.	Qty.
<b>TRANSISTORS</b>			
Q806,814	TRANSISTOR B1566E (LIGHTNING)	008-201566-100	2
Q807,815	TRLNPNSSST-TAP&TO-092 3CG1015	008-610150-000	2
Q801,805,813	TRLNPNSSST-TAP&TO-092 3DG1815	008-618150-000	3
Q808	TRLNPNPWR-TAP&TO-092 3DA8050	008-680500-000	1
Q809	TRLNPNPWR-TAP&TO-092 3CA8550	008-685500-000	1
Q804,812	TR PNPGEN-TAP&SC-072 DTA123ESA (ROHM) (88-WA2-662-08)	008-800123-003	2
Q802,803,811	TR NPNSSST-RAD&SC-072 DTC114ES (ROHM)	008-801141-000	3
<b>INTEGRATED CIRCUITS</b>			
IC801	(F010-207805-001) TR &&VOL-REG&TO-092 LM78L05ACZ 5V VOLTAGE REGULATOR	008-V07805-000	1
IC802,803	ICREGULA-P-005V001A BA05ST (ROHM)	010-400005-002	2
<b>DIODES</b>			
D810,811,815,816,817,818,822, 823,885	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	9
DZ804,806	ZENER DIODE MTZJT-72-12B 12V 1/2W (TSB#G51421015104)	011-010012-120	2
ZD801	ZENER DIODE #MTZJT-7224D 24V 1/2W	011-010024-120	1
ZD802	ZENER IN-5231B,HZ5C1,5.1V,1/2W	011-010051-120	1
DZ807	ZENER DIODE 6.2V #MTZJ6.2C	011-010062-005	1
DZ803	ZENER DIODE 10V #MTZJ10D 1/2W (ROHM)	011-010100-122	1
D887	RECTIFIER HER102	011-020102-000	1
D618,809,819,820,821,824	RECTIFIER IN-4001B	011-024001-000	6
D801,802,803,804	(F011-005401-000) RECTIFIER IN-5401BL	011-025401-000	4
D805,806,807,808	RECTIFIER IN5822	011-025822-000	4
<b>INDUCTORS</b>			
L801,802,803,804	INDUCTOR 3.3uH WIRE:D=0.6mm +-20% (R0002-CW68-3R3M-852243)/+-10% (RL6080-3R3K)	018-010337-300	4
L805	INDUCTOR 47uH CEC-470K/708032 +-10% LAL03TB470K/AL0305-470K	018-010476-000	1
<b>SWITCHES</b>			
SW501	PUSH SWITCH 2P2T PS3-22SP-W4CW-3.2 w/UL.VDE SEMKO APPROVAL (LUP FUNG) SLIDE SW 1P2T SS12F47G9	021-032222-000 025-120091-003	1 1
<b>WIRES</b>			
WH807	HSG (2.5mm) PEC 2507H-08 TO PEC 2501H-08 w/120mm RED,BLACKx7 AWG22#UL1007	136-J10812-000	1
WH801	HSG (2.5mm) PEC 2507H-09 TO 2501H-09 w/350mm BLUE,GREYx8 AWG26#UL1007	136-J10935-000	1
TO SW801	HSG (3.5mm) MOLEX 51067-0300 w/450mm BLK,NC,WHT AWG18#UL1672 SLDG.12mm	136-L00345-000	1
<b>MISCELLANEOUS</b>			
RL801	RELAY 9V SDT-S-109LMR	128-090109-000	1
	PT003WEI35/14&&WEN& 230V:12.4V EN STD w/o FUSE (P3512-A14E)	123-A33032-100	1
	PT035WEI57/35&F&WVDE 230V:8V/13V/22V/ 4.2V w/FUSE 130°C (L5735-P01E)	123-D53521-400	1
FS804	MICRO FUSE #251.630 630mA/125V WFF-215.630	124-006310-000	1

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
FS802,803	FUSE #618002 2A/250V 5x20mm TIME LAG (UL/VDE/CSA APP.)	124-020020-007	2
	PLA-ULN-7'05"-VDE-MG VDE APP.CORD 2250mm MIGRATION (HARVEST)	134-B11331-006	1
CN802	PIN HEADER 2 PINS TJC6-02P3 PITCH:7.92mm VERTICAL 1.14mm SQUARE PIN	135-00TJC6-020	1
CN801	HEADER MOLEX 2 PINS 53265-0210 V PITCH 7mm (87-099-623-01)	135-053265-020	1
WH809	HEADER 4PINS PEC #2507-WS-4 P:2.5mm VERTICAL REPLACE:135-005267-040	135-2507WS-040	1
WH808	*CdF HEADER 5 PINS PEC #2507-WS-5 P:2.5mm VERTICAL REPLACE:135-005267-050	135-2507WS-050	1
WH805	HEADER 8 PINS PEC #2507-WS-8 PITCH 2.5mm VERTICAL REPLACE:135-005267-080	135-2507WS-080	1
WH865	HEADER CTL 2 PINS PHS-02 P:2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) (CdF)	135-PHS020-020	1
WH803	HEADER CTL 4 PINS PHS-04 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS040-040	1
<b>MPEG+SERVO PORTION</b>			
<b>RESISTORS [All are +5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R14,29,39,58,100,101,120,153,177, 241,243,227,229,234,236,237, FB18,19,20	CHIP RESISTOR 0 ohm +5% 1/16W (0603/1608)	001-300052-016	19
R10,12,230	CHIP RESISTOR 10 ohm +5% 1/16W (0603/1608)	001-310052-016	3
R1,109,132	CHIP RESISTOR 100 ohm +5% 1/16W (0603/1608)	001-310152-016	3
R9,11,97,106,107,122,134,135,232	CHIP RESISTOR 1 Kohm +5% 1/16W (0603/1608)	001-310252-016	9
R5,6,19,20,21,22,23,56,95,102,123, 124,126,130,131,141,142,143,144, 145,146,147,148,157,163,200	CHIP RESISTOR 10 Kohm +5% 1/16W (0603/1608)	001-310352-016	26
R31,47,48,91,94,201,202,203,204, R32,33,34,35	CHIP RESISTOR 100 Kohm +5% 1/16W (0603/1608)	001-310452-016	9
R180,183,188,191,194,197	CHIP RESISTOR 1 ohm +5% 1/16W (0603/1608)	001-310852-016	4
R125,218,219	CHIP RESISTOR 12 Kohm +5% 1/16W (0603/1608)	001-312352-016	6
R208,209,212,213,216,217	CHIP RESISTOR 180 ohm +5% 1/16W (0603/1608)	001-318152-016	3
R164	CHIP RESISTOR 2 Kohm +5% 1/16W (0603/1608)	001-320252-016	6
R15,16,206,207,210,211,214,215	CHIP RESISTOR 22 ohm +5% 1/16W (0603/1608)	001-322052-016	1
R223	CHIP RESISTOR 220 ohm +5% 1/16W (0603/1608)	001-322152-016	8
R24,25,26,30,50,105	CHIP RESISTOR 2.2 Kohm +5% 1/16W (0603/1608)	001-322252-016	1
R231	CHIP RESISTOR 22 Kohm +5% 1/16W (0603/1608)	001-322352-016	6
R182,185,190,193,196,199	CHIP RESISTOR 2.4 Kohm +5% 1/16W (0603/1608)	001-324252-016	1
R59,65,66,67,68,69,70,71,73,74,75, 77,79,80,110,111,168,169,127,128, 165,166,167,170,171,175	CHIP RESISTOR 30 Kohm +1% 1/16W (0603/1608)	001-330312-016	6
R129,224	CHIP RESISTOR 33 ohm +5% 1/16W (0603/1608)	001-333052-016	26
R3,4,52,53,54,55,60,181,184,189, 192,195,198	CHIP RESISTOR 330 ohm +5% 1/16W (0603/1608)	001-333152-016	2
R155	CHIP RESISTOR 3.3 Kohm +5% 1/16W (0603/1608)	001-333252-016	13
R13,205	CHIP RESISTOR 392 ohm +1% 1/16W (0603/1608)	001-339112-016	1
R17,18,43,45,61,96,104,112,113, 114,115,116,117,118,119,133,139, 140,174	CHIP RESISTOR 470 ohm +5% 1/16W (0603/1608)	001-347152-016	2
	CHIP RESISTOR 4.7 Kohm +5% 1/16W (0603/1608)	001-347252-016	19



**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
U2	ICMOTORDRIVER-04CH BA5983FM (ROHM)	010-405983-000	1
U28	ICREGULA-P-3.3V&&&A LD1117S33C/ LM1117MPX-3.3/RT9164-33CG (ST/NATIONAL/RICHTEK)	010-721117-001	1
U4	ICMOTORDRIVER-&CH FAN8082 (FAIRCHILD)	010-748082-000	1
U26	ICLOGIC TC74HCU04AF-EL HEX INVERTER (TSB#G51451014108)	010-847404-001	1
U11	ICDIALER-NON-00 ZR36705TQC (ZORAN) APAPI INTERFACE	010-893670-002	1
U16	ICMPEG ZR36732PQC	010-893673-000	1
U13	ICRAMF-01X008M 8M BIT(512Kx16) FLASH RAM SST39VF800A-70-4C-EK/SST39VF800-70-4C-EK	010-993908-000	1
U6	(F010-474116-000) IC-DRAM M11B416256A-35J (SOJ) (SW034)	045-D00035-100	1
<b>DIODES</b>			
ZD1	ZENER DIODE 6.8V #MTZJ6.8B	011-010068-001	1
D10	RECTIFIER IN-4002,100V	011-024002-990	1
D1,2,3,4,5,6,7	CHIP DIODE (SMT) DL4148 (DC)	011-044148-002	7
<b>INDUCTORS</b>			
L2,4,5,13	INDUCTOR 10 uH CEC-100K +-10% (CdF)	018-010016-000	4
L26,27,28,29	C.COIL 1.8uH +-10% TAPE&REEL LK1608 1R8K-T/MGF11608C1R8/SDFL1608Q1R8KT	018-040187-002	4
L6	C.COIL 2.7uH +-10% TAPE&REEL LK2125 2R7K-T/MGF12012C2R7/SDFL2012Q2R7KT	018-040277-001	1
FB1,2,3,4,5,6,7,8,9,10,11,12,13,14, 15,16,21	CHIP FERRITE BEAD GZ1608Y102T (0603/1608) (SUNLORD)	032-101608-015	17
<b>RESONATOR</b>			
Y1	RESONATOR 33.8688 MHz 30ppm-50ppm ZTA33.86MX (CHEQUERS)	020-338688-000	1
<b>SWITCH</b>			
	MIRCO SWITCH MLS-1	023-000001-001	1
<b>WIRES</b>			
U2 GND TO U29 GND	*CdF JP WIRE AWG26#1007 3x3mm 70mm BLACK FFC CABLE 24 PINS L=400mm P:1mm UL2896 24P-4+392+4-P1-FC/53/182/SEPH02-02495	051-673070-009 040-240400-100	1 1
U2 GND	JP WIRE AWG26#1007 3x3mm 80mm BLACK HSG (2mm) PEC 2001H-06 TO 2001H-06 w/428mm BROWN,GREYx5 AWG28#UL1095 (7/0.127mm TA)	051-673080-009 136-F10642-800	1 1
CON10 TO WH753	HSG 3CD3-3A JST PHR/2mm L=425mm RED, BLK,WHT JP AWG28#1571 SLDG.5mm	136-033CD3-200	1
CON6 TO WH751	HSG 3CD3-5A JST PHR/2mm L=685mm Y,W,BL, R,BK JP WIRE AWG28#1571 SLDG 3mm	136-053CD3-200	1
CON5 TO WH754	HSG 3CD3-6B JST PHR w/455mm EMPTY,RED, BLK,WHT,YEL,BL AWG28#1571 3mm	136-063CD3-201	1
<b>MISCELLANEOUS</b>			
J5	*CdF HEADER MOLEX 6 PINS 5267-06A PITCH 2.5mm STRAIGHT TYPE	135-005267-060	1
J10	FFC CONN 6232 22 PINS w/o LOCK PITCH:1mm 00 6232 022 006 800 VERTICAL TYPE	135-006232-220	1
J1	FFC CONNECTOR 24 PINS PITCH:1mm LG BRAND GF106-24S-LS HORIZONTAL UPPER CONTACT	135-0GF106-240	1

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
J6	HEADER 4PINS PEC #2507-WS-4 P:2.5mm VERTICAL REPLACE:135-005267-040	135-2507WS-040	1
J9	HEADER 9 PINS PEC #2507-WS-9 PITCH 2.5mm VERTICAL REPLACE:135-005267-090	135-2507WS-090	1
J2	*CdF HEADER CTL 6 PINS PHS-06 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR)	135-PHS060-060	1
U2 GND	SOLDERING LUG PHOTOINTERRUPTER SPI-230 SANYO/ RPI-574/RPI-576 ROHM	137-300000-000 110-002060-000	1 1
WH753	*CdF HEADER 3 PINS #2001-WR-3 PITCH 2mm HORIZONTAL	135-2001WR-030	1
WH751	(F135-2001WR-051) HEADER 5 PINS #A2001WR2-05/2001-WR-5 P:2mm HORIZONTAL	135-2001WR-050	1
WH754	(F135-2001WR-061) HEADER 6 PINS #A2001WR2-6P/2001-WR-6 P:2mm HORIZONTAL	135-2001WR-060	1
WH755	FFC CONN SOCKET 16PINS P:1mm TAIKO DENKI	135-TOCA16-160	1
FB1,2,3,4,5,6,7,8,9	HORIZONTAL TOC-A16X-B2/D100-SRA-16 MOTOR-DC-005V-NORMAL 5V #PM7150T32-2 WITH PULLEY MOTOR-DC-006V-NORMAL 6V #PM7160T22-1 (SANKO) DVD-FLC-01-SAMG-N DVD MECHANISM FOR CD-R CMS-S21MG6 (SAMSUNG)	151-055032-000 151-066022-000 163-000216-000	1 1 1
<b>DVD MECHANISM - 3DV-9SMTB</b>			
<b>RESISTORS [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R754	*CdF RESISTOR 10 Kohm	001-010351-016	1
R755	RESISTOR 180 ohm	001-018151-016	1
R752	*CdF RESISTOR 22 Kohm	001-022351-016	1
R751,753	RESISTOR 2.2 ohm +-5% 1/2W	001-022850-012	2
R756	RESISTOR 8.2 Kohm	001-082251-016	1
<b>CAPACITORS</b>			
C753,754,755,756	CERAMIC CAP 0.1 uF/16V +80%-20%	003-010480-016	4
C757	ELECT CAP 4.7 MFD/50V +-20% (5x11)	006-004000-50D	1
<b>TRANSISTORS</b>			
Q751,752,853,854,855	TRLNPNST-TAP&TO-092 3DG1815	008-618150-000	5
<b>INTEGRATED CIRCUITS</b>			
IC751,752	ICMOTORDRIVER-02CH LS1641 (SIP-10-2.54) (LIGHTNING)	010-731641-000	2
<b>DIODES</b>			
D751	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	1
DZ753	ZENER DIODE 2.2V	011-010022-120	1
DZ751	ZENER IN-5228B,3.9V,1/2W	011-010039-120	1
DZ754	ZENER DIODE 4.3V 1/2W	011-010043-120	1
DZ752	ZENER IN-5232B, 5.6V, 1/2W (ROHM)	011-010056-120	1
<b>SWITCHES</b>			
	LEAF SWITCH LSA-1119H	022-001119-000	1
	LEAF SWITCH LS-121-0A (LUP FUNG)	022-001210-001	1
<b>WIRE</b>			
	JP WIRE AWG26#1007 3x3mm 70mm YELLOW	051-673070-010	1
<b>RDS PORTION</b>			

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
<b>RESISTORS</b>			
R458	CHIP RESISTOR 1 Kohm +-5% 1/16W (0603/1608)	001-310252-016	1
R472	CHIP RESISTOR 18 Kohm +-5% 1/16W (0603/1608)	001-318352-016	1
R454,456	CHIP RESISTOR 2.2 Kohm +-5% 1/16W (0603/1608)	001-322252-016	2
R457	CHIP RESISTOR 330 Kohm +-5% 1/16W (0603/1608)	001-333452-016	1
R455	CHIP RESISTOR 470 Kohm +-5% 1/16W (0603/1608)	001-347452-016	1
R453	CHIP RESISTOR 560 ohm +-5% 1/16W (0603/1608)	001-356152-016	1
R715	CHIP RESISTOR 100 ohm +-5% 1/16W (0603/1608)	001-310152-016	1
R721	CHIP RESISTOR 1 Kohm +-5% 1/16W (0603/1608)	001-310252-016	1
R717,718,720	CHIP RESISTOR 10 Kohm +-5% 1/16W (0603/1608)	001-310352-016	3
R701,706,722	CHIP RESISTOR 2.7 Kohm +-5% 1/16W (0603/1608)	001-327252-016	3
R702,703,708,709	CHIP RESISTOR 33 Kohm +-5% 1/16W (0603/1608)	001-333352-016	4
R707,710,711,712,719	CHIP RESISTOR 4.7 Kohm +-5% 1/16W (0603/1608)	001-347252-016	5
<b>CAPACITORS</b>			
C459	CHIP CAP 0.1 uF/16V +-10% (0603/1608) (87-A10-260-08G) (C1608JB1C104K) (TDK)	003-510412-016	1
C454	CHIP CAP 0.0022 uF/50V +-10% (0603/1608) (UMK107B222KZ-TM)	003-522212-050	1
C452,453	CHIP CAP 0.022 uF/25V +-10% (0603/1608) (MCH182C223KK/GRM39X7R223K25PT)	003-522312-025	2
C456	CHIP CAP 0.047 uF/25V +-10% (0603/1608)	003-547312-025	1
C460	CHIP CAP 560 pF/50V +-10% (0603/1608)	003-556112-050	1
C457,458	CHIP CAP 33 pF/50V +-5% NPO (0603/1608) (GRM39COG330J50PT/MCH185A330JK)	003-633052-050	2
C461	ELECT CAP 2.2 MFD/50V +-20% (5x11)	006-002000-50D	1
C451	ELECT CAP 100 MFD/10V +-20% (5x11)	006-010100-10D	1
C701,702	ELECT CAP 0.22 MFD/50V +-20% (VX/5x11)	006-000200-50C	2
C703,704	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	2
C711,712	ELECT CAP 100 MFD/16V +-20% (5x11)	006-010100-16D	2
<b>TRANSISTORS</b>			
Q412,413	TR NPN SST-RAD&SC-059 2SC2712GR (89-327-125-08)	008-A02712-000	2
Q701,702,708,709	TR NPN GEN-BUL&TO-092 3DG9014(9014)	008-609014-000	4
<b>CRYSTAL</b>			
CX402	CRYSTAL 4.332 MHz CSA309 CL=16pF CITIZEN (87-A70-091-01G)	009-604332-000	1
<b>INTEGRATED CIRCUIT</b>			
IC403	ICRDS DECODER BU1923F (ROHM)	010-351923-001	1
<b>DIODE</b>			
DZ402	ZENER IN-5231B, HZ5C1, 5.1V, 1/2W	011-010051-120	1
<b>INDUCTORS</b>			
L402	*CdF INDUCTOR 100 uH /1128/CEC-101K +-10% LAL03 TB 101K	018-010014-000	1
FB701,702,703,704,705,706,707	*CdF FERRITE BEAD INDUCTOR #BL01RN1-A62 0.45 uH/7A (5x3.6mm) (87-008-372-01)	032-101162-000	7
<b>WIRE</b>			
	FFC CABLE 22 PINS L=128mm 4+120+4 P:1mm UL2896 0.035x0.7 (TUNG HING)	040-220128-100	1
<b>MISCELLANEOUS</b>			
WH702, J11	FFC CONN 6232 22 PINS w/o LOCK PITCH:1mm 00 6232 022 006 800 VERTICAL TYPE	135-006232-220	2

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
JK701	RGB CONNECTOR SOCKET 21 PINS HRC-021V-07(KUNMING)/MRC-021V-04(HONDA)	135-HRC021-210	1
<b>TUNER PORTION</b>			
<b>RESISTORS</b>			
JP403,404,407,408,409,421,423,424	CHIP RESISTOR 0 ohm +-5% 1/16W (0603/1608)	001-300052-016	8
R467	CHIP RESISTOR 10 ohm +-5% 1/16W (0603/1608)	001-310052-016	1
R415,430,431	CHIP RESISTOR 100 ohm +-5% 1/16W (0603/1608)	001-310152-016	3
R401,410,412,443,444,445,459,465	CHIP RESISTOR 1 Kohm +-5% 1/16W (0603/1608)	001-310252-016	8
R451,461,409	CHIP RESISTOR 10 Kohm +-5% 1/16W (0603/1608)	001-310352-016	3
R402,403,435,448	CHIP RESISTOR 100 Kohm +-5% 1/16W (0603/1608)	001-310452-016	4
R420,421,442	CHIP RESISTOR 18 Kohm +-5% 1/16W (0603/1608)	001-318352-016	3
R406,416	CHIP RESISTOR 220 ohm +-5% 1/16W (0603/1608)	001-322152-016	2
R405,422,438	CHIP RESISTOR 2.2 Kohm +-5% 1/16W (0603/1608)	001-322252-016	3
R413,417,423	CHIP RESISTOR 22 Kohm +-5% 1/16W (0603/1608)	001-322352-016	3
R411,419,424,425,426,427,452	CHIP RESISTOR 3.3 Kohm +-5% 1/16W (0603/1608)	001-333252-016	7
R404,407	CHIP RESISTOR 47 ohm +-5% 1/16W (0603/1608)	001-347052-016	2
R408	CHIP RESISTOR 470 ohm +-5% 1/16W (0603/1608)	001-347152-016	1
R428,429,436,447	CHIP RESISTOR 4.7 Kohm +-5% 1/16W (0603/1608)	001-347252-016	4
R446	CHIP RESISTOR 47 Kohm +-5% 1/16W (0603/1608) (MCR03EZJH-473)	001-347352-016	1
R418	CHIP RESISTOR 5.1 Kohm +-5% 1/16W (0603/1608)	001-351252-016	1
R414	CHIP RESISTOR 56 ohm +-5% 1/16W (0603/1608)	001-356052-016	1
R437	CHIP RESISTOR 560 ohm +-5% 1/16W (0603/1608)	001-356152-016	1
R460	CHIP RESISTOR 5.6 Kohm +-5% 1/16W (0603/1608)	001-356252-016	1
R466	CHIP RESISTOR 8.2 Kohm +-5% 1/16W (0603/1608)	001-382252-016	1
<b>CAPACITORS</b>			
C421	CHIP CAP 0.001 uF/50V +-10% (0603/1608) (MCH185C102KK/GRM39X7R102K50PT)	003-510212-050	1
C403,404,409,410,415	CHIP CAP 0.01 uF/50V +-10% (0603/1608) (GRM39B103K50PT)	003-510312-050	5
C418,427,436	CHIP CAP 0.1 uF/16V +-10% (0603/1608) (87-A10-260-08G) (C1608JB1C104K) (TDK)	003-510412-016	3
C422,428,429,432,433	CHIP CAP 0.015 pF/50V +-10% (0603/1608)	003-515312-050	5
C402,438	CHIP CAP 0.0022 uF/50V +-10% (0603/1608) (UMK107B222KZ-TM)	003-522212-050	2
C405,411,414,439,441,444,466	CHIP CAP 0.022 uF/50V +-10% (0603/1608)	003-522312-050	7
C473,476	CHIP CAP 0.0047 uF/50V +-10% (0603/1608)	003-547212-050	2
C406	CHIP CAP 0.047 uF/25V +-10% (0603/1608)	003-547312-025	1
C423	CHIP CAP 0.47 uF/10V +-10% (0603/1608) (LMK107BL474KA-T)	003-547412-010	1
C424	(F003-556382-016) CHIP CAP 0.056 uF/16V +-10 (0603/1608)	003-556312-016	1
C420,448,449	(F003-610112-050) CHIP CAP 100 pF/50V +-5% NPO (0603/1608)	003-610152-050	3
C413	CHIP CAP 15 pF/50V +-5% NPO (0603/1608) (UMK107CH150JZ-TM)	003-615052-050	1
C446,447	CHIP CAP 24 pF/50V +-5% NPO (0603/1608)	003-624052-050	2
C412	POLY CAP 350 pF/50V +-5% (B351J09P2HH33AAA)	005-035100-000	1
C425,467,468	ELECT CAP 0.47 MFD/50V +-20% (5x11)	006-000400-50D	3



**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
C417,426,430,431	ELECT CAP 1 MFD/50V +-20% (5x11)	006-001000-50D	4
C435	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	1
C437,465,470	ELECT CAP 100 MFD/16V +-20% (5x11)	006-010100-16D	3
C419	ELECT CAP 22 MFD/25V +-20% (5x11)	006-022000-25D	1
C416,442	ELECT CAP 220 MFD/10V +-20% (6.3x11)	006-022100-10D	2
C471	ELECT CAP 220 MFD/16V +-20% (8x11.5)	006-022100-16D	1
TC401	TRIMMER CAP CVN610 3-10pF WHITE (6x6x5mm) (JIN MYOUNG) (CdF)	007-200610-000	1
C408	*CdF ELECT CAP 47 MFD/16V +-20% (5x11)	006-047000-16D	1
<b>TRANSISTORS</b>			
Q402	CHIP NJFET SST201/SST201B-T1 (SILICONIX) 2SK208Y TOSHIBA	008-A00201-010	1
Q409,410	TR PNPPWR-RAD&SC-059 2SA1036K	008-A01036-000	2
Q401,403,404,405	TR NPNSST-RAD&SC-059 2SC2712GR (89-327-125-08)	008-A02712-000	4
<b>CRYSTAL</b>			
CX401	CRYSTAL 7.2 MHz HC-49/U/ALCCCAK	009-607200-000	1
<b>INTEGRATED CIRCUITS</b>			
IC401	ICRDS TA2099N (TOSHIBA) (87-A21-173-01)	010-832099-000	1
IC402	ICPLL TC9257F	010-849257-000	1
<b>DIODES</b>			
VD401,402	VARI CAP DIODE 1SV149B,TOSHIBA	011-000149-000	2
D401,402,403,404	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	4
<b>INDUCTORS</b>			
T408,409	IFT 7PF022C 7.8mm BLACK	012-000022-078	2
T405	IFT 7M4A1772R 7.5mm YELLOW 012-001720-075	012-001772-075	1
T403	IFT 7M1A1959R 7.5mm RED 012-001905-075	012-001959-075	1
T401	IFT 7M1A1961R 7.5mm BLACK 012-001950-075	012-001961-075	1
L401,403	*CdF INDUCTOR 100 uH /1128/CEC-101K +-10% LAL03 TB 101K	018-010014-000	2
<b>CERAMIC FILTERS</b>			
CF401,402	CERAMIC FILTER SFE10.7MS3-A	019-000107-006	2
CF404	CERAMIC FILTER CDA10.7MG82-A	019-000107-028	1
CF403	(F019-000450-002) CERAMIC FILTER LTU450G2	019-000450-012	1
<b>WIRES</b>			
CON1	*CdF HSG CD170-2A JST PHR 2mm w/110mm BLK,RED JP WIRE AWG28#1095 SLDG.5mm	136-020170-200	1
CON1 TO WH852	HSG (2mm) JST PHR-08 w/450mm RED,BLK,BLUE, WHT,YEL,ORN,BRN,RED AWG30#UL1571 SL 4mm	136-F00845-000	1
	HSG (2mm) PEC 2001H-03 TO 2003H-03 w/425mm SHIELD WIRE AWG28#UL2547/2C RED,WHITE	136-F10342-500	1
<b>MISCELLANEOUS</b>			
JK401	TUNER-FM&&00STATION FM FRONT END TUNER PET-3010F/H (EU) (TAE BONG) JACK COAXIAL JACK HTR-401V HEADER MOLEX 2 PINS 5268-02A PITCH 2.5mm HORIZONTAL TYPE	042-103010-000 118-030401-000 135-005268-020	1 1 1
<b>CENTRE SPEAKER PORTION - SSQC3</b>			
<b>WIRES</b>			
	JP WIRE AWG22#1007 5x5mm 130mm RED	051-275130-006	1

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
	JP WIRE AWG22#1007 5x5mm 130mm BLACK	051-275130-009	1
<b>MISCELLANEOUS</b>			
FOR CT	PUSH TERMINAL BOARD PT-213-03 BLACK,RED MSP-105H-03 BLACK,RED SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm TRANS. w/BK LINE 4M w/TUBE 2xRED,BLK,BRN SPK00003*008OHM0050W w/BK DOME PAPER CAP #LF77SZ4307G55C8AS19PDB (GGEC)(L0234)	118-000213-000 122-002120-401 131-308050-010	1 1 1
<b>OUTPUT TERMINAL PORTION</b>			
<b>RESISTORS [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R880,881,882	*CdF RESISTOR 10 ohm	001-010051-016	3
R1003	*CdF RESISTOR 100 ohm	001-010151-016	1
R877	*CdF RESISTOR 10 Kohm	001-010351-016	1
R875	*CdF RESISTOR 22 Kohm	001-022351-016	1
R876	*CdF RESISTOR 3.3 Kohm	001-033251-016	1
R873,874	*CdF RESISTOR 47 Kohm	001-047351-016	2
R871	RESISTOR 56 Kohm	001-056351-016	1
<b>CAPACITORS</b>			
C996	(F003-010380-025) CERAMIC CAP 0.01 uF/ 50V +80%-20%	003-010380-050	1
C998	ELECT CAP 1000 MFD/16V +-20% (10x20)	006-010200-16D	1
<b>TRANSISTORS</b>			
Q871,875	TRLNPNST-TAP&TO-092 3DG1815	008-618150-000	2
Q872	TRLPNPPWR-TAP&TO-092 3CA8550	008-685500-000	1
<b>DIODES</b>			
D913,915,916	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	3
D914	RECTIFIER IN-4001B	011-024001-000	1
<b>MISCELLANEOUS</b>			
JK601,603	4 P PUSH TERMINAL BOARD HSP-354V-03 A,B-RED C,D-BLACK (STS5x/STS6x)	118-000354-000	2
JK602	EXT SP JACK HSP-102V-01 A-RED,B-BLACK (PUSH TERMINAL BOARD)	118-040102-000	1
JK604	MINI DIN SOCKET MDSL-09SC0A (LEOCO)	119-000090-000	1
RL601,602,603	⚠ RELAY 12V OSA-SS-212DM5	128-122125-000	3
CN01	HEADER 2 PINS #TJ6-2A PITCH:3.96mm VERTICAL 1.14mm AQUIRE PIN	135-000TJ6-020	1
CN02	HEADER MOLEX 2 PINS 5267-02A PITCH 2.5mm STRAIGHT TYPE	135-005267-020	1
<b>POWER AF PORTION</b>			
<b>RESISTORS [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R680,905,915	RESISTOR 100 ohm,+-5%,1/4W	001-010150-014	3
R632,661,664,665,919,1015,1016	*CdF RESISTOR 10 Kohm	001-010351-016	7
R657,663,687,920	*CdF RESISTOR 100 Kohm	001-010451-016	4
R614,616,631,633,634,907	RESISTOR 1.8 Kohm	001-018251-016	6
R924	*CdF RESISTOR 2.2 Kohm	001-022251-016	1
R662	*CdF RESISTOR 22 Kohm	001-022351-016	1
R610,619,622,627,639,912	(F001-022951-001) RESISTOR 0.22 ohm +-5% 1W (METAL FILM)	001-022952-001	6
R605,606,666,671,672,673,689, 903,909,910	*CdF RESISTOR 4.7 Kohm	001-047251-016	10

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
R1001	RESISTOR 3.3 Kohm +-5% 1/2W	001-033250-012	1
R602,604,675,677,679,682,683,684,685,686,902,921	*CdF RESISTOR 47 Kohm	001-047351-016	12
R640,642,643,644,645,646,647,648,649,650,914,917	RESISTOR 4.7 ohm +-5% 1/2W	001-047850-012	12
R607,611,612,613,901,906,615,617,621,625,630,629,635,636,668,669,670,908,916	RESISTOR 56 Kohm	001-056351-016	19
R641,681	RESISTOR 56 ohm +-5% 1/4W	001-056050-014	2
R658	RESISTOR 5.6 Kohm	001-056251-016	1
R608,609,618,620,623,624,626,628,637,638,659,913,918	*CdF RESISTOR 6.8 Kohm	001-068251-016	13
R652,653,654,655,656,923	*CdF RESISTOR 82 Kohm	001-082351-016	6
<b>CAPACITORS</b>			
C605,606,617,619,621	CERAMIC CAP 220 pF/50V +-10%	003-022110-050	5
C601,602,636,637,638,903	CERAMIC CAP 470 pF/50V +-5% (88-211-550-81C)	003-047150-050	6
C916	SEMI-COND 0.022 uF/25V +-10%	003-322310-025	1
C607,610,615,616,623,906	CERAMIC CAP 3 pF/50V +-0.25pF (NPO) (CC45-CH1H030C/RBU04CH030C-L)	003-430830-050	6
C625,626,627,628,629,911	#MYLAR CAP 0.1 uF/50V +-10%	004-010410-050	6
C603,604,633,634,635	ELECT CAP 1 MFD/50V +-20% (5x11)	006-001000-50D	5
C630,631,902	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	3
C613,614,624,905	ELECT CAP 100 MFD/35V +-20% (8x11.5)	006-010100-35D	4
C907	ELECT CAP 1000 MFD/16V +-20% (10x20)	006-010200-16D	1
C632,917	ELECT CAP 22 MFD/25V +-20% (5x11)	006-022000-25D	2
C909,910	(F006-022200-35D) ELECT CAP 2200 MFD/35V +-20% (VX/16x31.5)	006-022200-35C	2
C611,612	ELECT CAP 3300 MFD/35V +-20% (18x35)	006-033200-35D	2
C608,609,618,620,622,904	*CdF ELECT CAP 47 MFD/16V +-20% (5x11)	006-047000-16D	6
C908	ELECT CAP 47 MFD/50V +-20% (87-010-408-08J)	006-047000-50C	1
<b>TRANSISTORS</b>			
Q611	TR PNPST-RAD&TO-092 3CG733P (2SA733P)	008-600733-000	1
Q607	TR NPNST-RAD&TO-092 3DG945P (2SC945P)	008-600945-000	1
Q603,604,605,606,608,610,615,902,903	TRLNPNST-TAP&TO-092 3CG1015	008-610150-000	9
Q601,602,609,616,617,618,901	TRLNPNST-TAP&TO-092 3DG1815	008-618150-000	7
Q614	TRLNPNPWR-TAP&TO-092 3DA8050	008-680500-000	1
Q612	TR NPNST-RAD&SC-072 DTC114ES (ROHM)	008-801141-000	1
<b>INTEGRATED CIRCUITS</b>			
IC601	ICAMP-POWR-&&-00020W STK402-930 (SANYO) (5 CHANNEL AF)	010-550402-001	1
IC901	ICAMP-POWR-&&-00040W STK404-070 (1 CHANNEL AF)	010-550404-000	1
<b>DIODES</b>			
D601,602,603,604,605,607,901,906	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	8
ZD901	ZENER DIODE MTZJT-72-12B 12V 1/2W (TSB#G51421015104)	011-010012-120	1
<b>MISCELLANEOUS</b>			

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
L601,602,603,604,605,901	FM COIL 24.5T 4mm/4.0x24.5Tx0.7 RED DIA:0.7mm #CS47-868793/F192829	015-245040-007	6
	DIN COAXIAL CABLE #2464 9C+1 DIA:10mm L=5M UL2464-SB 9Cx26AWG (9 PIN)	122-004020-500	1
	SPK006.5"004OHM0120W w/BK DOME PAPER CAP #SW165RZ5802G100F4AS36PFB (L0257)	131-6540A0-010	1
<b>PRE AF PORTION</b>			
<b>RESISTORS [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R850,861,862,863,864	*CdF RESISTOR 10 Kohm	001-010351-016	5
R961,962,969,970,976,977	*CdF RESISTOR 100 Kohm	001-010451-016	6
R959,964,967,972,974	*CdF RESISTOR 12 Kohm	001-012351-016	5
R983	*CdF RESISTOR 15 Kohm	001-015351-016	1
R979	RESISTOR 180 Kohm	001-018451-016	1
R852,854,965,966,973,980,985,986,991,992	*CdF RESISTOR 220 ohm	001-022151-016	10
R951,952,953,954,955,956,978,999	*CdF RESISTOR 2.2 Kohm	001-022251-016	8
R981	*CdF RESISTOR 22 Kohm	001-022351-016	1
R960,963,968,971,975,993,994,995,996,997,998	*CdF RESISTOR 4.7 Kohm	001-047251-016	11
R984,982	RESISTOR 68K	001-068351-016	2
R950,958,987,988,989,990	RESISTOR 8.2 Kohm	001-082251-016	6
<b>CAPACITORS</b>			
C959,960,963,964,966	CERAMIC CAP 100 pF/50V +-10%	003-010110-050	5
C981,982,983,984,985,986	CERAMIC CAP 220 pF/50V +-10%	003-022110-050	6
C990,991,992,993,994,995	CERAMIC CAP 30 pF/50V +-10%	003-030010-050	6
C997	CERAMIC CAP 0.04 uF/50V +80-20%	003-040380-050	1
C967	SEMI-COND 0.0056 uF/25V +-10% Y5P	003-356210-025	1
C973	#MYLAR CAP 0.012 uF/100V +-10%	004-012310-100	1
C972	#MYLAR CAP 0.068 uF/100V +-10%	004-068310-100	1
C969,970	ELECT CAP 0.47 MFD/50V +-20% (5x11)	006-000400-50D	2
C951,952,953,954,955,956,957,958,975,976,977	ELECT CAP 1 MFD/50V +-20% (5x11)	006-001000-50D	11
C941,978	ELECT CAP 10 MFD/50V +-20% (5x11)	006-010000-50D	2
C872,875	ELECT CAP 100 MFD/16V +-20% (5x11)	006-010100-16D	2
C961,962,965,968,971,974,979,980	ELECT CAP 220 MFD/16V +-20% (8x11.5)	006-022100-16D	8
C871,874	ELECT CAP 220 MFD/25V +-20% (8x11.5)	006-022100-25D	2
C873,876	ELECT CAP 470 MFD/25V +-20% (10x16)	006-047100-25D	2
<b>TRANSISTORS</b>			
Q851	TRLNPNPWR-TAP&TO-092 3DA8050	008-680500-000	1
Q802	TRLNPNPWR-TAP&TO-092 3CA8550	008-685500-000	1
<b>INTEGRATED CIRCUITS</b>			
IC951,952,953,954	IC BA4558N O.AMP	010-404558-000	4
<b>DIODES</b>			
D909	DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH	011-004148-000	1
ZD851,852	ZENER DIODE MTZJT-72-12B 12V 1/2W (TSB#G51421015104)	011-010012-120	2
D910,911	RECTIFIER IN-4001B	011-024001-000	2
<b>WIRE</b>			
A TO A`	JP WIRE AWG26#1007 5x5mm 60mm BLACK	051-675060-009	1
<b>RECTIFIER PORTION</b>			

**ELECTRICAL PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
<b>RESISTOR [All are +-5% 1/16W (1/8W) tape &amp; wheel resistors unless otherwise specified]</b>			
R859	*CdF RESISTOR 100 ohm	001-010151-016	1
<b>CAPACITORS</b>			
C861,862,863,864,867,868,869,870	(F003-010380-025) CERAMIC CAP 0.01 uF/ 50V +80%-20%	003-010380-050	8
C879,880	ELECT CAP 100 MFD/50V +-20% (8x11.5)	006-010100-50D	2
C877,878	ELECT CAP 1000 MFD/25V +-20% (12.5x20)	006-010200-25D	2
<b>DIODES</b>			
D855,856,857,858	RECTIFIER 10A1 10A 100V (GW)	011-020010-990	4
D851,852,853,854,859	RECTIFIER IN-4001B	011-024001-000	5
<b>WIRES</b>			
CN809 TO CN812	JP WIRE AWG22#1015 5x5mm 300mm RED	051-255300-006	2
CN813 TO CN01	JP WIRE AWG22#1015 5x5mm 300mm WHITE	051-255300-008	2
CN817 TO A.B, CN814 TO CN820	HSG CD228-2A MOLEX 5264 w/300mm RED,BLK AWG26#1007 UL JP SLDG.4mm	136-020228-250	2
CN02 TO LED101	HSG CD363-2C PIN MOLEX5264 2.5mm w/600mm RED,BLK JP AWG26#1007 SLDG 4mm	136-020363-251	1
CN806 TO CN807	HSG AS162-3 MOLEX 5264 WITH 220mm RED, BLUE,BLACK AWG26#1007 JP SLDG 5mm	136-030162-000	1
CN805 TO CN808	HSG CD2775-3B JMT JP2422-3 w/230mm RED,BLACK,WHITE AWG22#UL1007 SLDG.4mm	136-032775-390	1
CN01 TO SP	HSG (3.96mm) YS TJC6-2Y w/600mm RED,BLACK AWG18#UL1007 SLDG.10mm	136-MZ0260-000	1
<b>MISCELLANEOUS</b>			
LED101	LED-R-3MM&-S-&&&-&&& SE-3001DT 3mm BRIG.RED 28mm LEAD w/REFL.(8C-CS8-619-01)	110-030010-003	1
	⚠ PT300WEI76/56&F&BVDE 230V:24V/24V/13V/ 13V w/FUSE 130°C (L7656-G01E)	123-F53551-400	1
FUSE1,2	⚠ FUSE #S506 1.6A/250V 5x20mm TIME LAG. (CUL/SEMKO/VDE/BSI APP.)	124-016020-000	2
FUSE3,4	⚠ FUSE #21806.3 6.3A/250V 5x20mm TIME LAG (CUL/SEMKO/VDE/BSI)	124-063020-001	2
RL806	⚠ RELAY 9V SDT-S-109LMR	128-090109-000	1
	⚠ PLA-ULN-7'05"-VDE-MG VDE APP.CORD 2250mm MIGRATION (HARVEST)	134-B11331-006	1
CN805	HEADER JMT 3 PINS JM2422-3 PITCH:3.96mm	135-002422-030	1
CN814,817	HEADER 2 PINS PEC #2507-WS-2 PITCH 2.5mm VERTICAL REPLACE:135-005267-020	135-2507WS-020	2
CN806	HEADER 3 PINS PEC #2507-WS-3 PITCH 2.5mm VERTICAL REPLACE:135-005267-030	135-2507WS-030	1
<b>4-SPEAKER PORTION - SSQ3</b>			
<b>WIRES</b>			
	JP WIRE AWG22#1007 5x5mm 130mm RED	051-275130-006	4
	JP WIRE AWG22#1007 5x5mm 130mm BLACK	051-275130-009	4
<b>MISCELLANEOUS</b>			
	PUSH TERMINAL BOARD PT-213-03 BLACK,RED MSP-105H-03 BLACK,RED	118-000213-000	1
FOR FR	SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm TRANS.w/BK LINE 4M w/TUBE 2xRED,BLK,YEL	122-002120-402	1
FOR FL	SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm TRANS.w/BK LINE 4M w/TUBE 2xRED,BLK,BLUE	122-002120-403	1

**ELECTRICAL PARTS LIST - CONTINUED**

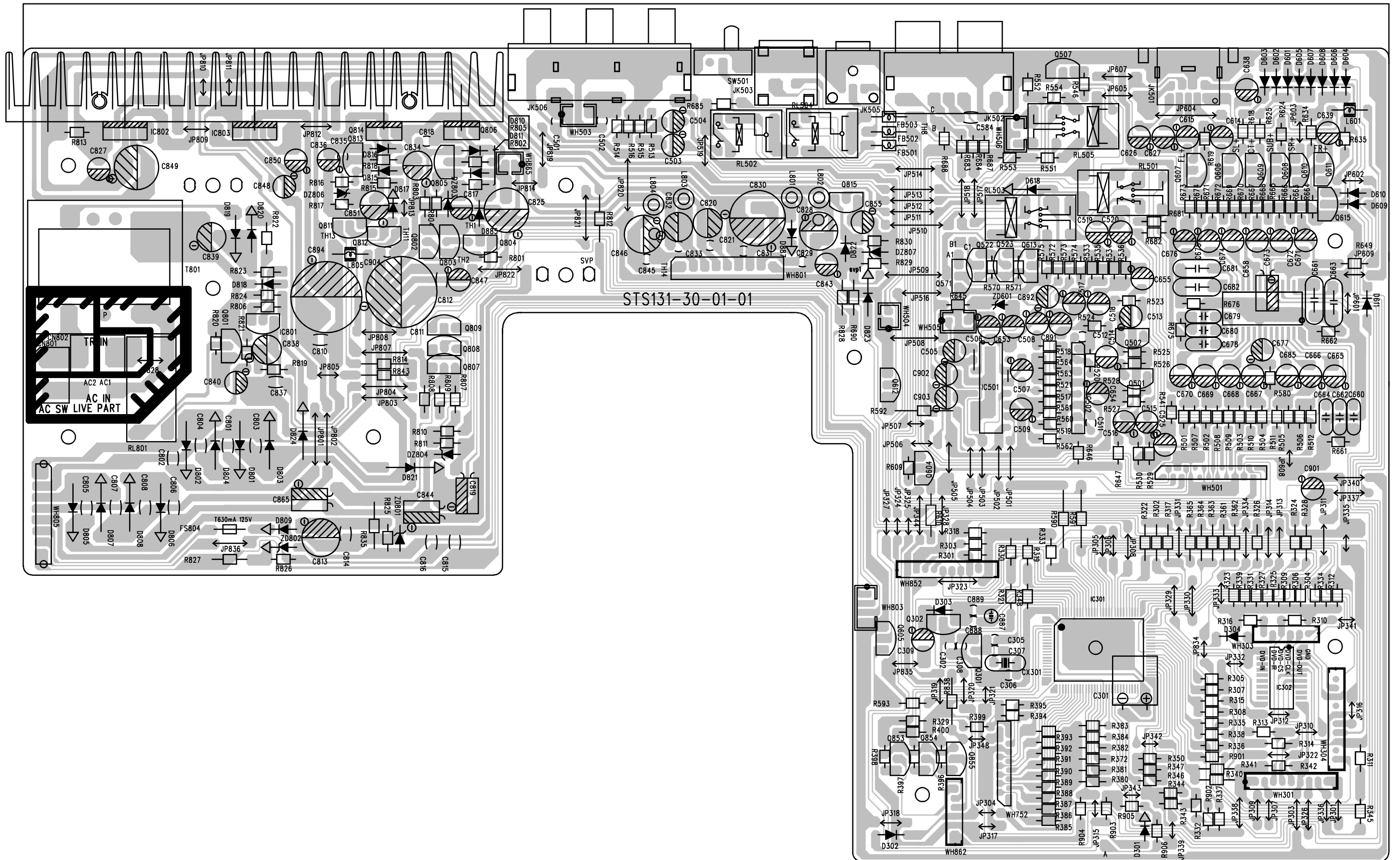
Ref. No.	Description	Mfr's Part No.	Qty.
FOR SR	SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm TRANS.w/BK LINE 10M w/TUBE 2xRED,BLK,GRN	122-002121-003	1
FOR SL	SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm TRANS.w/BK LINE 10M w/TUBE 2xRED,BLK,ORN	122-002121-004	1
	SPK00003*008OHM0050W w/BK DOME PAPER CAP #LF77SZ4307G55C8AS19PDB (GGEC)(L0234)	131-308050-010	4

**NOTES:**

1. " # " Mylar is a registered trademark of E.I. Du Pont de Nemours and Company.
2. ⚠ Symbol in parts list represent safety parts.

# PRINTED CIRCUIT BOARDS

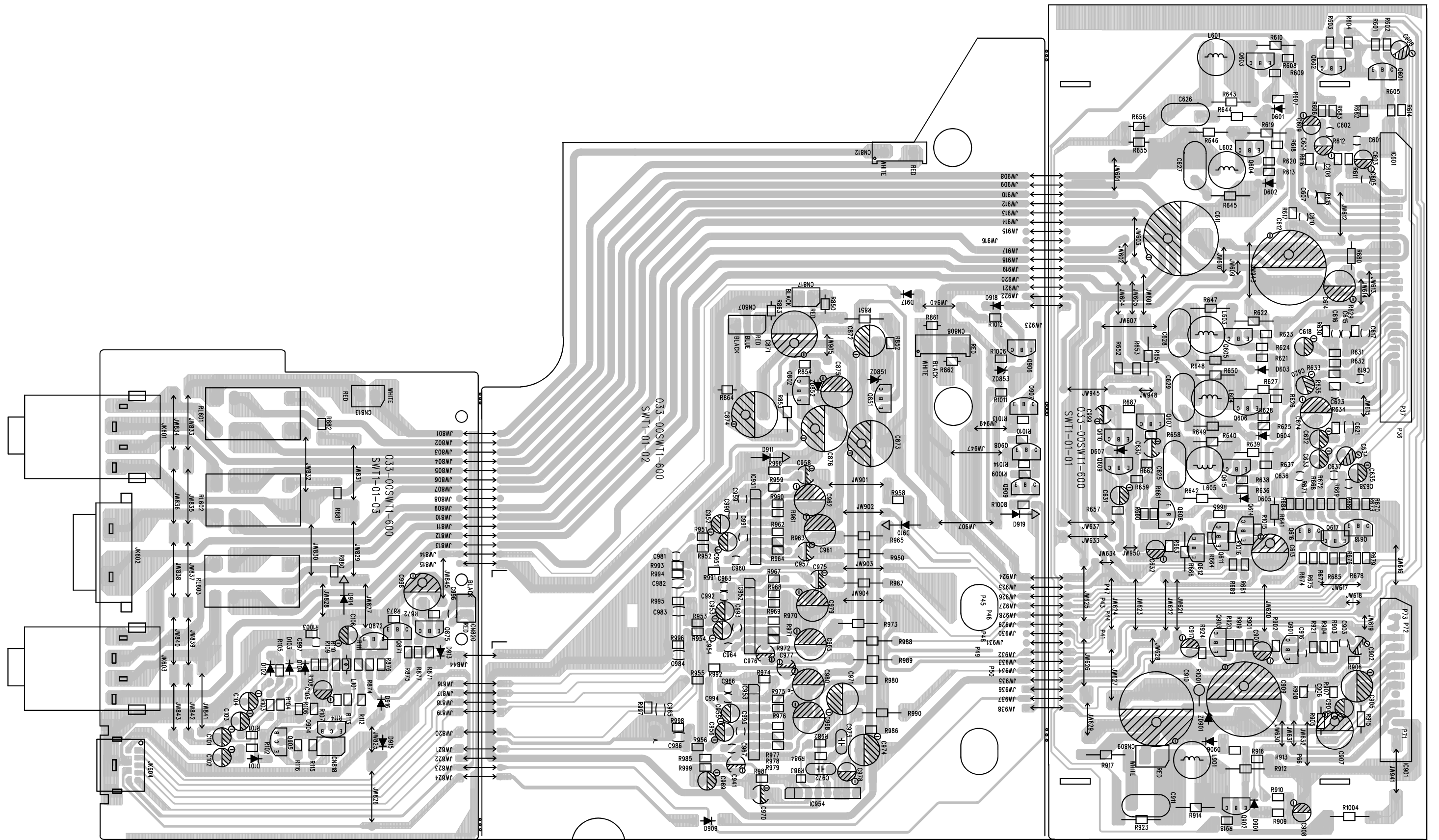
## MAIN BOARD STS131-30-01-01



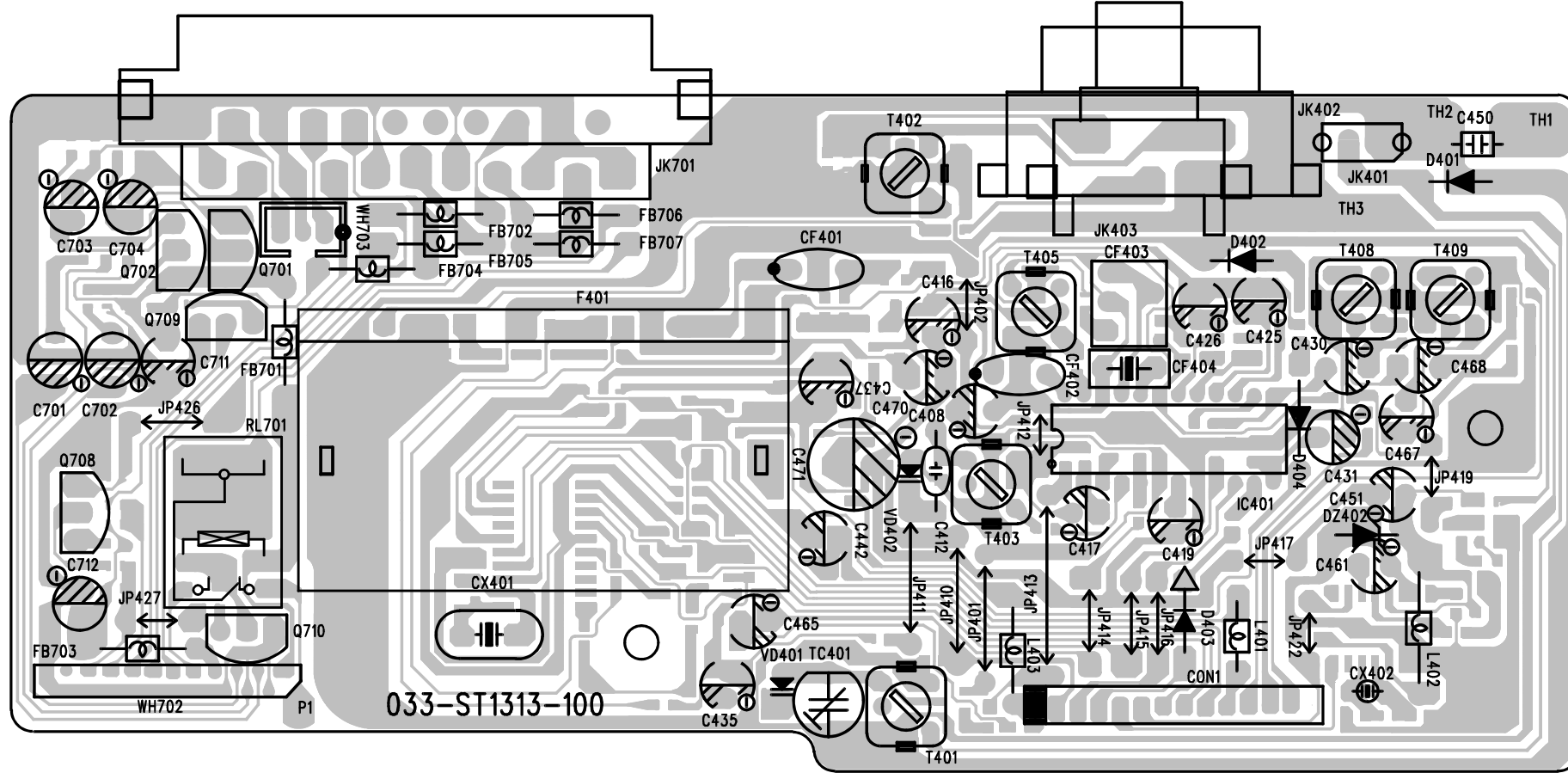
**REMARKS:**

PCB Part No.: 033-00SWT1-600, 033-ST1313-300 of this model are assembled and aligned in FULL SET and are supplied in FULL SET for serving.

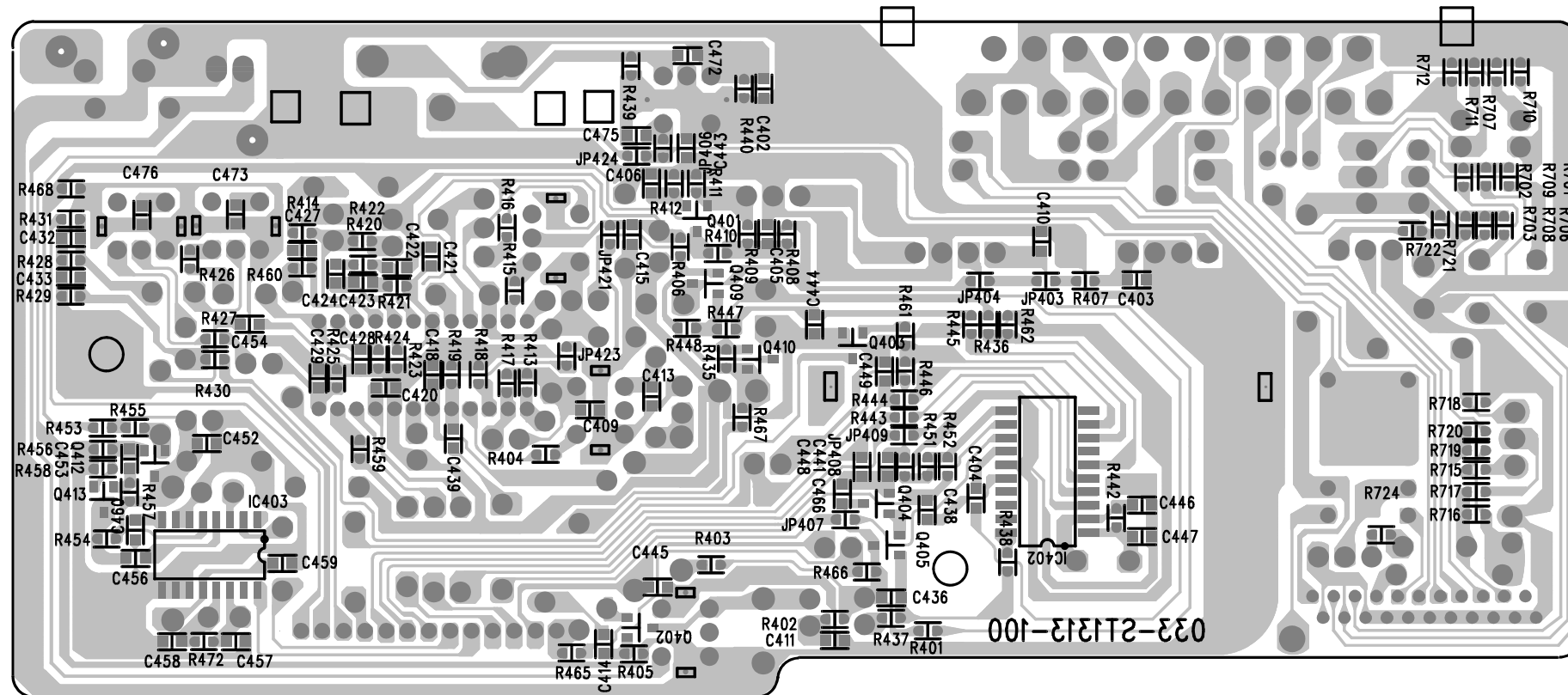
**POWER AMPLIFIER BOARD**  
**SWT1-01-01,02,03**



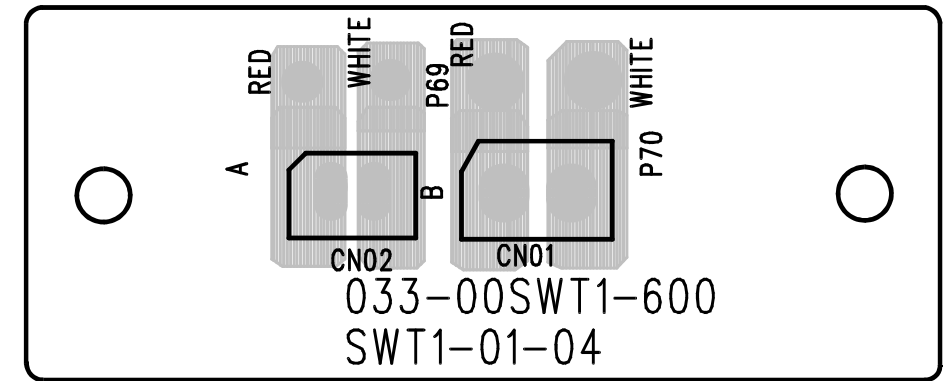
**TUNER BOARD (TOP VIEW)**  
STS131-30-01-02



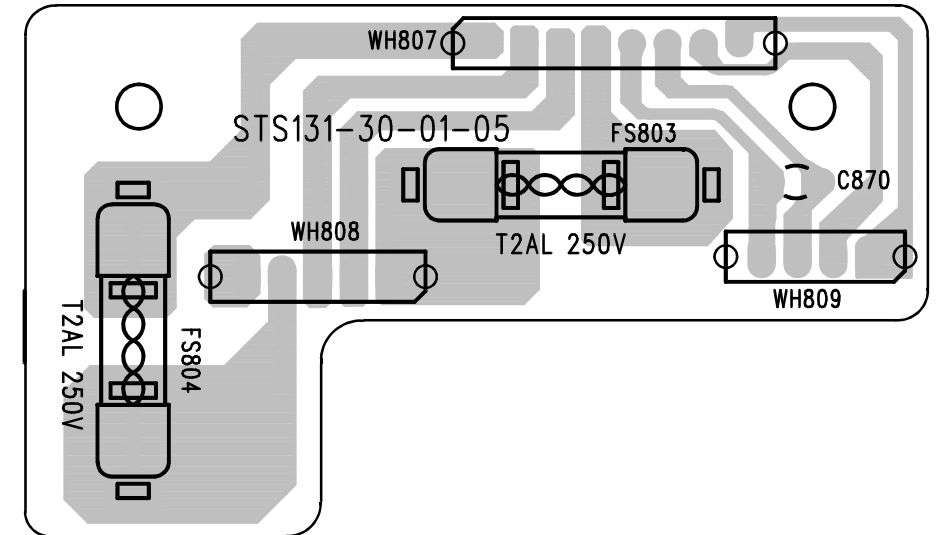
**TUNER BOARD (BOTTOM VIEW)**  
STS131-30-01-02



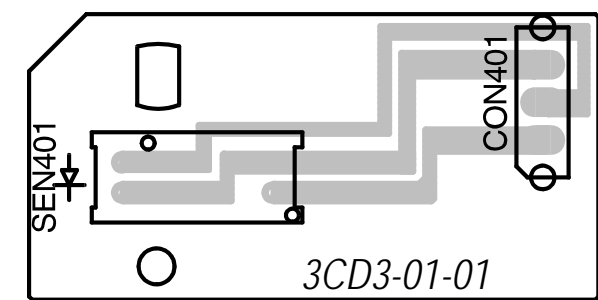
**CONNECTION BOARD**  
SWT1-01-04



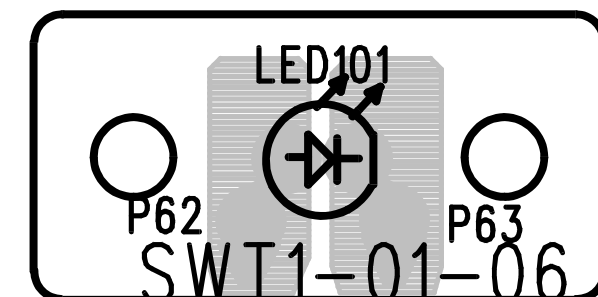
**FUSE BOARD**  
STS131-30-01-05



**SENSOR BOARD**  
3CD3-01-01

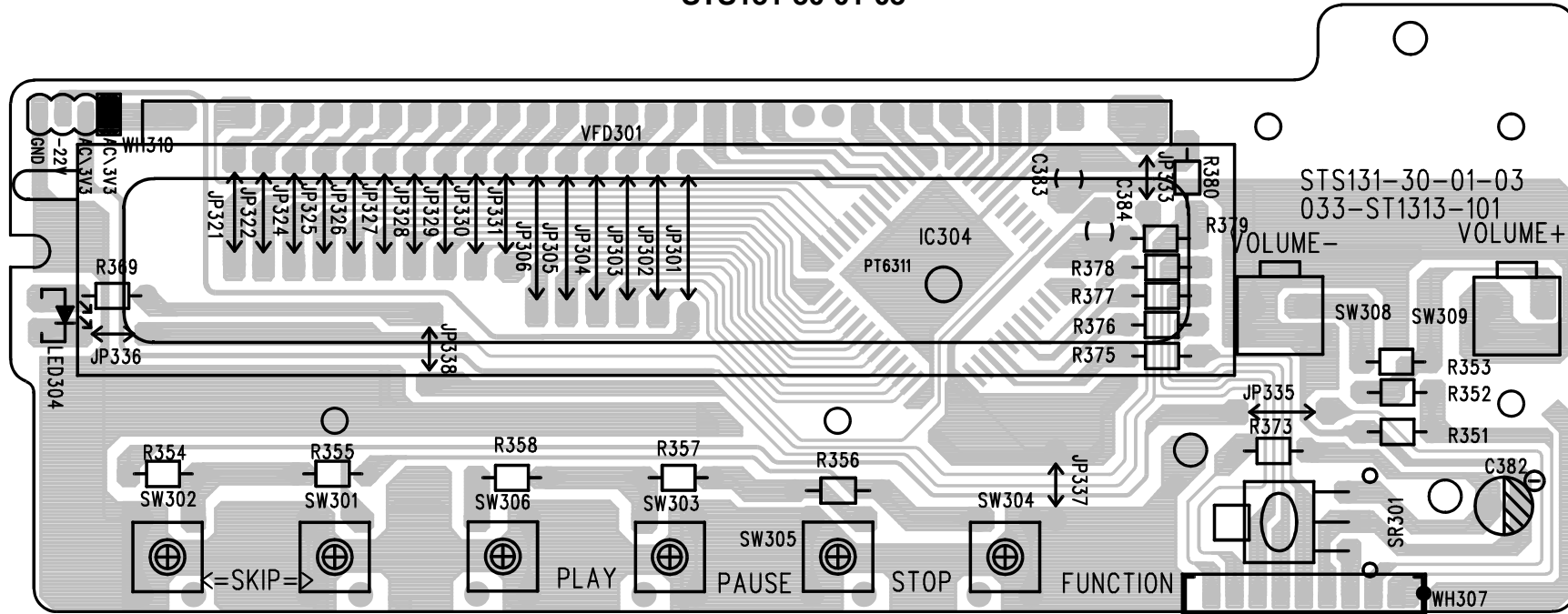


**LED BOARD**  
SWT1-01-06

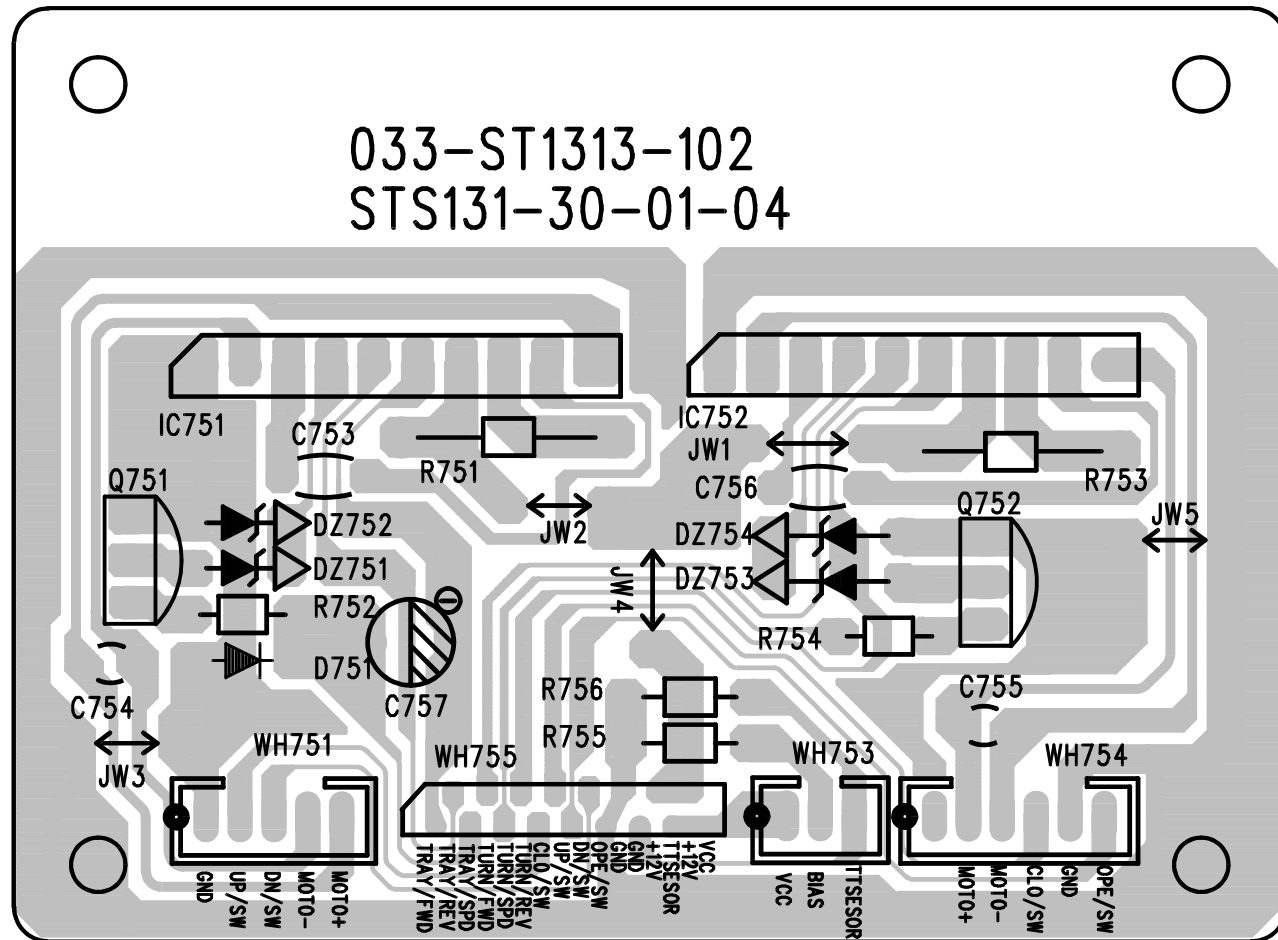




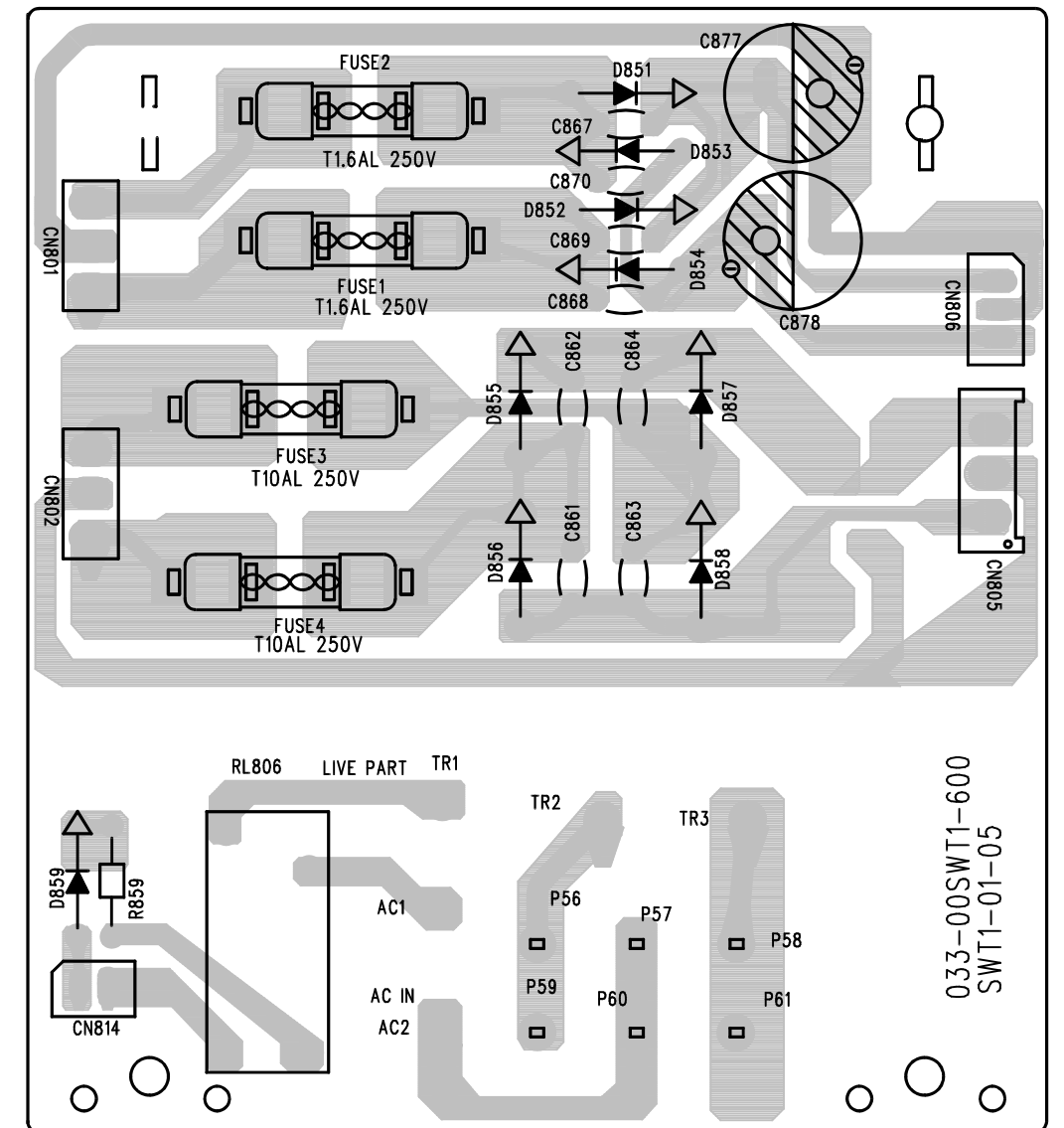
**DISPLAY & KEY BOARD**  
ST131-30-01-03



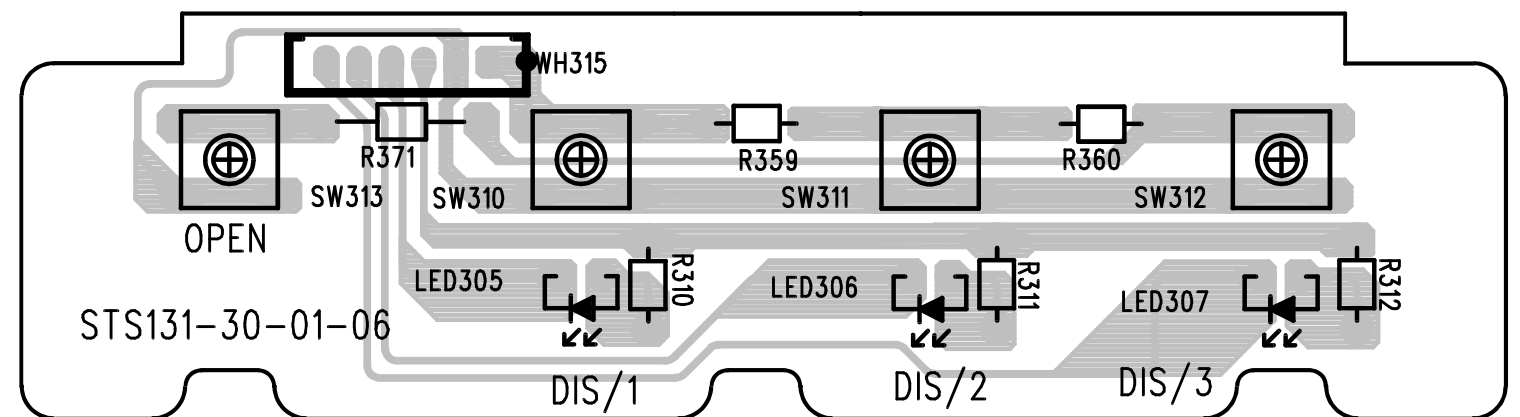
**MOTOR DRIVER BOARD**  
ST131-30-01-04



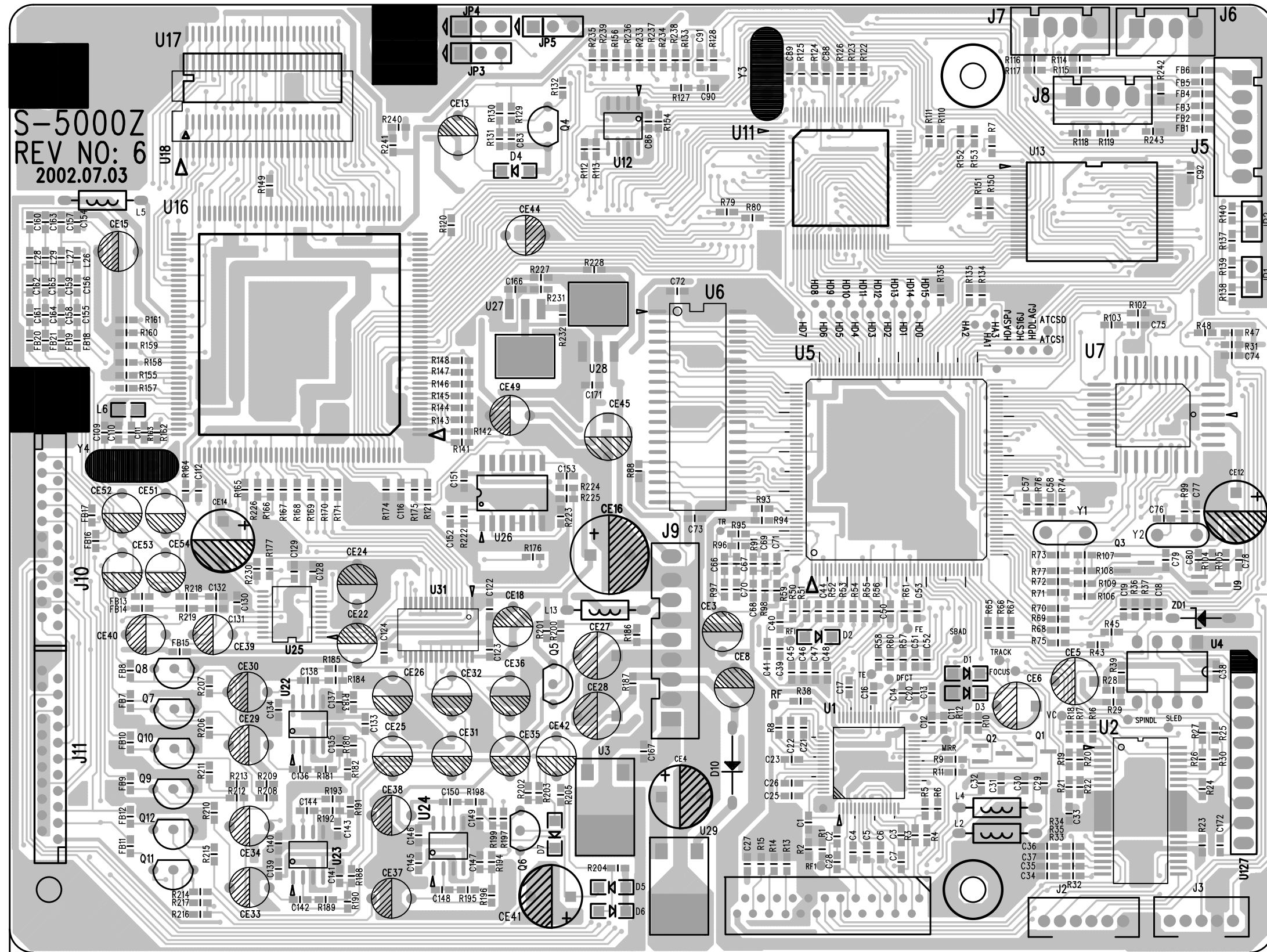
**SUB-WOOFER RECTIFIER BOARD**  
SWT1-01-05



**DISC INDICATION BOARD**  
ST131-30-01-06

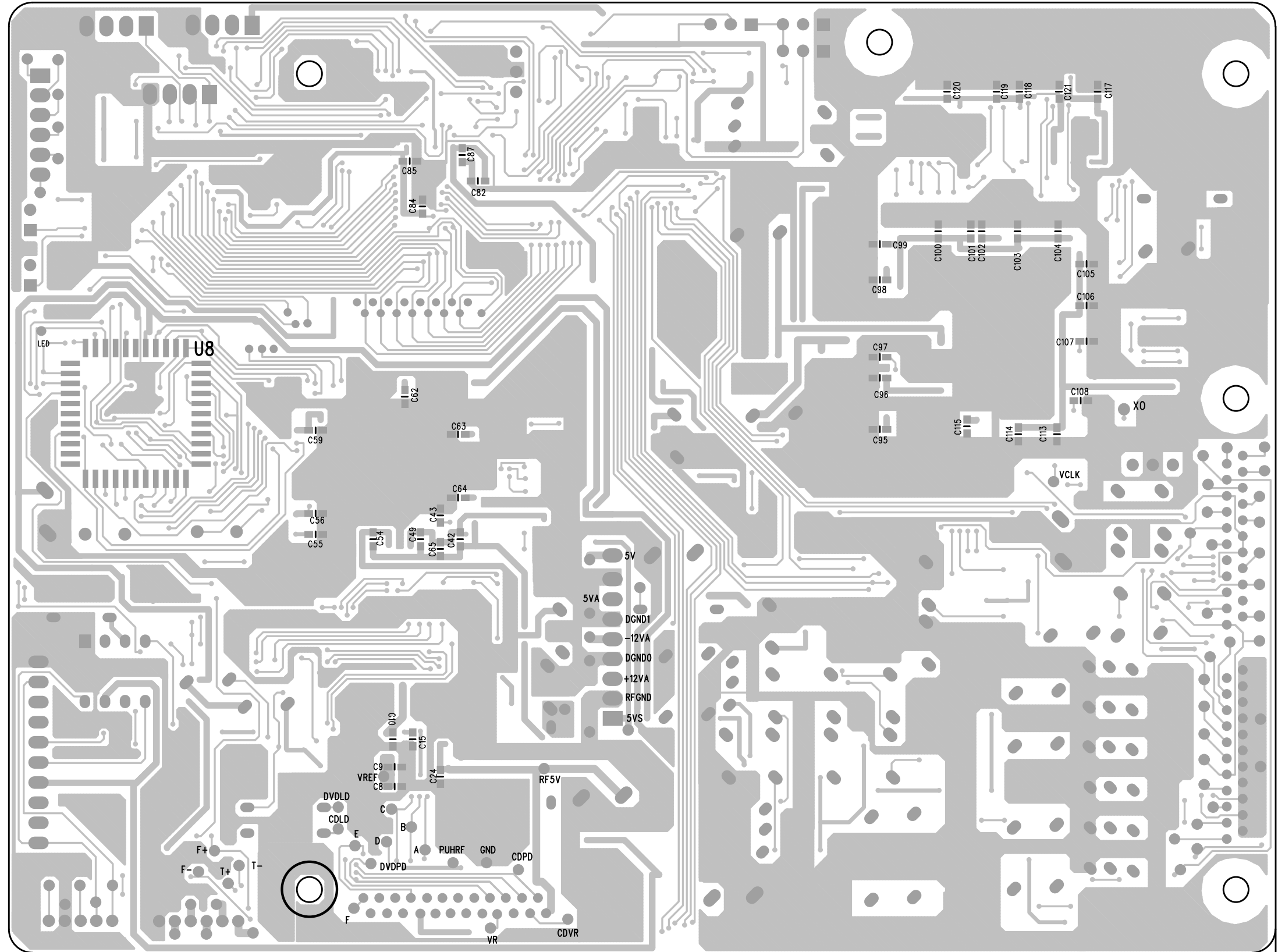


MPEG+SERVO BOARD(TOP VIEW)  
STS21AAS-01-02



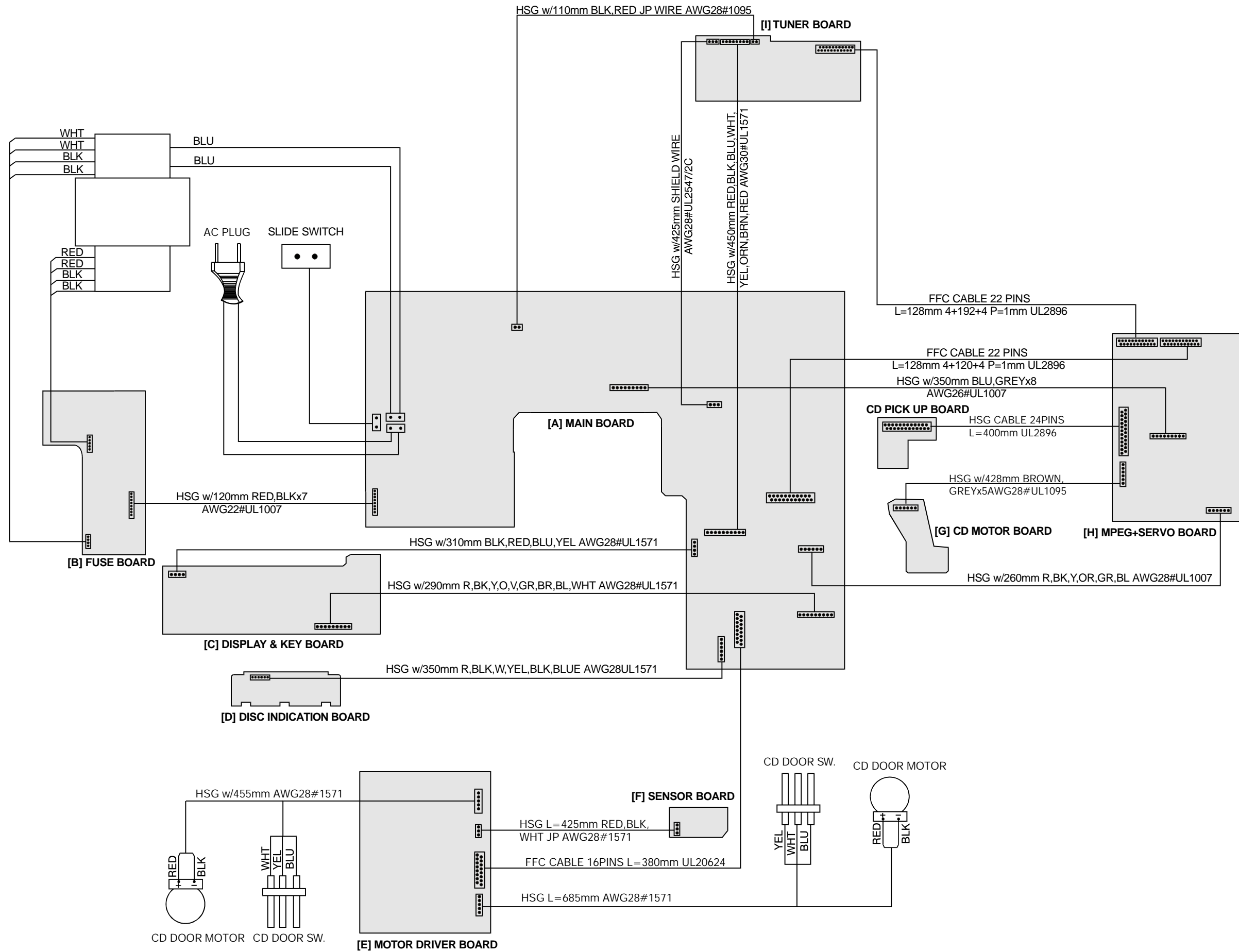


MPEG+SERVO BOARD(BOTTOM VIEW)  
STS21AAS-01-02

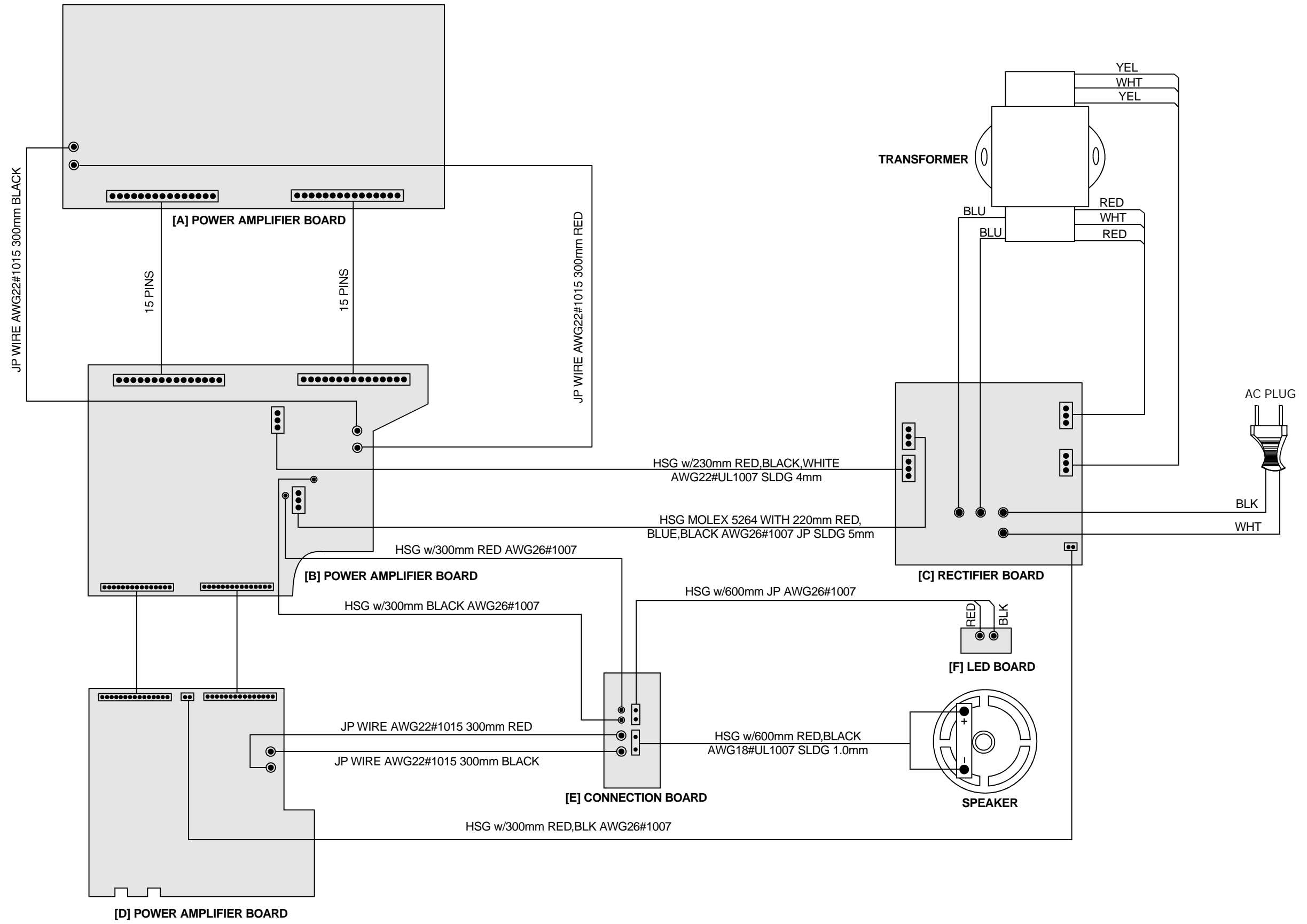


# WIRING DIAGRAMS

## MAIN UNIT



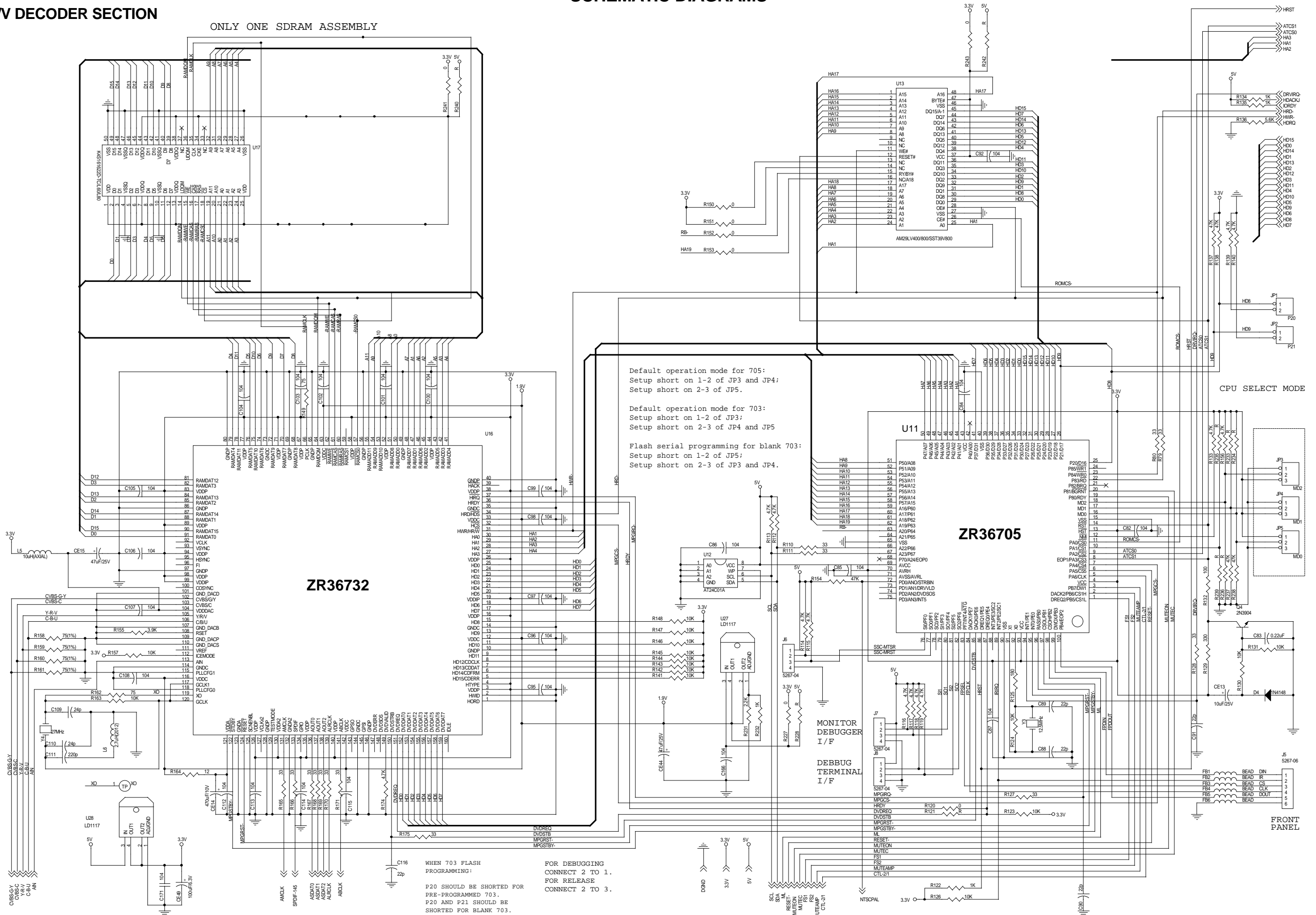
**SUB-WOOFER SECTION**



# SCHEMATIC DIAGRAMS

## AV DECODER SECTION

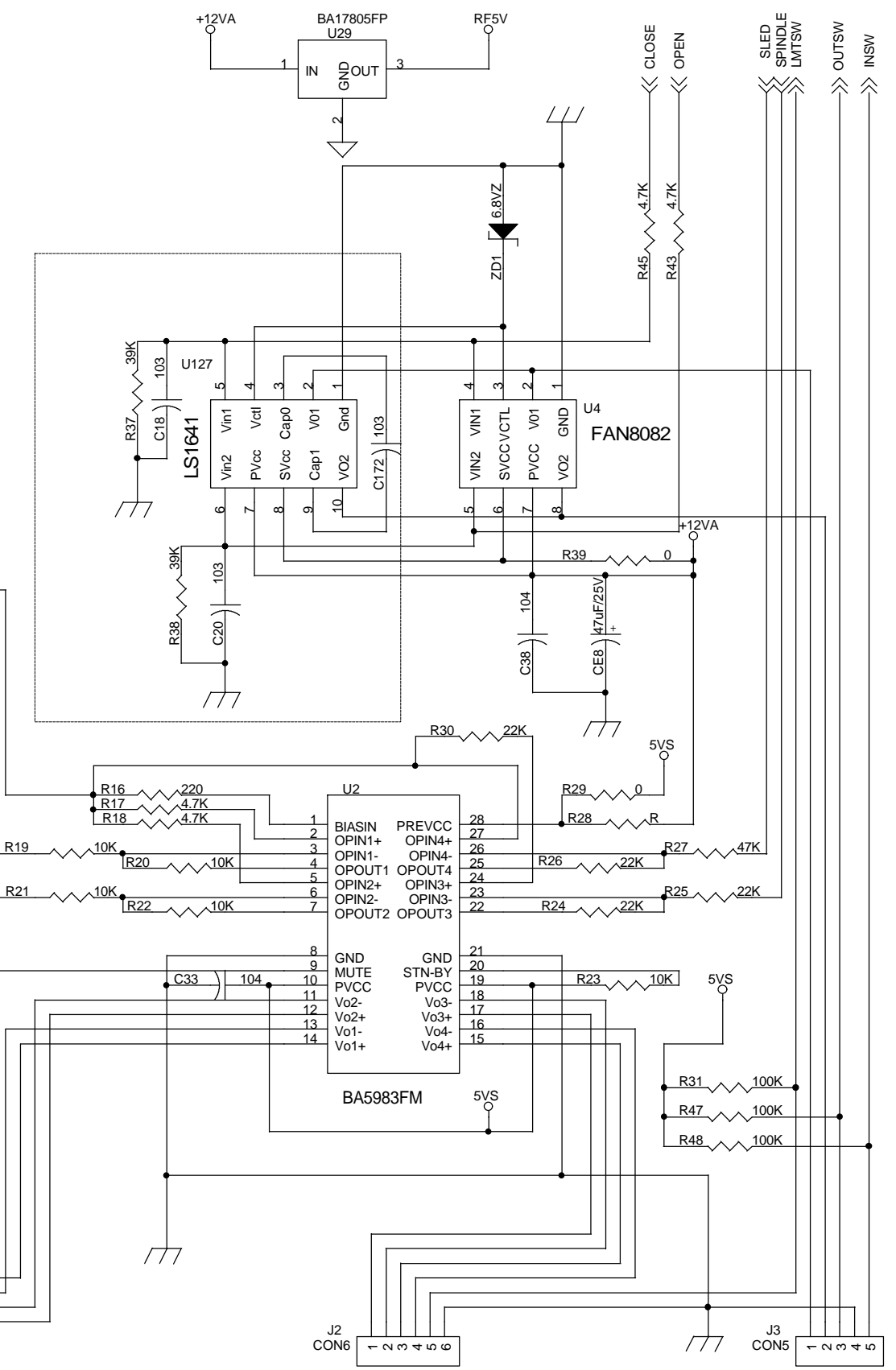
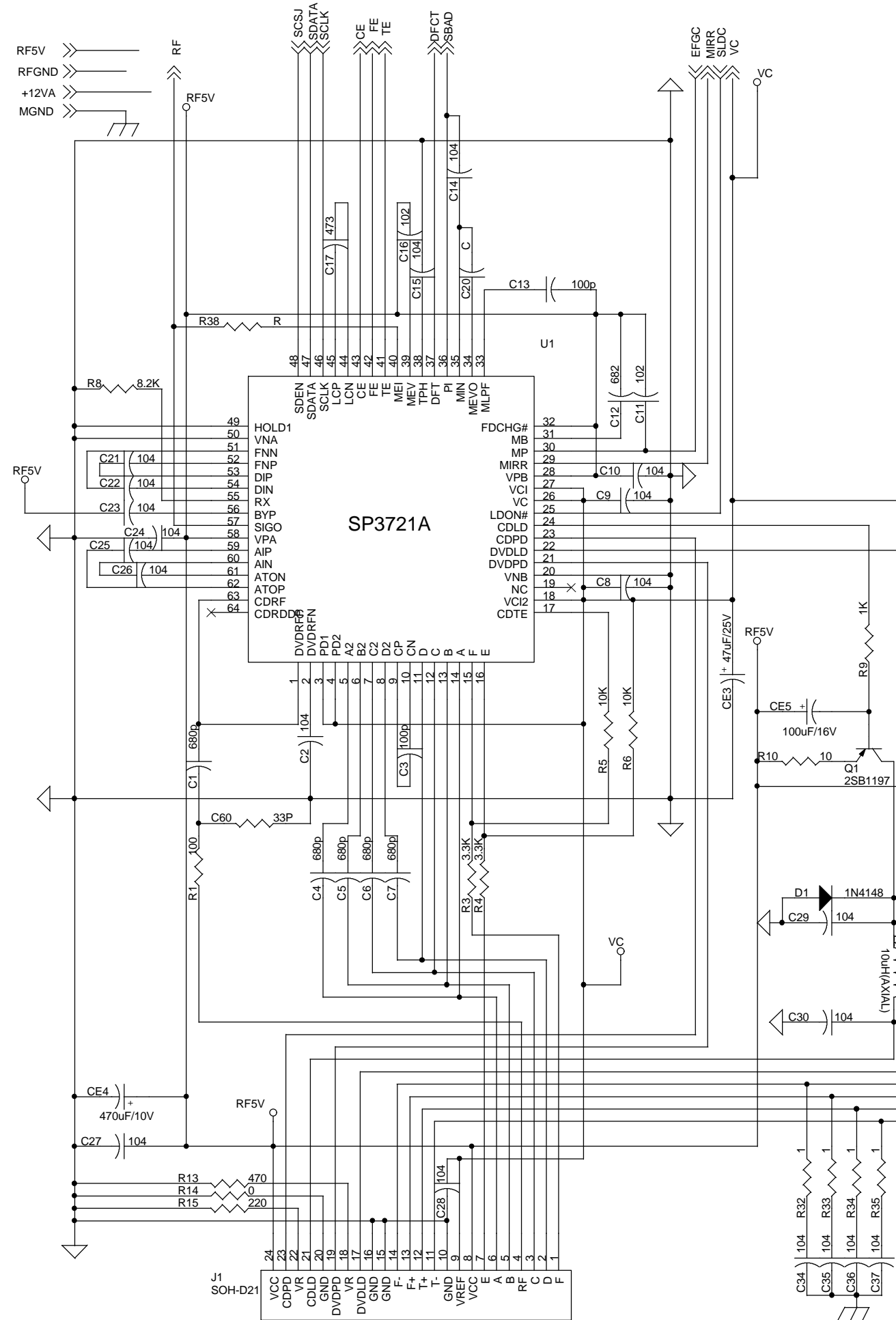
ONLY ONE SDRAM ASSEMBLY





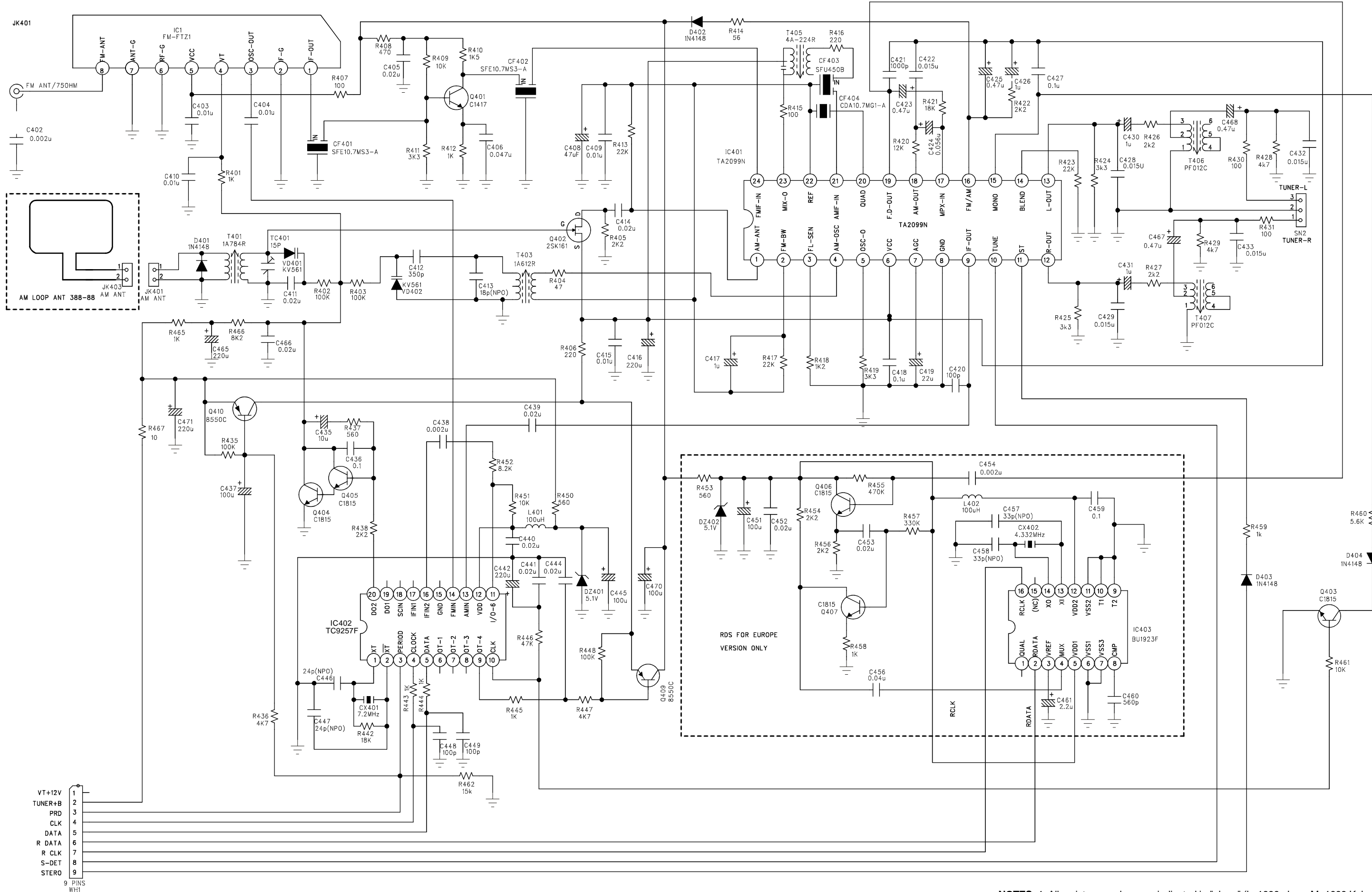


**PREAMP & MOTOR DRIVER SECTION**



**NOTES:** 1. All resistance values are indicated in "ohms" (k=1000 ohms, M=1000 Kohms).  
2. All capacitance values are indicated in "µF" (p=10<sup>-6</sup> µF).

# TUNER SECTION

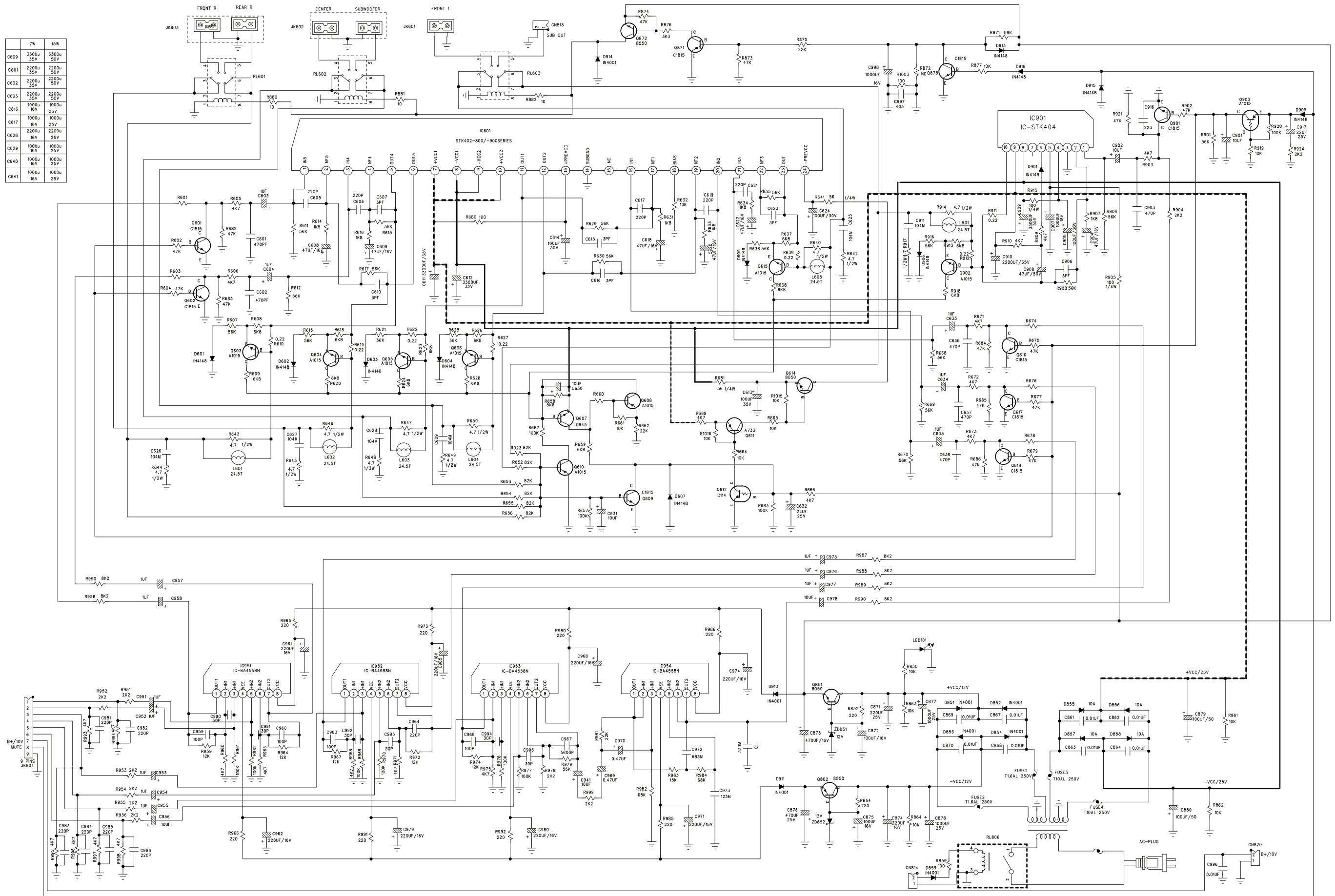


**NOTES:** 1. All resistance values are indicated in "ohms" (k=1000 ohms, M=1000 Kohms).  
 2. All capacitance values are indicated in "µF" (p=10<sup>-6</sup> µF).



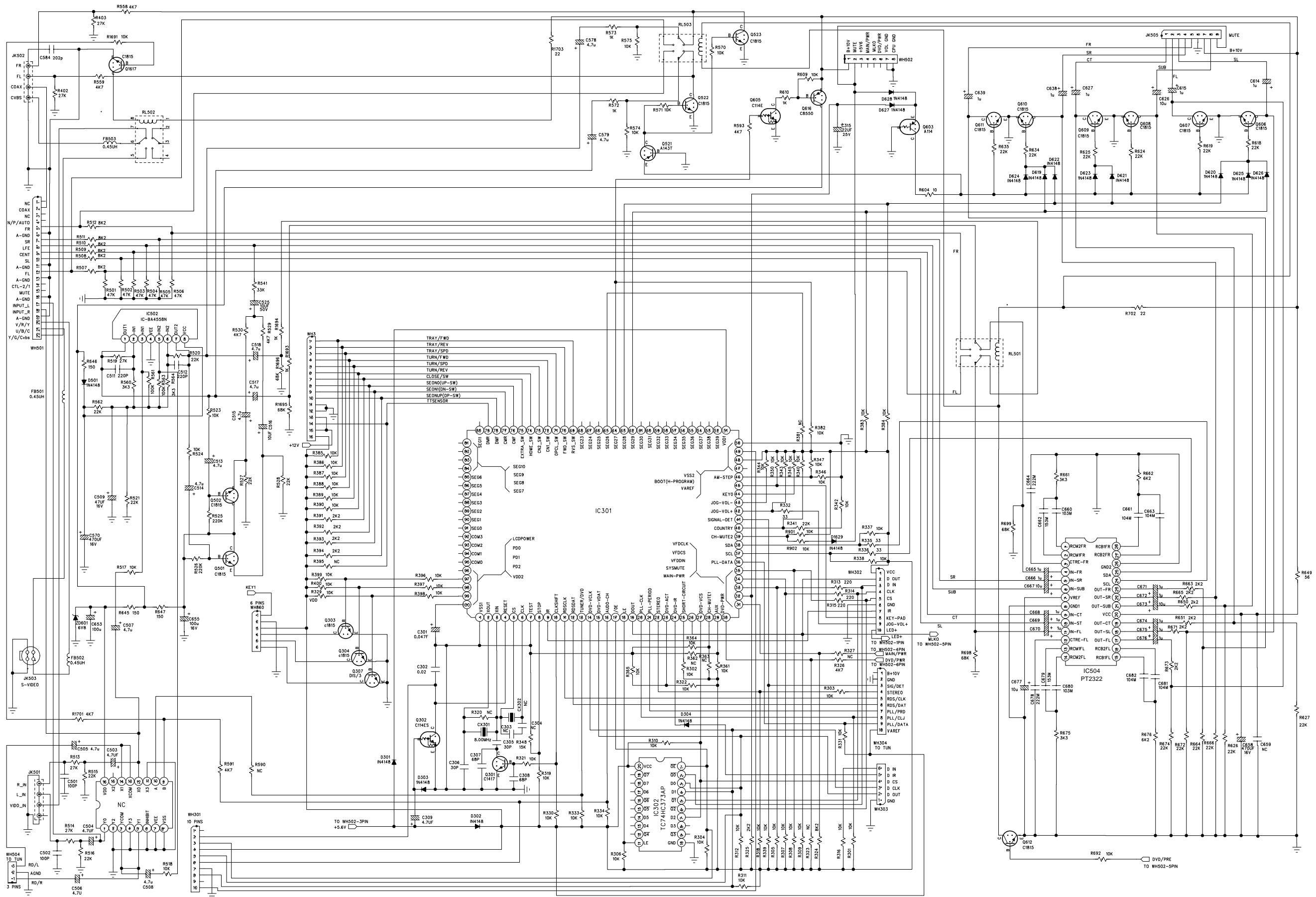
# POWER AMPLIFIER SECTION (FOR SUB-WOOFER)

	7W	15W
C609	3300u	3300u
	35V	50V
C601	2200u	2200u
	35V	50V
C602	2200u	2200u
	35V	50V
C603	2200u	2200u
	35V	50V
C616	1000u	1000u
	16V	25V
C617	1000u	1000u
	16V	25V
C628	2200u	2200u
	16V	25V
C629	1000u	1000u
	16V	25V
C640	1000u	1000u
	16V	25V
C641	1000u	1000u
	16V	25V



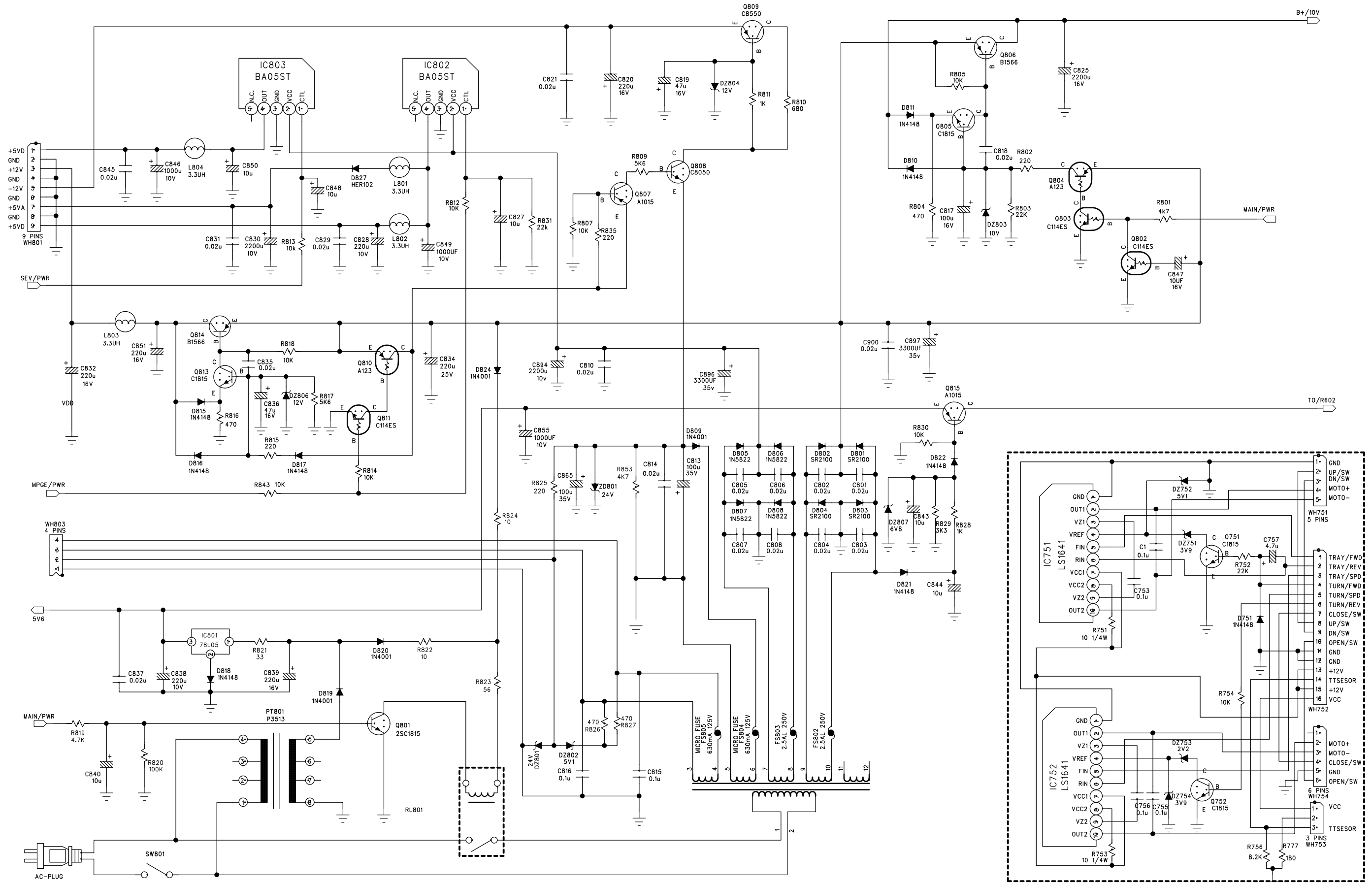
NOTES: 1. All resistance values are indicated in "ohms" (k=1000 ohms, M=1000 Kohms).  
 2. All capacitance values are indicated in "µF" (p=10<sup>-6</sup> µF).

CPU SECTION



NOTES: 1. All resistance values are indicated in "ohms" (k=1000 ohms, M=1000 Kohms).  
 2. All capacitance values are indicated in "µF" (p=10<sup>-6</sup> µF).

# POWER SUPPLY SECTION



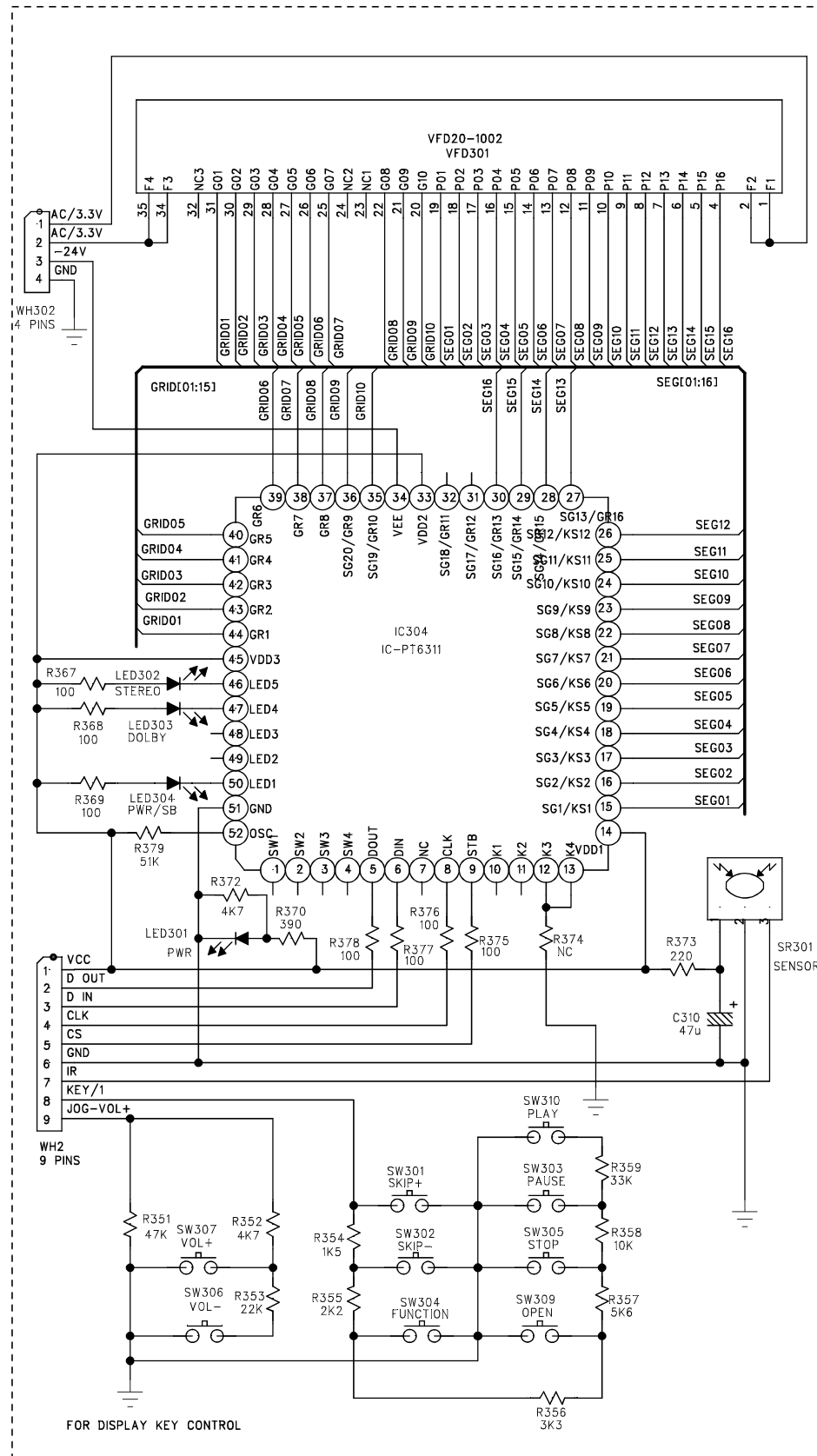
**NOTES:** 1. All resistance values are indicated in "ohms" (k=1000 ohms, M=1000 Kohms).  
 2. All capacitance values are indicated in "µF" (p=10<sup>-6</sup> µF).

## CONTROL SECTION

	AAS	AAS T	AUX IN
R303	NC	10K	
R349	10K	NC	
R361			10K
R362			NC
R363	NC	10K	
R364	10K	NC	

COUNTRY	R340	R342	R341
USA1	20K	100K	10K
USA2	20K	39K	5K6
EUROPE1	20K	5K6	27K
EPROE2	20K	12K	3K9
JAPAN	20K	3K3	1K

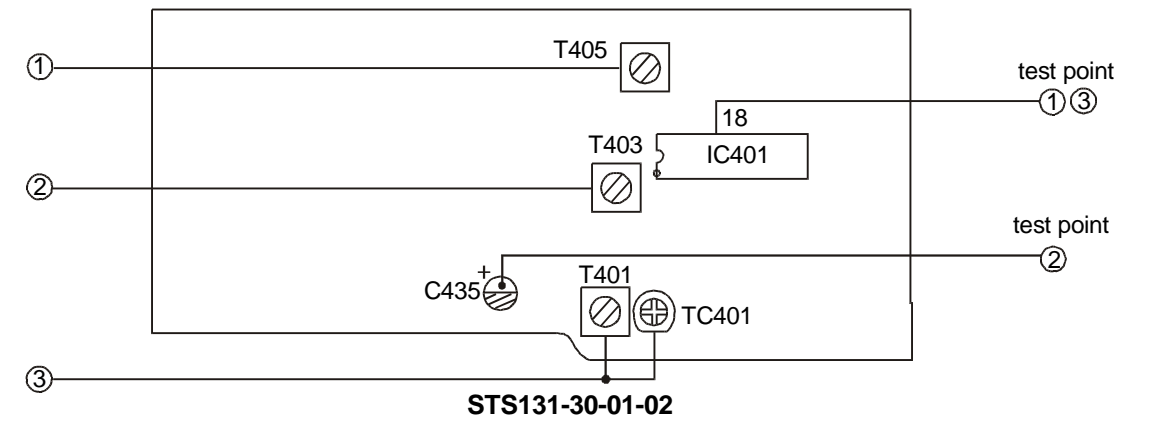
AM STEP	R347	R346
S/W CHG	47K	OPEN
ORIG STEP	47K	47K
TOG STEP	OPEN	47K



FOR DISPLAY KEY CONTROL

## ALIGNMENT SET-UP PROCEDURES

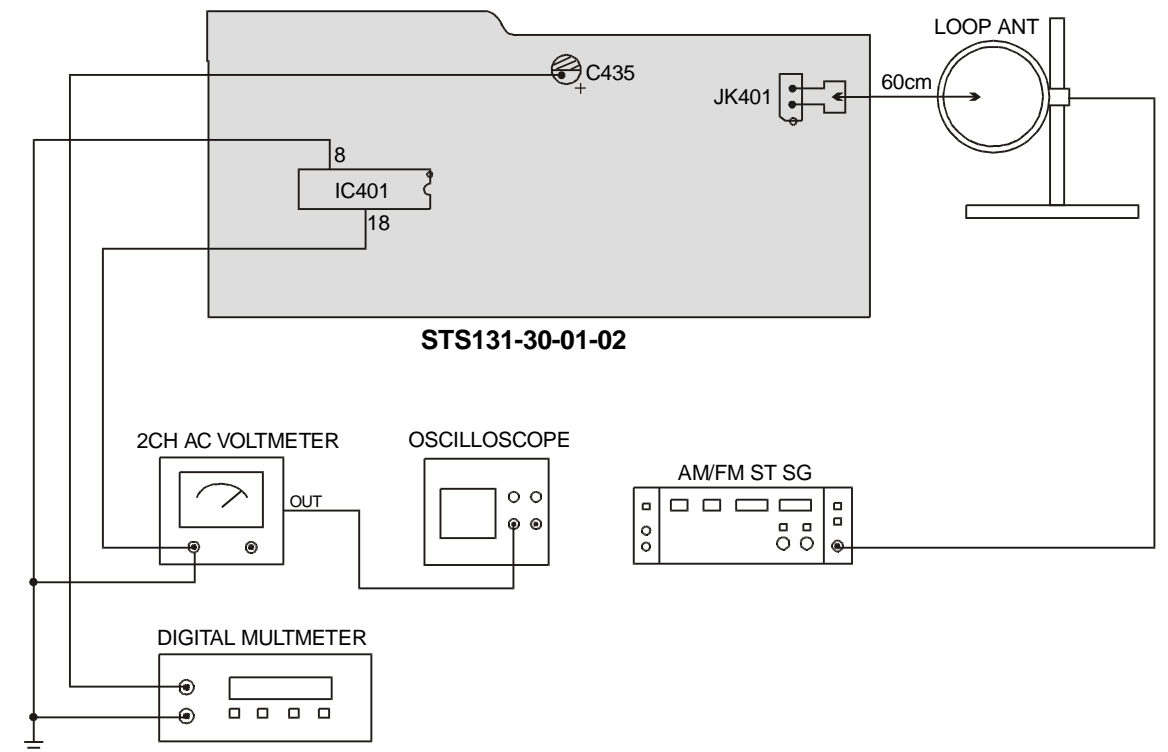
### TUNER SECTION



- 1. AM IF Adjustment**  
 Test point: IC401 (TA2099N)  
 Adjustment location: T405  
 T405 ----- 450±3kHz
- 2. MW Frequency Range Adjustment**  
 Test point: C435 ⊕  
 Adjustment location: T403  
 Set the tuner frequency to be 531kHz.  
 Adjust T403 so that the test point voltage is 1.7±0.05V.
- 3. MW Tracking Adjustment**  
 Test point: IC401 (TA2099N) 18 PIN  
 Adjustment location: T401, TC401  
 T401 ----- 603kHz waveform max.  
 TC401 ----- 1404kHz waveform max.

### EQUIPMENT CONNECTION DIAGRAM

#### MW SECTION



## VOLTAGE CHART

**CPU SECTION**  
**TEST CONDITION: DVD PLAY**  
**IC301 (TMP87EP26F)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
DVD PLAY	0	2.43	2.15	4.75	0	0.24	0	4.01	4.61	0
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
DVD PLAY	0.06	0.06	0.03	3.30	0.03	4.88	0.04	4.92	4.88	4.92
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
DVD PLAY	4.92	4.88	0	4.92	4.88	0	3.30	4.92	0.04	4.89
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
DVD PLAY	4.88	0.04	0.03	4.88	4.84	0.04	4.88	4.88	0	2.81
PIN'S NUMBER	41	42	43	44	45	46	47	48	49	50
DVD PLAY	4.88	4.02	4.88	4.88	0	2.44	0.16	4.87	0	0
PIN'S NUMBER	51	52	53	54	55	56	57	58	59	60
DVD PLAY	4.92	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	61	62	63	64	65	66	67	68	69	70
DVD PLAY	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	71	72	73	74	75	76	77	78	79	80
DVD PLAY	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	81	82	83	84	85	86	87	88	89	90
DVD PLAY	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	91	92	93	94	95	96	97	98	99	100
DVD PLAY	/	/	/	/	/	/	/	/	/	4.92

TRANSISTOR	Q301(2SC1417)			Q302(DTC114ES)		
	E	C	B	E	C	B
DVD PLAY	0	0.24	0	0	4.21	0

**IC304 (PT6311)**

PIN'S NUMBER	1	2	3	4	5	6	7	8
DVD PLAY	2.18	2.09	1.95	1.94	4.33	4.99	0	4.99
PIN'S NUMBER	9	10	11	12	13	14	15	16
DVD PLAY	4.99	2.01	1.95	0	0	4.99	/	/
PIN'S NUMBER	17	18	19	20	21	22	23	24
DVD PLAY	/	/	/	/	/	/	/	/
PIN'S NUMBER	25	26	27	28	29	30	31	32
DVD PLAY	/	/	/	/	/	/	/	/
PIN'S NUMBER	33	34	35	36	37	38	39	40
DVD PLAY	4.99	-25.10	/	/	/	/	/	/
PIN'S NUMBER	41	42	43	44	45	46	47	48
DVD PLAY	/	/	/	/	5.00	5.00	5.00	5.00
PIN'S NUMBER	49	50	51	52				
DVD PLAY	5.00	4.80	0	2.69				

**POWER AMP. SECTION**  
**TEST CONDITION: DVD PLAY**  
**IC801 (LM7805ACZ)**

PIN'S NUMBER	1	2	3
DVD PLAY	5.68	0.60	11.48

## VOLTAGE CHART - CONTINUED

**IC802 (BA05ST)**

PIN'S NUMBER	1	2	3	4	5
DVD PLAY	2.79	7.80	0	5.00	0

**IC803 (BA05ST)**

PIN'S NUMBER	1	2	3	4	5
DVD PLAY	4.20	7.86	0	5.00	0

**IC502 (BA4558N)**

PIN'S NUMBER	1	2	3	4	5	6	7	8
DVD PLAY	1.07	0.95	0.91	0	0.91	0.95	1.01	1.64

**IC504 (PT2322-S)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
DVD PLAY	4.20	4.22	4.20	4.19	4.19	4.20	4.21	0	4.19	4.19
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
DVD PLAY	4.20	4.21	4.22	4.21	4.22	4.22	4.22	4.22	4.22	8.46
PIN'S NUMBER	21	22	23	24	25	26	27	28		
DVD PLAY	4.22	4.22	4.23	4.32	4.32	0	4.21	4.22		

**IC751 (LS1641)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
TRAY CLOSE	0	3.28	4.72	3.20	4.79	0	8.38	8.03	0.90	0.12
TRAY OPEN	0	0.10	0.87	3.20	0	4.79	8.38	8.08	4.72	3.19

**IC752 (LS1641)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
TRUNTABLE ROTATE	0	6.84	8.30	9.97	4.79	0	8.40	8.23	0.93	0.52

TRANSISTOR	Q802(C1145ES)			Q803(C114ES)			Q804(A114)		
	E	C	B	E	C	B	E	C	B
DVD PLAY	0	2.08	0.13	0	0	2.08	14.18	13.80	0
TRANSISTOR	Q805(C1815)			Q806(B1566)			Q807(A1015)		
	E	C	B	E	C	B	E	C	B
DVD PLAY	9.95	13.41	10.47	14.11	10.65	13.56	14.09	13.65	13.08
TRANSISTOR	Q808(C8050)			Q809(C8550)			Q811(C114ES)		
	E	C	B	E	C	B	E	C	B
DVD PLAY	18.90	18.80	18.23	11.35	11.37	12.03	0	0	2.70
TRANSISTOR	Q812(A123)			Q813(C1815)			Q814(B1566)		
	E	C	B	E	C	B	E	C	B
DVD PLAY	14.02	14.04	0	11.50	13.55	12.05	14.16	12.21	13.43
TRANSISTOR	Q815(A1015)								
	E	C	B						
DVD PLAY	5.61	0	5.65						

**MPEG+SERVO SECTION**  
**TEST CONDITION: DVD PLAY**

**U12 (AT24C01A/S24C01BFJ)**

PIN'S NUMBER	1	2	3	4	5	6	7	8
DVD PLAY	0	0	0	0	3.75	0	0	4.94

**VOLTAGE CHART - CONTINUED**

**U13 (SST39VF800A)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
DVD PLAY	0.70	0.50	0.60	0.70	0.60	2.80	0	2.82	0	0
<b>PIN'S NUMBER</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
DVD PLAY	3.20	3.30	0	0	0	0.40	0.70	2.50	2.30	0.40
<b>PIN'S NUMBER</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
DVD PLAY	0.65	1.00	1.00	1.92	1.45	0	0	1.26	1.28	1.44
<b>PIN'S NUMBER</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
DVD PLAY	1.58	0.64	1.50	1.22	1.25	1.08	3.30	0	0.74	0.71
<b>PIN'S NUMBER</b>	<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>		
DVD PLAY	0	1.04	0.81	2.04	1.70	0	3.30	0.19		

**U16 (ZR36732)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
DVD PLAY	0	0.00	3.30	3.30	3.27	3.27	3.27	3.27	2.16	0
<b>PIN'S NUMBER</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
DVD PLAY	3.27	1.85	3.27	0	3.27	3.30	2.10	1.06	3.31	0.82
<b>PIN'S NUMBER</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
DVD PLAY	1.63	1.40	1.39	1.23	1.49	3.30	1.15	1.21	1.78	1.54
<b>PIN'S NUMBER</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
DVD PLAY	3.22	3.30	1.85	1.24	0	0.35	3.25	3.30	3.21	0
<b>PIN'S NUMBER</b>	<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
DVD PLAY	0.49	0.54	0.53	3.30	0.44	0.45	0.35	0.49	0	0.37
<b>PIN'S NUMBER</b>	<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>59</b>	<b>60</b>
DVD PLAY	0.27	3.30	2.12	0.35	0.51	0	3.04	3.30	3.14	3.16
<b>PIN'S NUMBER</b>	<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	<b>70</b>
DVD PLAY	3.23	3.19	1.85	0	0	1.75	3.30	1.71	0	1.35
<b>PIN'S NUMBER</b>	<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>77</b>	<b>78</b>	<b>79</b>	<b>80</b>
DVD PLAY	3.31	1.40	0	1.40	1.48	1.27	3.31	1.40	1.61	0
<b>PIN'S NUMBER</b>	<b>81</b>	<b>82</b>	<b>83</b>	<b>84</b>	<b>85</b>	<b>86</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>90</b>
DVD PLAY	1.63	1.53	3.29	0.52	1.71	0	2.30	1.71	3.29	0.64
<b>PIN'S NUMBER</b>	<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>99</b>	<b>100</b>
DVD PLAY	1.42	1.66	0.07	3.28	3.04	1.64	0	3.28	3.24	0.26
<b>PIN'S NUMBER</b>	<b>101</b>	<b>102</b>	<b>103</b>	<b>104</b>	<b>105</b>	<b>106</b>	<b>107</b>	<b>108</b>	<b>109</b>	<b>110</b>
DVD PLAY	0.77	1.25	1.03	3.28	1.12	1.47	0	1.22	0	0
<b>PIN'S NUMBER</b>	<b>111</b>	<b>112</b>	<b>113</b>	<b>114</b>	<b>115</b>	<b>116</b>	<b>117</b>	<b>118</b>	<b>119</b>	<b>120</b>
DVD PLAY	0	3.28	0.29	0	0	1.82	1.59	0	1.61	1.59
<b>PIN'S NUMBER</b>	<b>121</b>	<b>122</b>	<b>123</b>	<b>124</b>	<b>125</b>	<b>126</b>	<b>127</b>	<b>128</b>	<b>129</b>	<b>130</b>
DVD PLAY	1.82	3.29	0	3.29	0	3.28	1.70	0	0	3.29
<b>PIN'S NUMBER</b>	<b>131</b>	<b>132</b>	<b>133</b>	<b>134</b>	<b>135</b>	<b>136</b>	<b>137</b>	<b>138</b>	<b>139</b>	<b>140</b>
DVD PLAY	1.63	0	0	0	2.90	3.29	1.07	0	0	1.04
<b>PIN'S NUMBER</b>	<b>141</b>	<b>142</b>	<b>143</b>	<b>144</b>	<b>145</b>	<b>146</b>	<b>147</b>	<b>148</b>	<b>149</b>	<b>150</b>
DVD PLAY	1.64	3.29	1.82	0	0	0.50	0	0.53	0.53	0
<b>PIN'S NUMBER</b>	<b>151</b>	<b>152</b>	<b>153</b>	<b>154</b>	<b>155</b>	<b>156</b>	<b>157</b>	<b>158</b>	<b>159</b>	<b>160</b>
DVD PLAY	2.57	0	0	2.20	1.96	1.65	2.33	0	1.65	0

**U25 (WM8739EDS)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
DVD PLAY	3.76	0	1.68	0.25	3.15	0	3.15	1.65	0.37	0.69
<b>PIN'S NUMBER</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
DVD PLAY	0.97	1.65	0	3.15	0	1.56	1.56	1.57	0	0

**VOLTAGE CHART - CONTINUED**

**U31 (WM8746EDS)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
DVD PLAY	4.32	1.68	1.65	1.65	1.66	1.65	1.65	0	0	1.65
<b>PIN'S NUMBER</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
DVD PLAY	0	3.30	0	3.75	4.35	2.17	2.18	0	2.18	0
<b>PIN'S NUMBER</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>		
DVD PLAY	2.18	0	2.18	0	2.18	0	2.18	4		

**U11 (ZR36705TQC)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
DVD PLAY	0	0	3.29	3.29	3.29	3.38	3.29	3.30	3.29	3.29
<b>PIN'S NUMBER</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
DVD PLAY	1.45	3.29	3.29	3.29	0	0	0	0	3.29	3.29
<b>PIN'S NUMBER</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
DVD PLAY	2.86	0.67	3.30	3.29	3.86	3.86	5.07	5.07	3.37	3.20
<b>PIN'S NUMBER</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
DVD PLAY	3.15	3.43	3.32	4.67	2.35	3.43	1.85	1.93	3.16	0
<b>PIN'S NUMBER</b>	<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
DVD PLAY	3.80	2.40	3.29	1.80	0.06	1.22	0.05	0	0	0
<b>PIN'S NUMBER</b>	<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>59</b>	<b>60</b>
DVD PLAY	0	0	0	0	0	0	0	0	1.60	2.53
<b>PIN'S NUMBER</b>	<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	<b>70</b>
DVD PLAY	3.29	3.29	3.29	3.29	0	5.04	0.04	3.29	5.05	3.29
<b>PIN'S NUMBER</b>	<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>77</b>	<b>78</b>	<b>79</b>	<b>80</b>
DVD PLAY	0	3.29	3.11	3.11	2.03	5.05	5.05	3.29	5.05	5.05
<b>PIN'S NUMBER</b>	<b>81</b>	<b>82</b>	<b>83</b>	<b>84</b>	<b>85</b>	<b>86</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>90</b>
DVD PLAY	5.05	3.30	3.29	3.29	3.27	0.53	2.91	3.63	0.00	1.43
<b>PIN'S NUMBER</b>	<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>99</b>	<b>100</b>
DVD PLAY	1.50	3.29	0.15	3.29	3.29	3.29	3.29	3.29	4.32	0.02

**U22 (NJM4580E)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
DVD PLAY	0	0	0	10.43	0	0	0	11.23

**U23 (NJM4580E)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
DVD PLAY	0	0	0	10.43	0	0	0	11.23

**U24 (NJM4580E)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
DVD PLAY	0	0	0	10.43	0	0	0	11.23

**U7 (W29EE512P)**

<b>PIN'S NUMBER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
DVD PLAY	0	0	1.65	1.88	2.10	2.09	1.59	1.75
<b>PIN'S NUMBER</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
DVD PLAY	2.00	1.96	1.97	1.96	1.61	1.86	1.69	0
<b>PIN'S NUMBER</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
DVD PLAY	1.43	1.65	2.00	0	1.76	0	1.80	1.70
<b>PIN'S NUMBER</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>32</b>
DVD PLAY	1.25	1.81	1.77	0.70	2.24	0	3.33	4.91

**VOLTAGE CHART - CONTINUED**

**U17 (K4S161622D/HY57V161610DTC)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
DVD PLAY	3.30	1.45	0.70	0	0.77	0.75	3.30	2.10	0.82	0
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
DVD PLAY	0.78	0.90	3.30	0	3.19	3.23	3.16	3.08	0.52	1.74
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
DVD PLAY	0	0	0.45	0	3.30	0	0.55	0.55	0.53	0.55
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
DVD PLAY	0.26	0.30	0	3.30	1.73	0	0	3.30	1.45	1.23
PIN'S NUMBER	41	42	43	44	45	46	47	48	49	50
DVD PLAY	0	1.20	1.15	3.30	1.65	1.16	0	1.16	0.86	0

**U26 (TC74HCU04AF)**

PIN'S NUMBER	1	2	3	4	5	6	7
DVD PLAY	2.03	2.10	2.10	2.16	2.16	2.15	0
PIN'S NUMBER	8	9	10	11	12	13	14
DVD PLAY	3.16	2.15	2.16	2.15	2.16	2.15	4.32

**U1 (SP3721A/M5703T)**

PIN'S NUMBER	1	2	3	4	5	6	7	8
DVD PLAY	3.56	3.56	2.51	2.51	3.50	3.50	3.50	3.50
PIN'S NUMBER	9	10	11	12	13	14	15	16
DVD PLAY	3.52	0	0	2.54	2.54	2.57	3.01	2.53
PIN'S NUMBER	17	18	19	20	21	22	23	24
DVD PLAY	4.29	2.51	0	0	0.17	3.33	0	5.00
PIN'S NUMBER	25	26	27	28	29	30	31	32
DVD PLAY	0	2.51	2.51	5.01	0.12	2.73	2.56	5.01
PIN'S NUMBER	33	34	35	36	37	38	39	40
DVD PLAY	0	4.24	0	3.20	0	3.34	4.95	3.23
PIN'S NUMBER	41	42	43	44	45	46	47	48
DVD PLAY	2.52	2.49	1.83	4.28	3.96	3.33	0	0
PIN'S NUMBER	49	50	51	52	53	54	55	56
DVD PLAY	0	0	2.50	2.52	0	3.47	0.59	2.34
PIN'S NUMBER	57	58	59	60	61	62	63	64
DVD PLAY	2.98	5.01	3.53	3.53	3.80	3.80	3.54	1.41

**U2 (BA5983FM)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
DVD PLAY	2.49	2.51	2.51	2.46	2.51	0	2.53	0	3.32	4.88
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
DVD PLAY	2.40	2.53	2.51	2.41	2.24	2.08	3.52	0.76	4.88	3.68
PIN'S NUMBER	21	22	23	24	25	26	27	28		
DVD PLAY	0	2.84	2.51	2.51	2.48	2.51	2.51	4.90		

**U3 (BA033FP)**

PIN'S NUMBER	1	2	3
DVD PLAY	4.95	0	3.35

**U4 (FAN8082)**

PIN'S NUMBER	1	2	3	4	5	6	7	8
DVD PLAY	0	0.37	0.19	1.44	1.44	12.06	12.17	0.37

**VOLTAGE CHART - CONTINUED**

**U6 (M11B416256A-35J)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
DVD PLAY	4.94	1.54	1.54	1.10	1.30	4.95	0.80	0.56	0.65	0.54
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
DVD PLAY	0	0	3.33	3.31	0	0.10	0.20	0.11	0.15	4.94
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
DVD PLAY	0	0.24	0.25	0.30	0.23	0.33	0.22	3.18	3.21	0
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
DVD PLAY	1.97	1.94	1.94	1.95	0	1.83	1.85	0	1.93	0

**U9 (XC61AN1902MR)**

PIN'S NUMBER	1	2	3
DVD PLAY	4.88	3.47	0

**U5 (M5705)**

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
DVD PLAY	0	2.50	2.48	5.01	2.49	2.51	3.34	1.26	2.49	3.12
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
DVD PLAY	2.56	2.48	2.51	5.01	2.11	0	0.10	2.51	2.51	2.51
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
DVD PLAY	2.52	0	2.52	2.49	1.95	5.01	3.21	0	0	0
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
DVD PLAY	3.34	0	0	2.62	3.34	0	0	0	3.34	1.65
PIN'S NUMBER	41	42	43	44	45	46	47	48	49	50
DVD PLAY	4.86	0	0	4.86	0	0	2.62	3.33	2.59	3.31
PIN'S NUMBER	51	52	53	54	55	56	57	58	59	60
DVD PLAY	2.60	2.60	0	0	0	2.59	1.66	0	0	0
PIN'S NUMBER	61	62	63	64	65	66	67	68	69	70
DVD PLAY	0	1.59	1.89	1.72	0.22	1.70	2.01	2.01	1.76	2.62
PIN'S NUMBER	71	72	73	74	75	76	77	78	79	80
DVD PLAY	2.59	0	0	0	1.78	3.34	1.82	1.82	2.14	2.10
PIN'S NUMBER	81	82	83	84	85	86	87	88	89	90
DVD PLAY	1.51	1.75	2.00	1.97	1.97	1.98	1.91	0	0.60	2.23
PIN'S NUMBER	91	92	93	94	95	96	97	98	99	100
DVD PLAY	1.63	2.60	3.30	3.09	1.05	1.53	2.60	1.90	0.10	0
PIN'S NUMBER	101	102	103	104	105	106	107	108	109	110
DVD PLAY	4.09	3.99	1.25	0	0	1.71	1.35	0	1.58	0
PIN'S NUMBER	111	112	113	114	115	116	117	118	119	120
DVD PLAY	0.88	1.26	0.75	1.30	3.34	0	1.68	0	0.99	0.66
PIN'S NUMBER	121	122	123	124	125	126	127	128	129	130
DVD PLAY	0	0	0	0	0	1.89	1.90	0	1.81	0
PIN'S NUMBER	131	132	133	134	135	136	137	138	139	140
DVD PLAY	1.81	1.58	0	1.83	0	1.94	1.89	0	0	0
PIN'S NUMBER	141	142	143	144	145	146	147	148	149	150
DVD PLAY	0	0	1.70	0	3.09	3.34	0	0	0.30	0
PIN'S NUMBER	151	152	153	154	155	156	157	158	159	160
DVD PLAY	0	0	0	0	0.25	0.20	0	0	0	0
PIN'S NUMBER	161	162	163	164	165	166	167	168	169	170
DVD PLAY	0	3.34	0.12	0.11	0	2.51	2.51	0	2.68	0
PIN'S NUMBER	171	172	173	174	175	176				
DVD PLAY	2.51	2.51	2.51	2.51	2.51	1.75				

### VOLTAGE CHART - CONTINUED

#### U27 (LD1117S)

PIN'S NUMBER	1	2	3	4
DVD PLAY	1.85	1.85	3.31	0.59

#### U28 (LD1117S33C)

PIN'S NUMBER	1	2	3	4
DVD PLAY	0	3.30	4.95	3.30

#### U29 (BA17805FP)

PIN'S NUMBER	1	2	3
DVD PLAY	11.44	0	5.02

### TUNER SECTION

TEST CONDITION: SET AM/FM ON ONE FREQUENCY

#### IC403 (BU1923F)

PIN'S NUMBER	1	2	3	4	5	6	7	8
FM	2.13	2.41	2.30	2.27	4.30	0	0	2.29
PIN'S NUMBER	9	10	11	12	13	14	15	16
FM	0	0	0	4.30	0	2.06	0	2.25

#### IC401 (TA2099N)

PIN'S NUMBER	1	2	3	4	5	6	7	8
AM	1.97	2.72	0.11	1.97	1.34	6.37	0.48	0
FM	1.95	2	0	2	0.97	7.43	1.29	0
PIN'S NUMBER	9	10	11	12	13	14	15	16
AM	4.96	0.04	5.68	0.76	0.77	0.11	4.89	4.92
FM	4.98	4	4.13	0.77	0.77	0.00	0.52	0.65
PIN'S NUMBER	17	18	19	20	21	22	23	24
AM	1.19	0.48	2.05	1.81	1.97	1.97	6.43	1.97
FM	1.19	1.32	1.99	2.44	1.97	1.97	7.40	1.97

#### IC402 (TC9257F)

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
AM	2.45	2.47	4.29	4.29	0.01	0.14	0.02	0.11	0.02	0.02
FM	2.38	2.41	4.97	4.97	0	0.14	0	0.11	0	0
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
AM	4.97	4.97	0	2.43	0	2.44	1.44	1.37	1.15	1.14
FM	0	0	0	2.36	0	2.36	0.17	0.17	0.76	1.08

### SUB-WOOFER PORTION

TEST CONDITION: DVD PLAY

#### IC601 (STK402)

PIN'S NUMBER	1	2	3	4	5	6	7	8
	-0.16	-0.17	-0.16	-0.17	0	0	30.50	-30.50
PIN'S NUMBER	9	10	11	12	13	14	15	16
	-30.50	30.30	0	0	27.30	0	-26.90	-0.16
PIN'S NUMBER	17	18	19	20	21	22	23	24
	-0.16	-25.50	-0.16	-0.16	-0.16	-0.16	0	-26.90

#### IC901 (STK404)

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
	0.15	0.15	0	-30.30	12.04	1.20	-1.05	-30.50	30.50	0

### VOLTAGE CHART - CONTINUED

#### IC951 (BA4558N)

PIN'S NUMBER	1	2	3	4	5	6	7	8
	0	0	0	-10.60	0	0	0	10.40

#### IC952 (BA4558N)

PIN'S NUMBER	1	2	3	4	5	6	7	8
	0	0	0	-10.55	0	0	0	10.43

#### IC953 (BA4558N)

PIN'S NUMBER	1	2	3	4	5	6	7	8
	0	0	0	-10.70	0	0	0	10.43

#### IC954 (BA4558N)

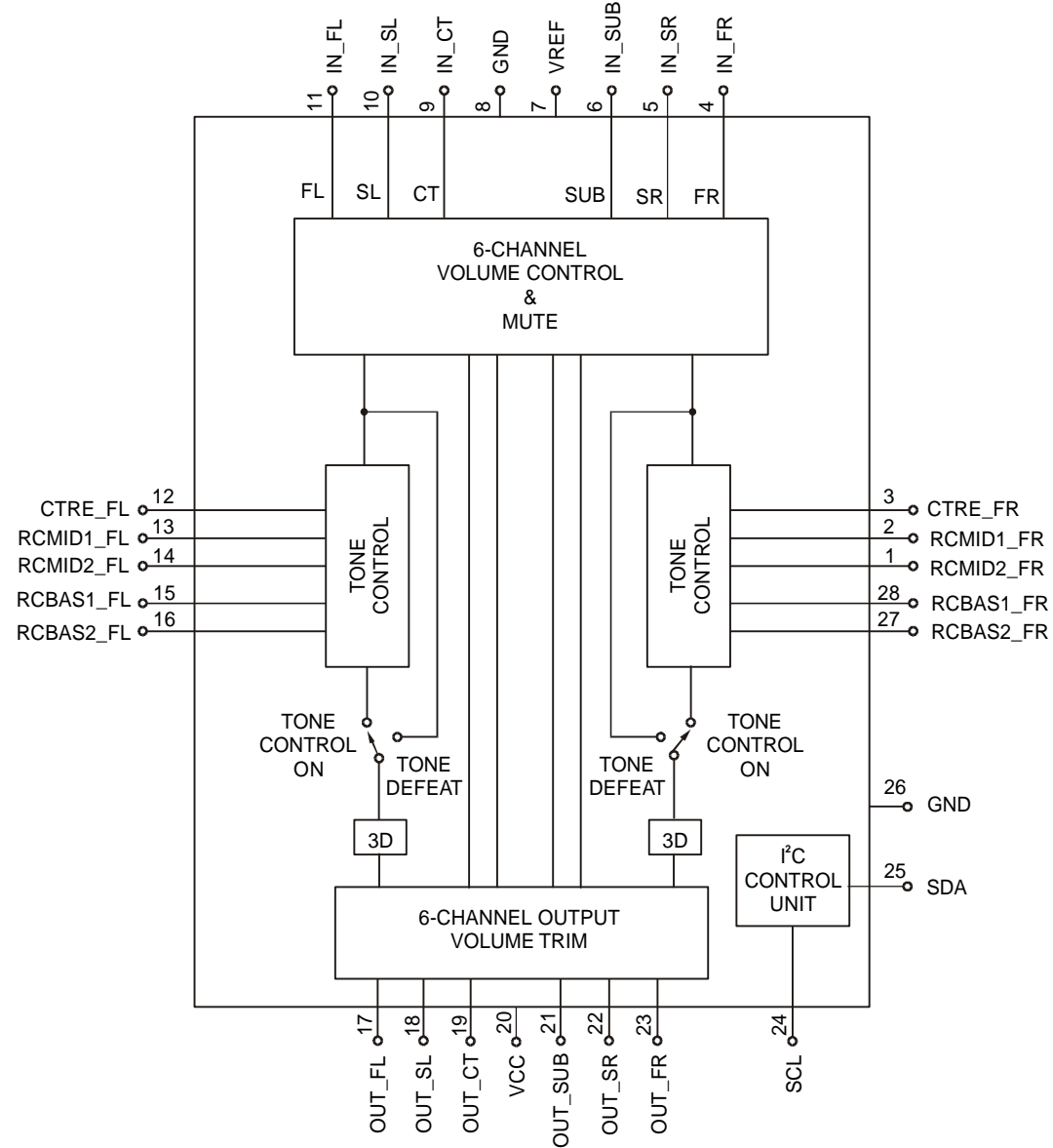
PIN'S NUMBER	1	2	3	4	5	6	7	8
	0.14	0.14	0	-10.72	0.15	0.15	0.15	10.43

TRANSISTOR	Q851(8050)			Q802(8550)		
	E	C	B	E	C	N
	11.74	14.36	12.42	-12.05	-15.74	-12.68

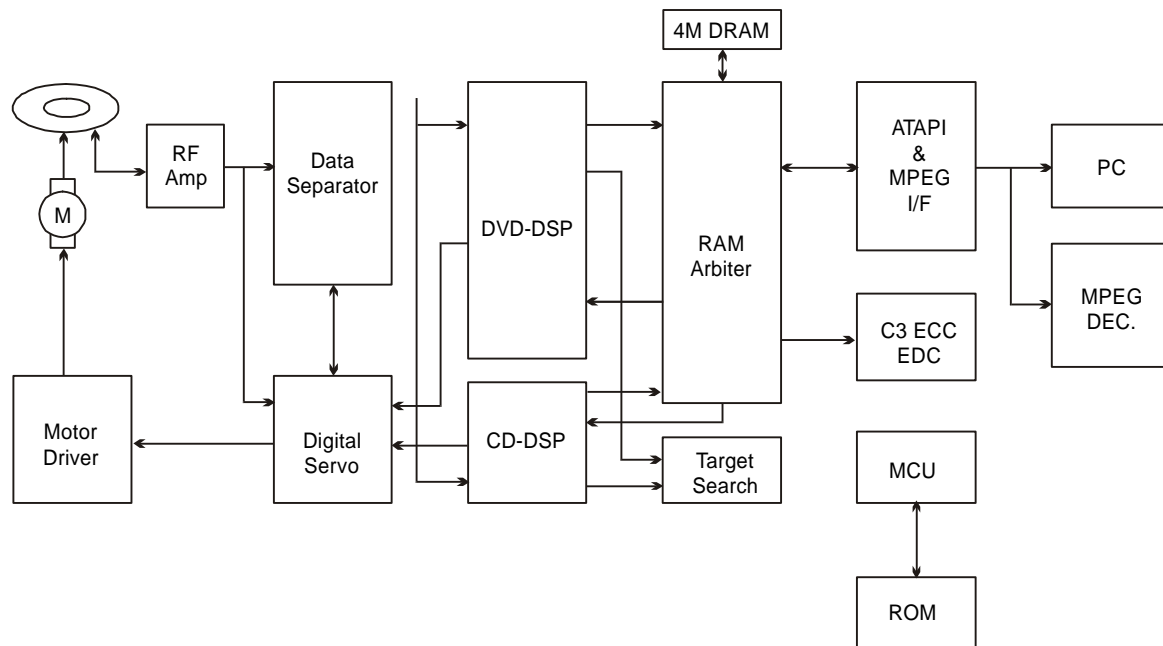


# IC BLOCK DIAGRAMS & IC PINS DESCRIPTION

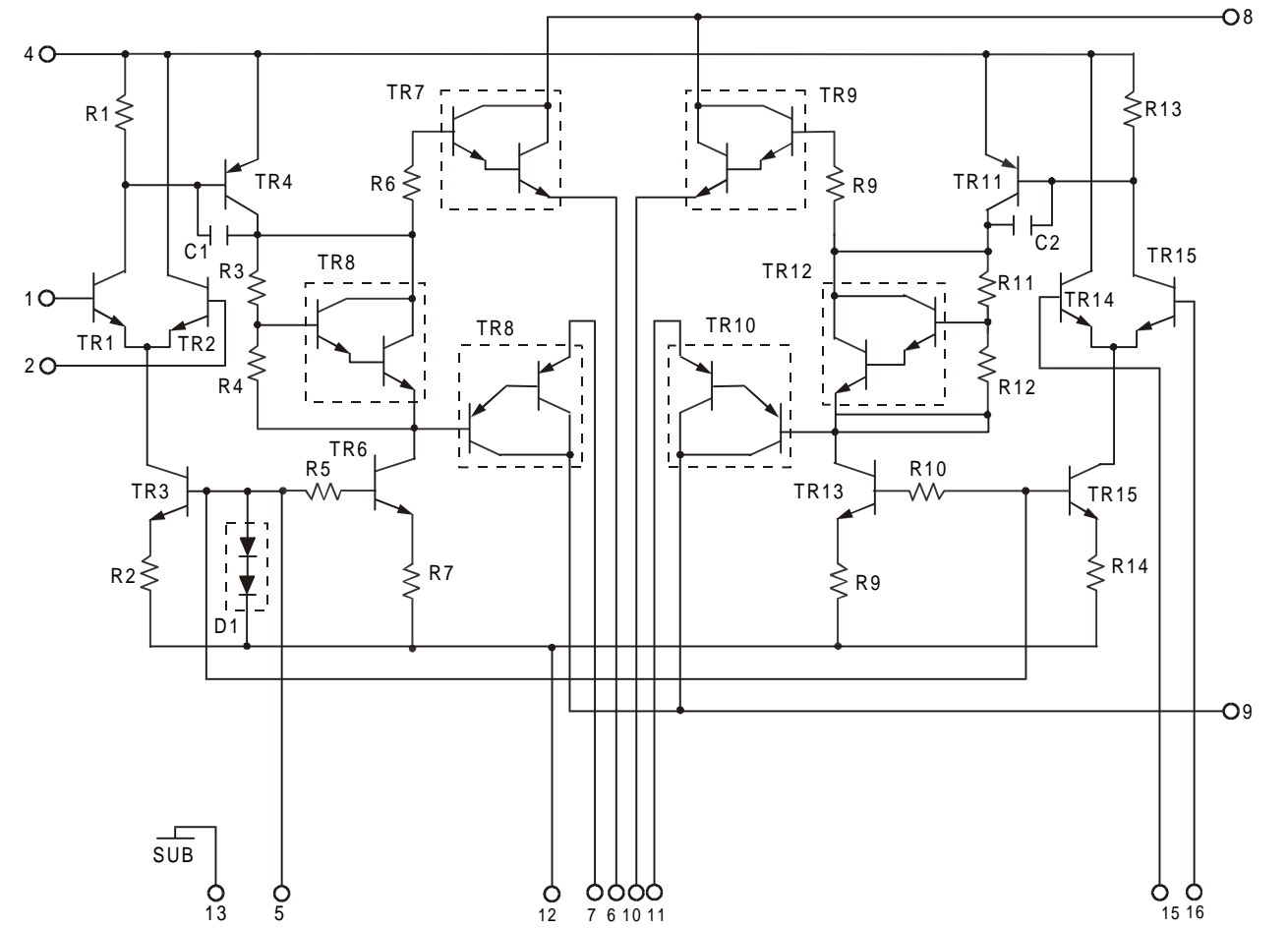
**IC504 PT2322-S**



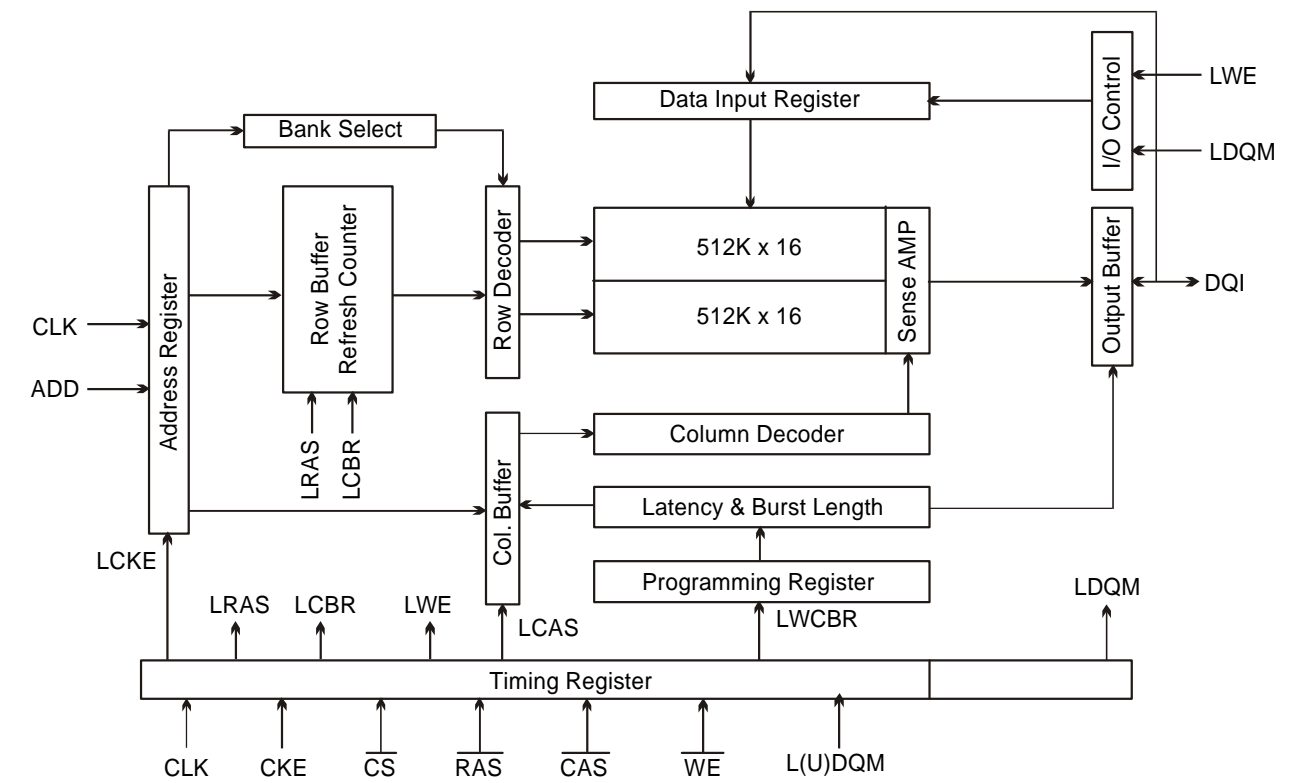
**U5 M5705**



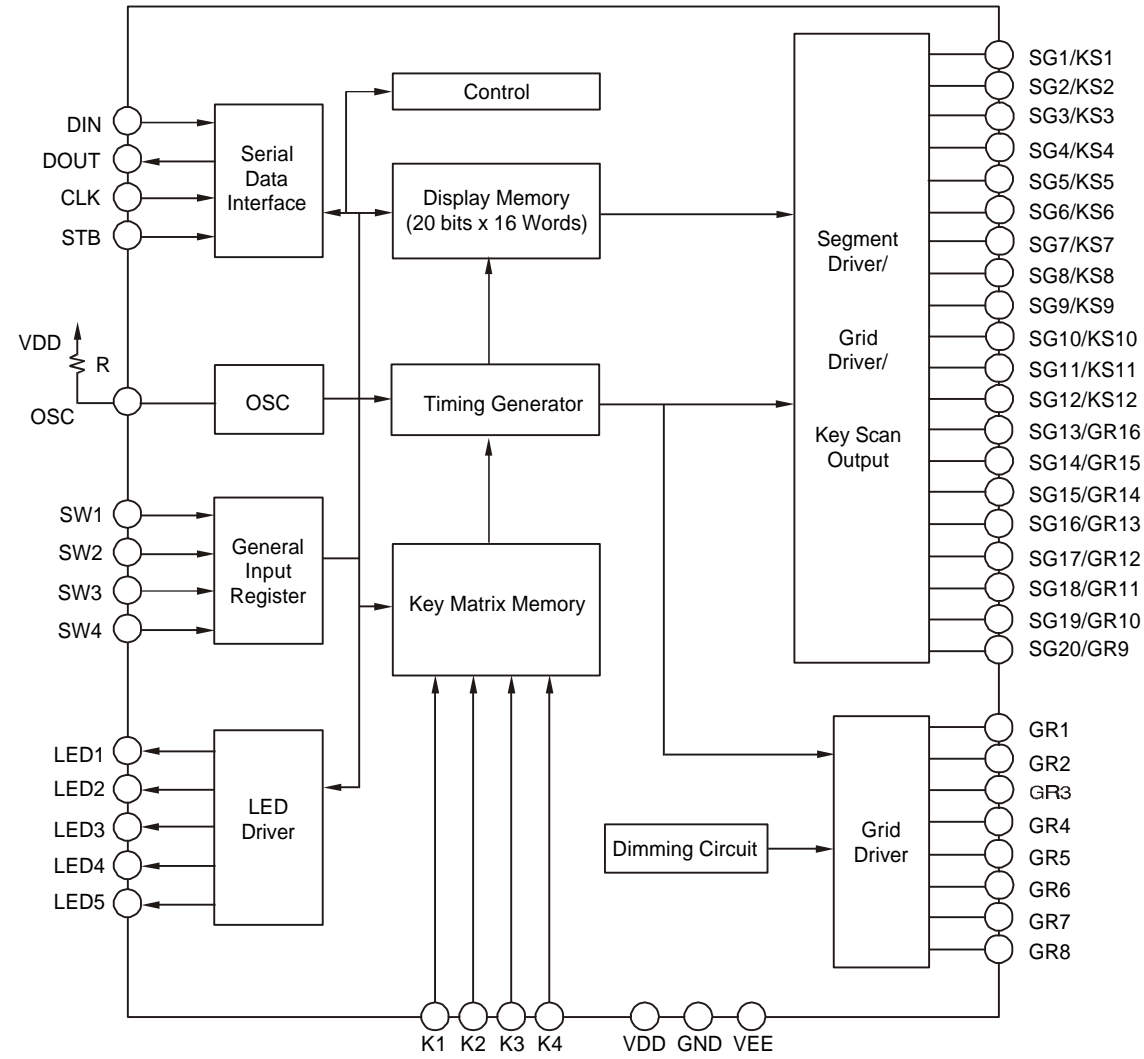
**IC601 STK402**



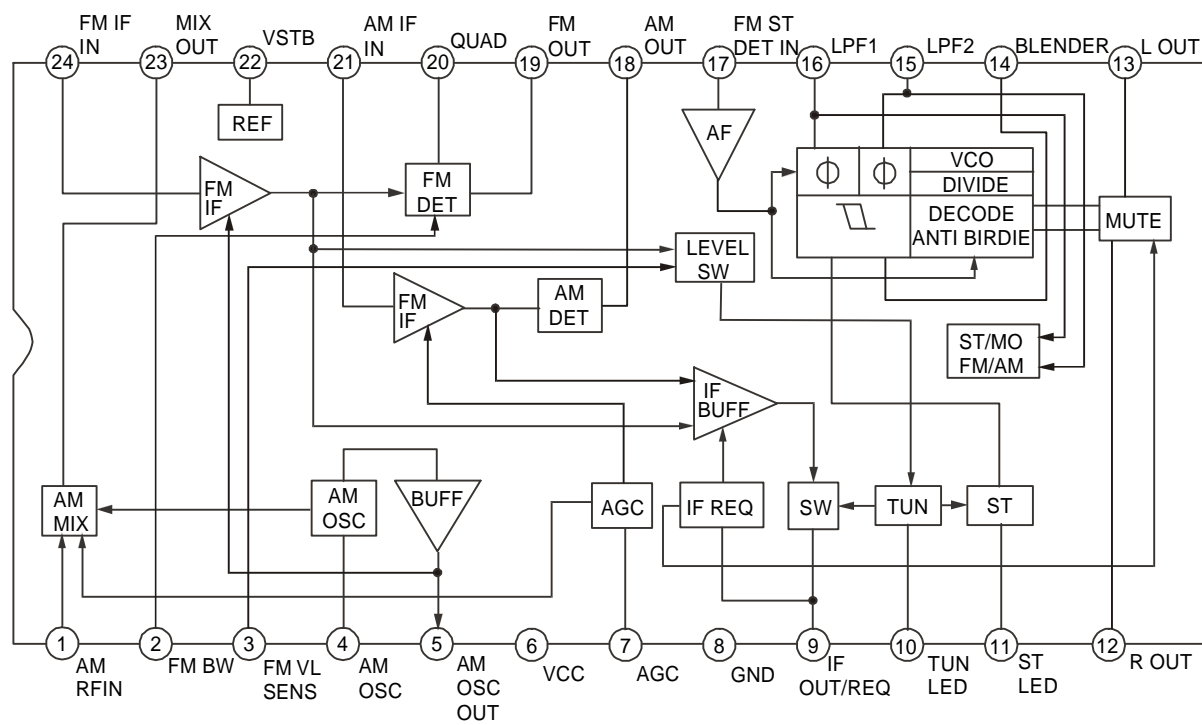
**U17 K4S161622D/HY57V16160DTC**



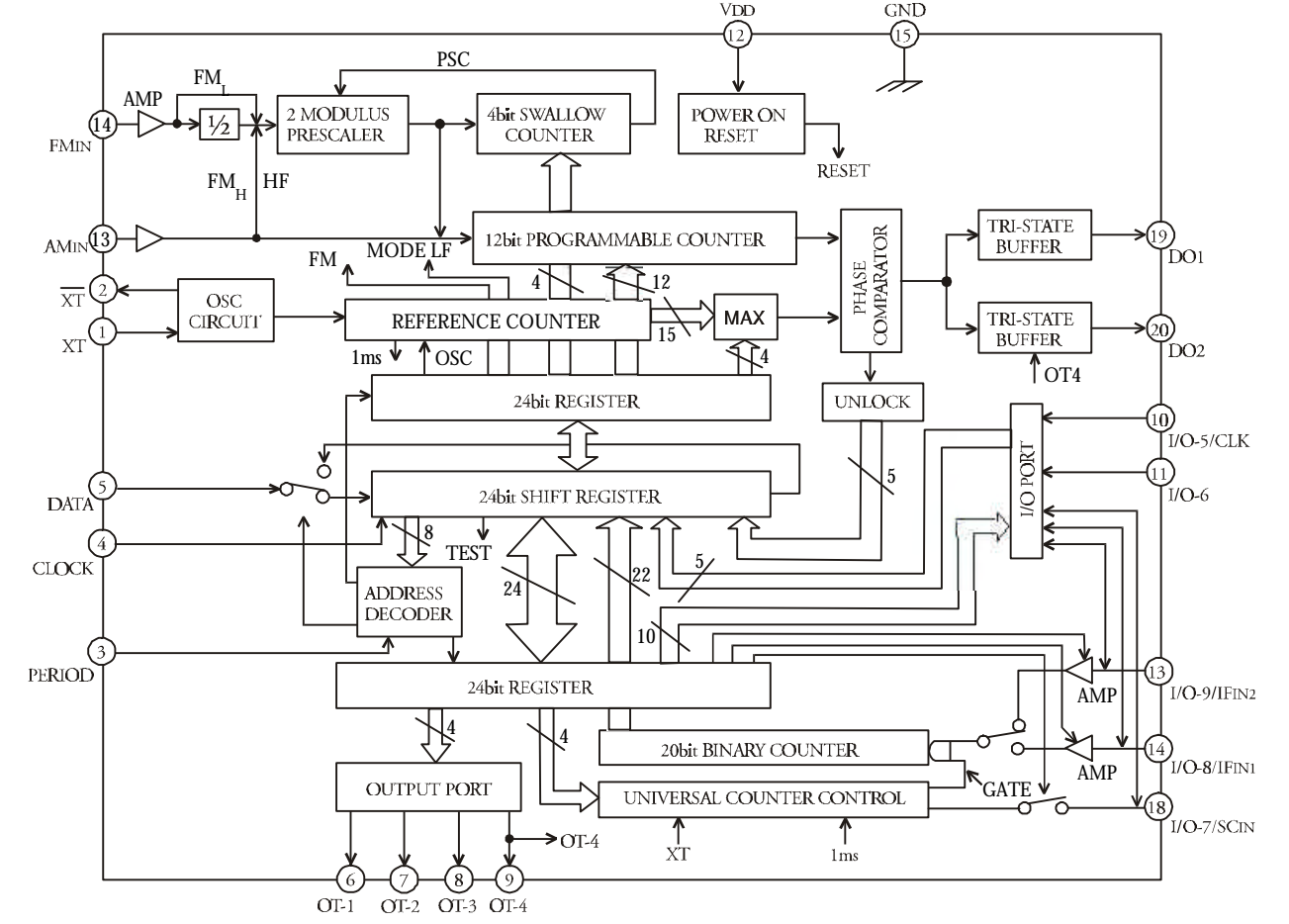
**IC304 PT6311**



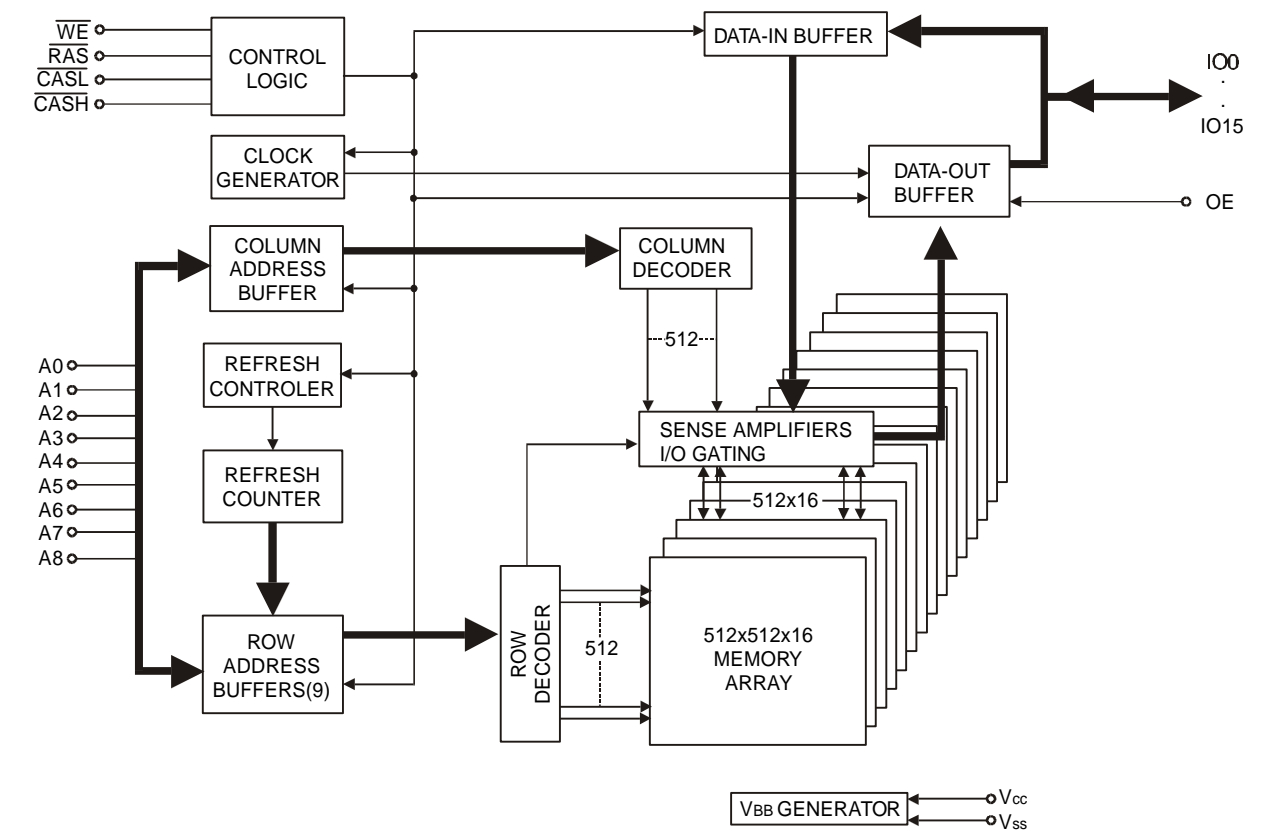
**IC401 TA2099N**



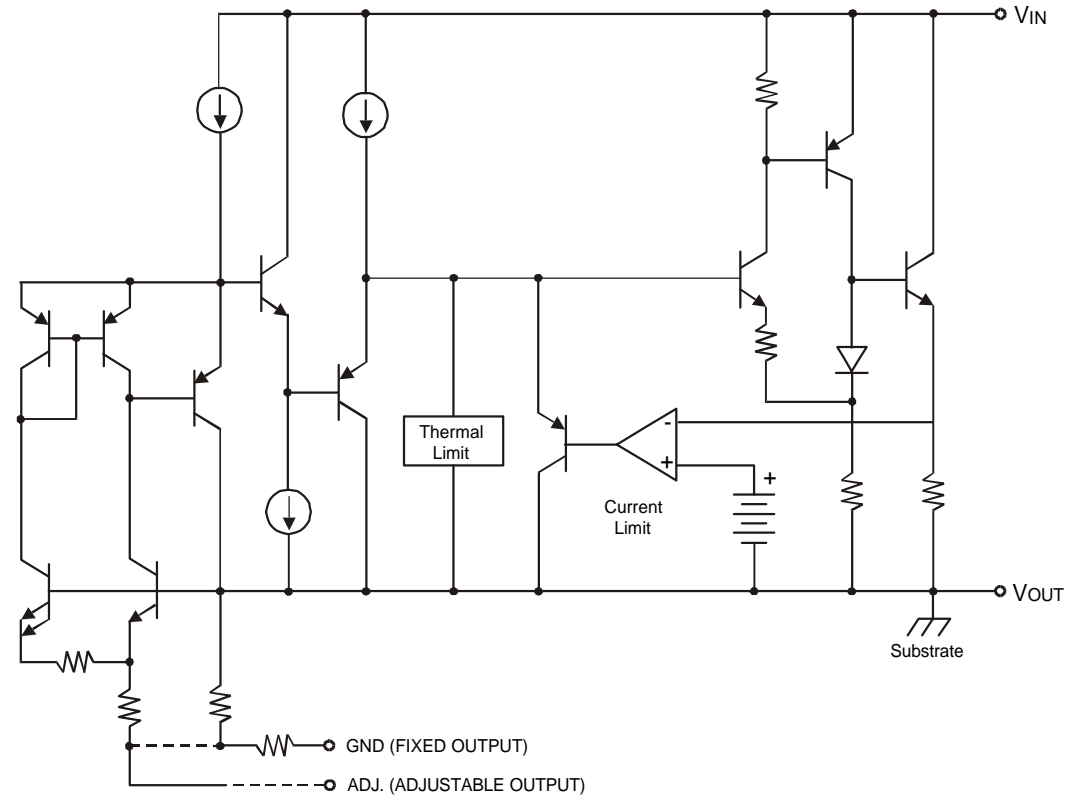
**IC402 TC9257F**



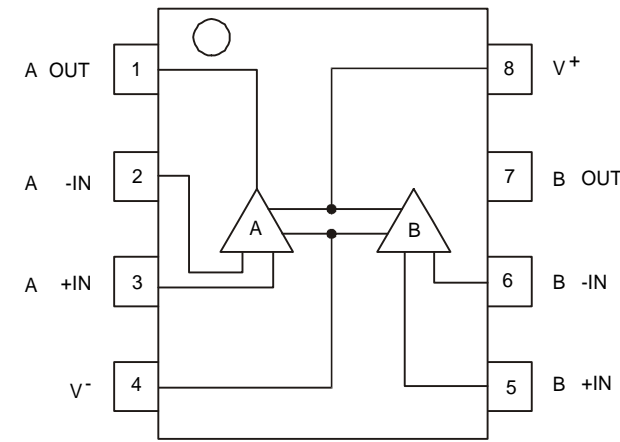
**U6 M11B416256A-35J**



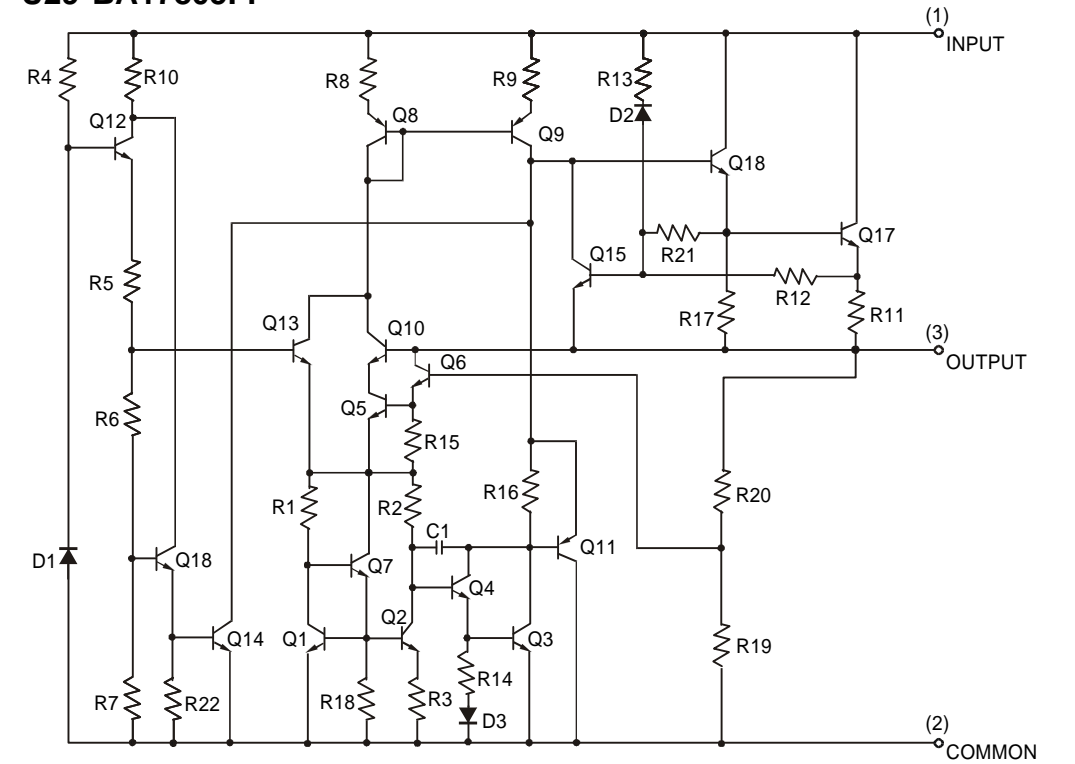
**U27 LD1117S**  
**U28 LD1117S33**



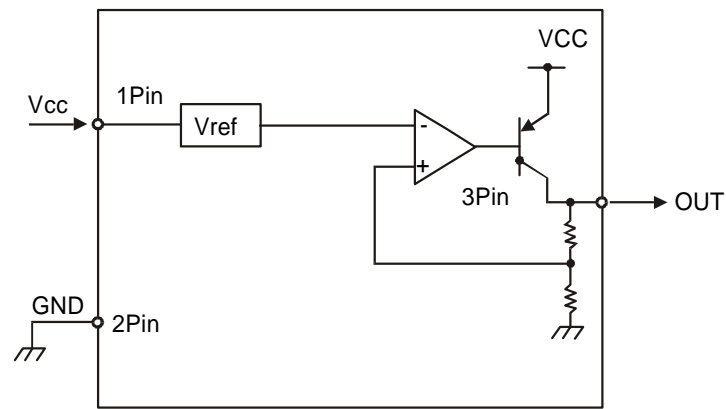
**U22, U23, U24 NJM4580E**



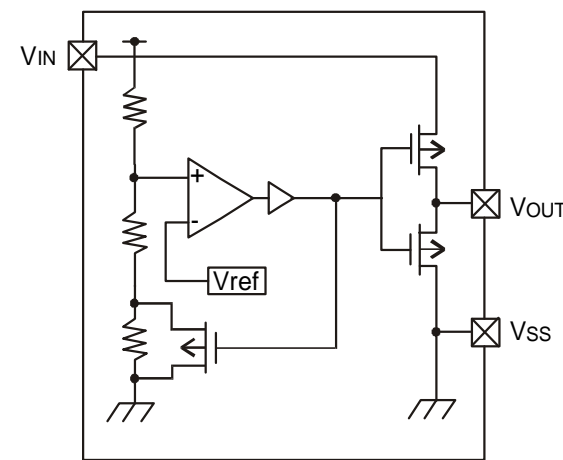
**U29 BA17805FP**



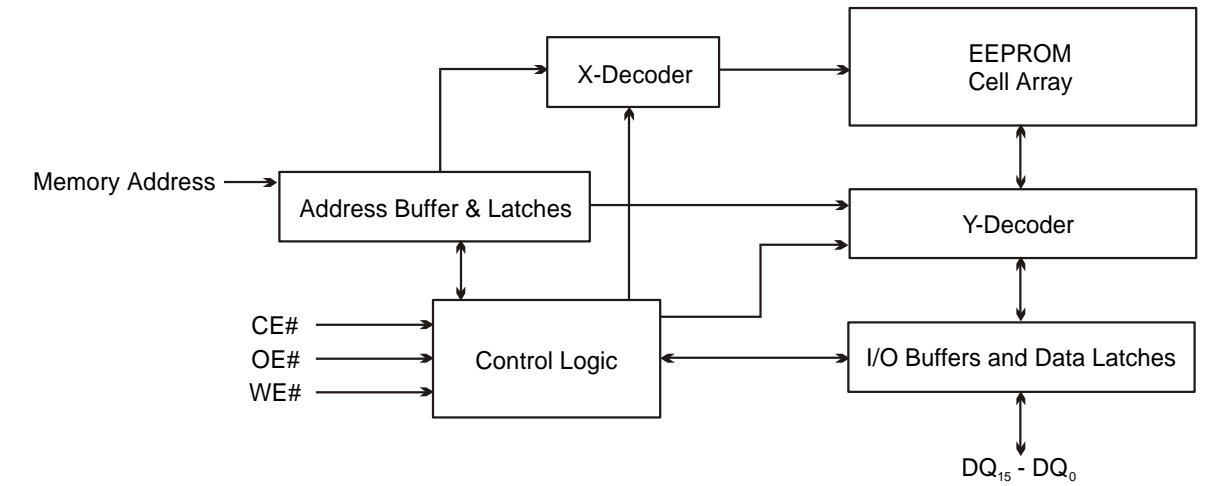
**U3 BA033FP**



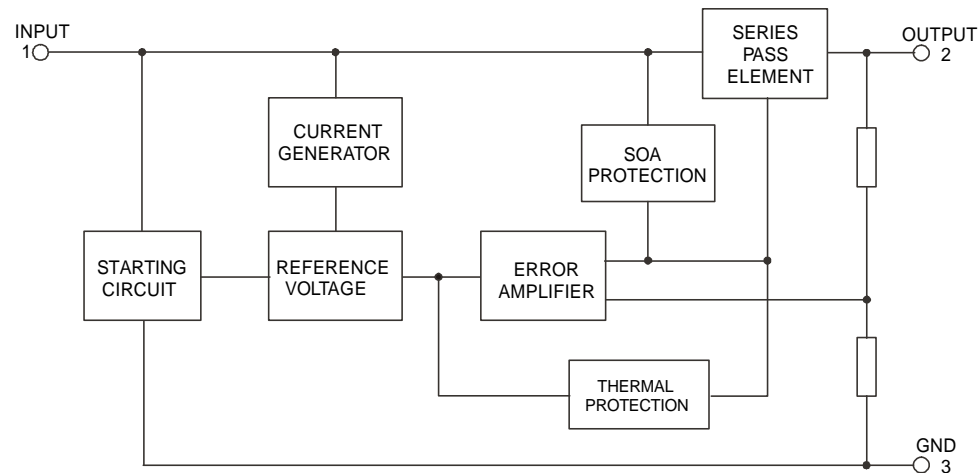
**U9 XC61AN1902MR**



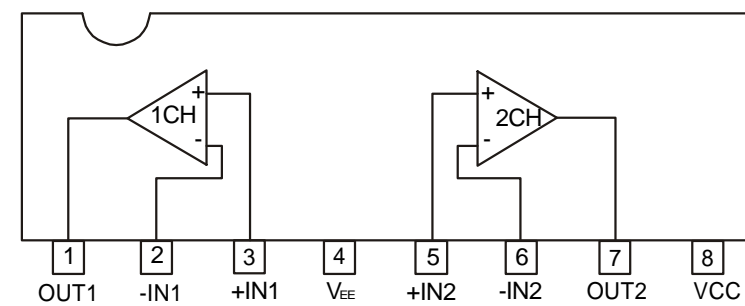
**U13 SST39VF800A**



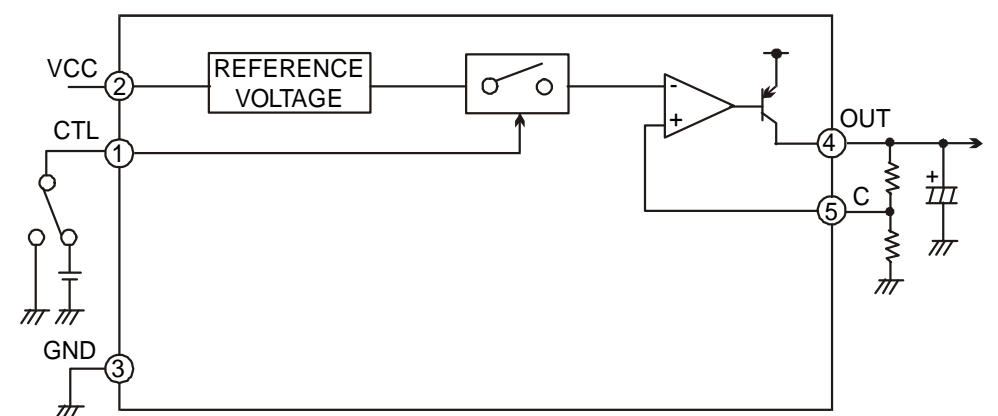
**IC801 LM78L05ACZ**



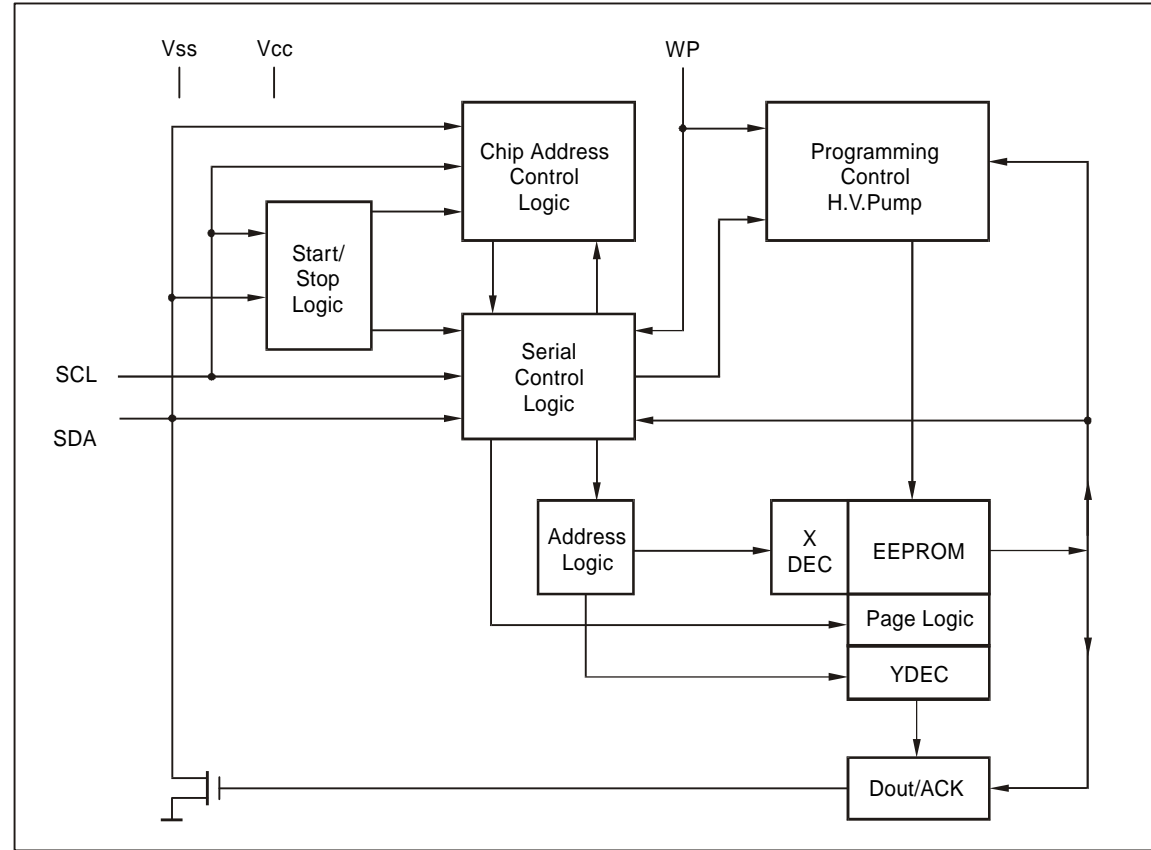
**IC502, IC951, IC952, IC953, IC954 BA4558N**



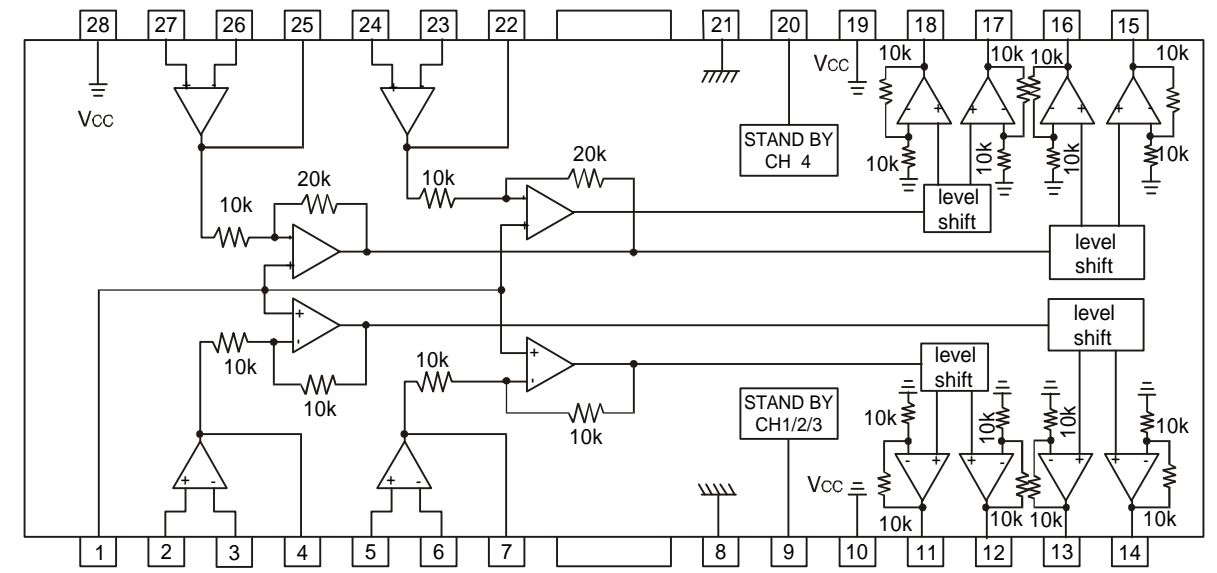
**IC802, IC803 BA05ST**



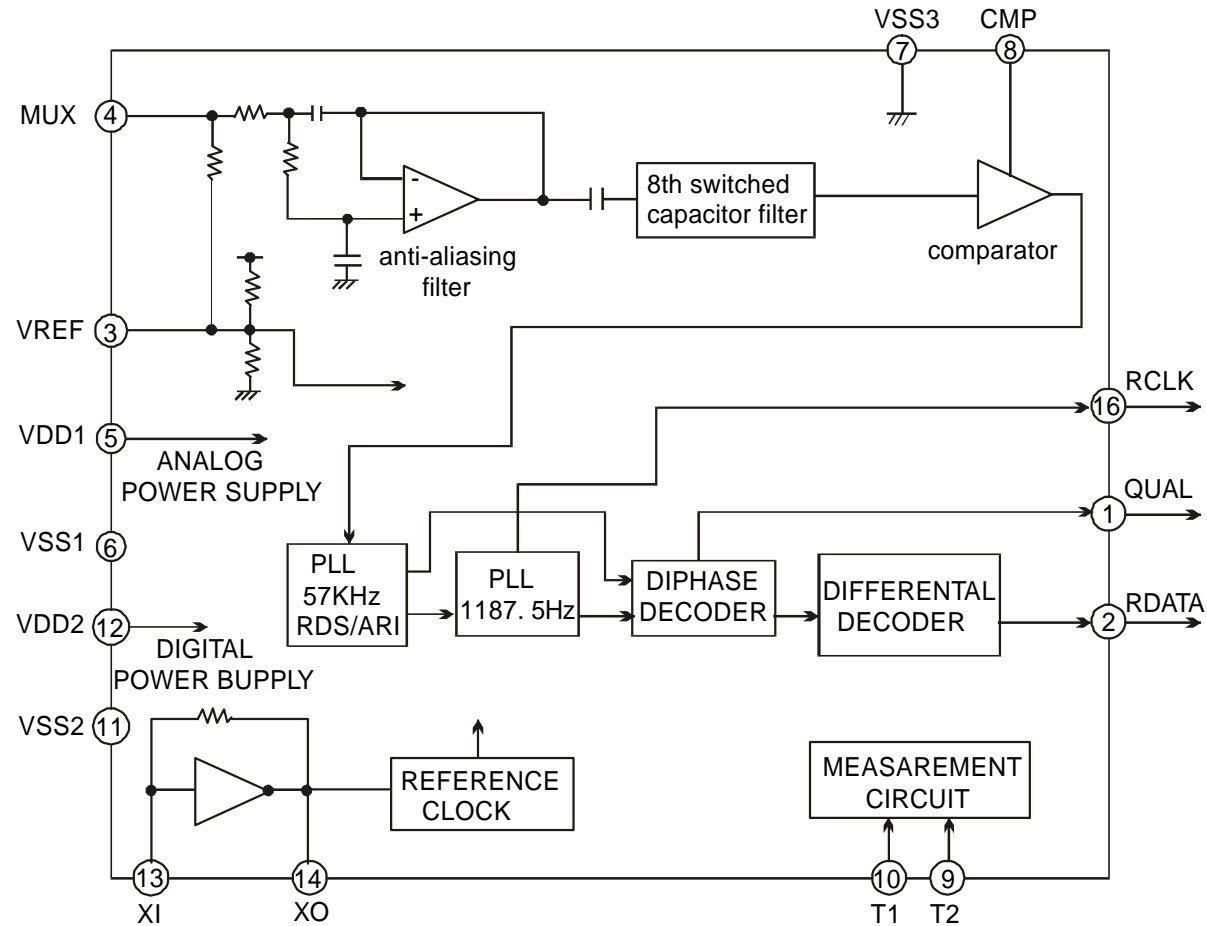
**U12 AT24C01A/S-24C01BFJ**



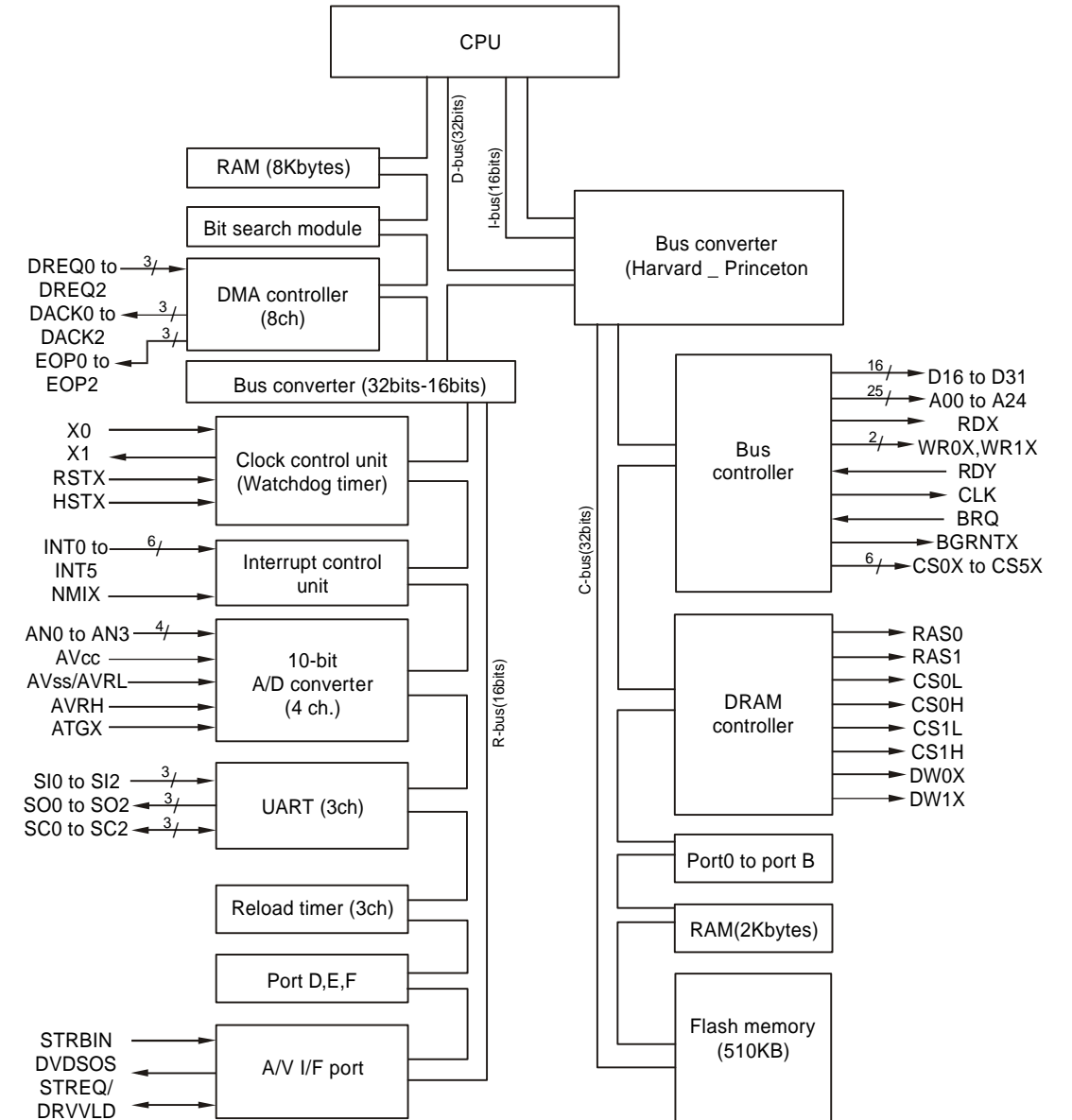
**U2 BA5983FM**



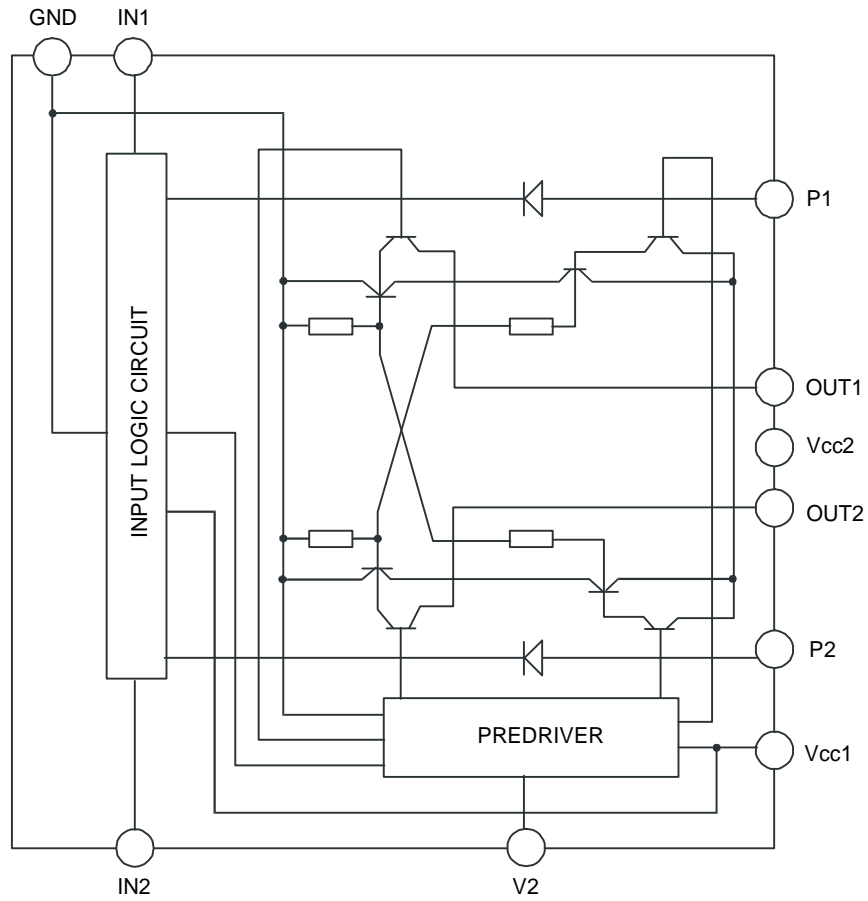
**IC403 BU1923F**



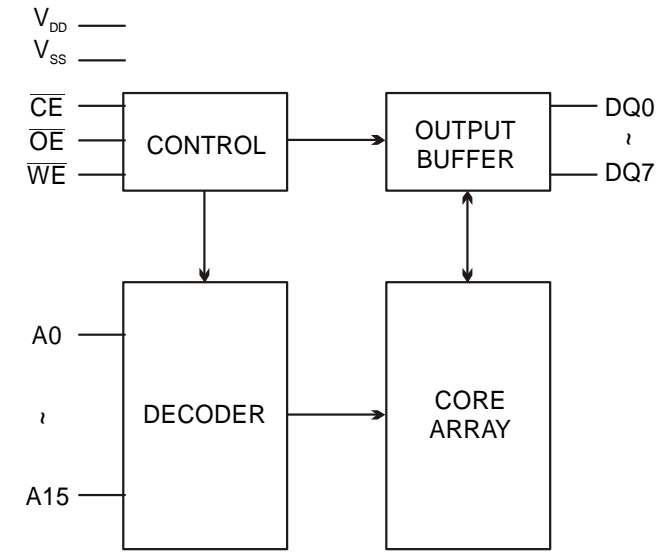
**U11 ZR36705TQC**



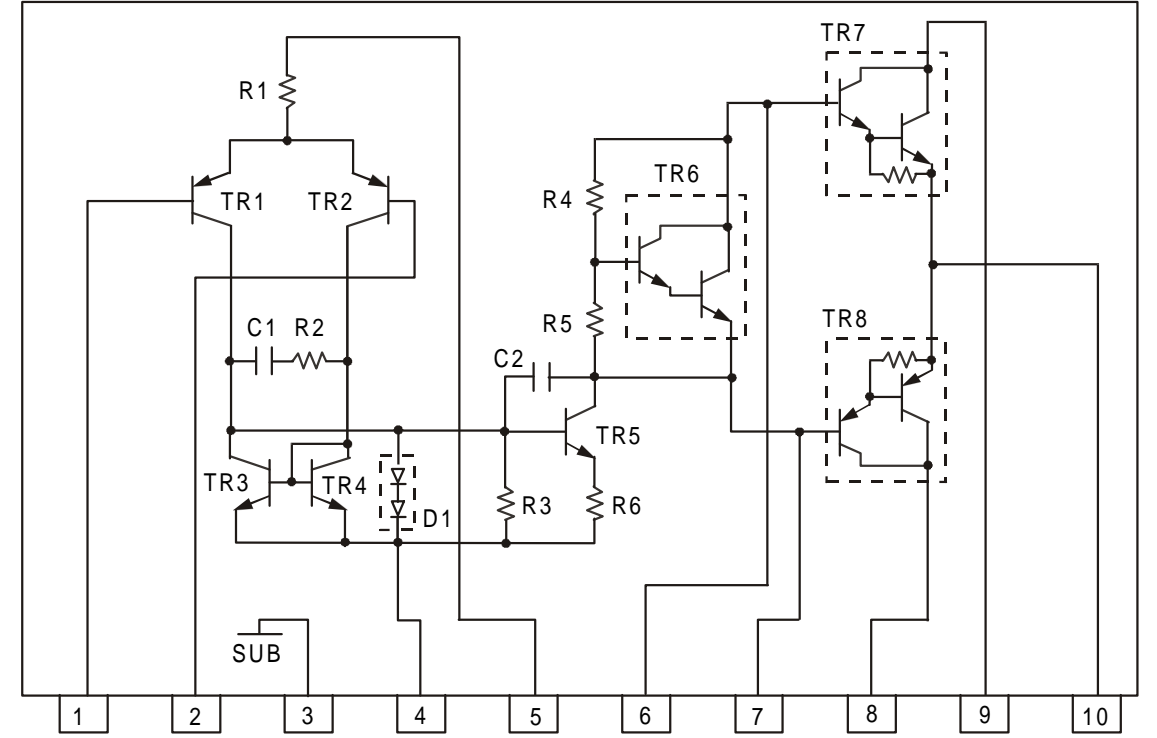
**IC751, IC752 LS1641**



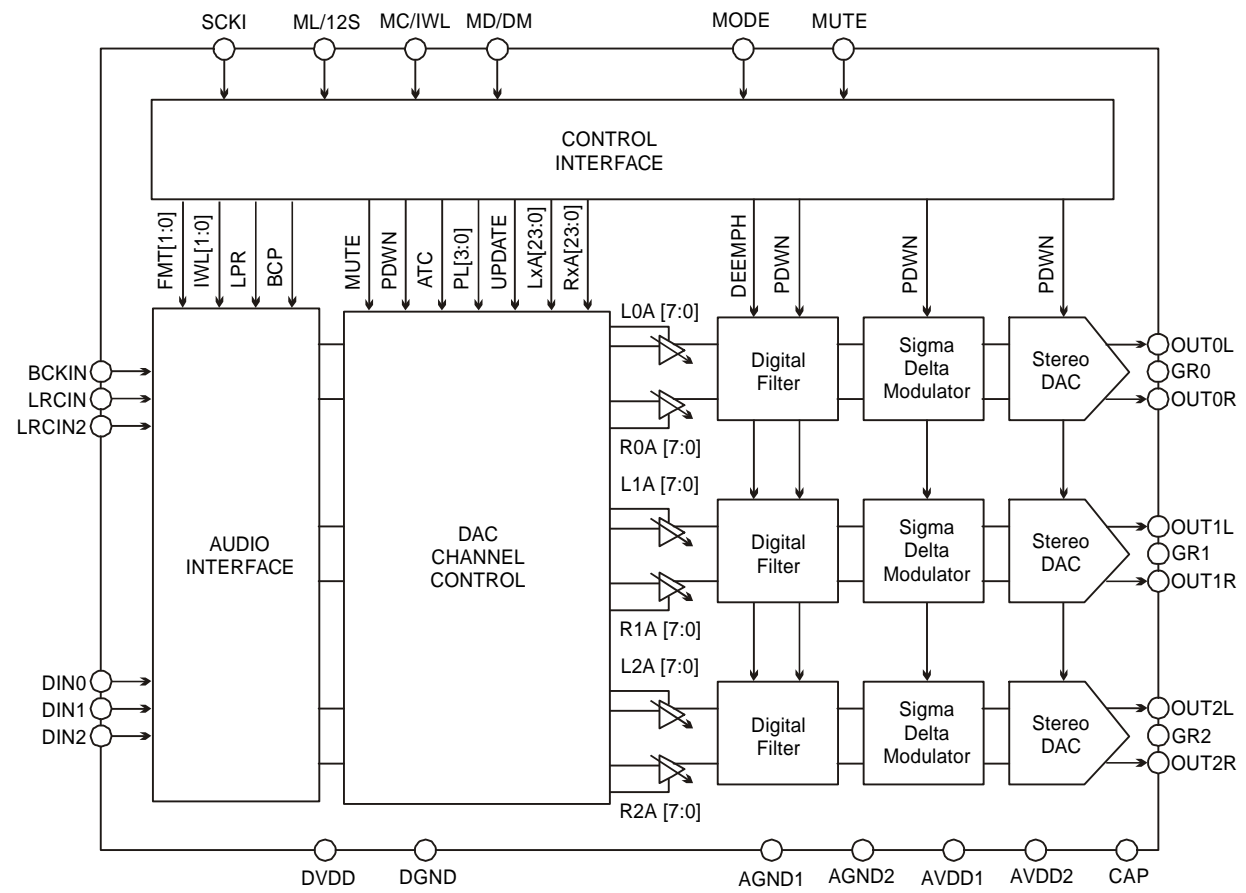
**U7 W29EE512P**



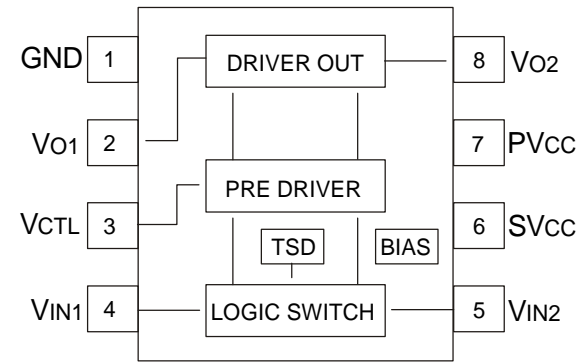
**IC901 STK404**



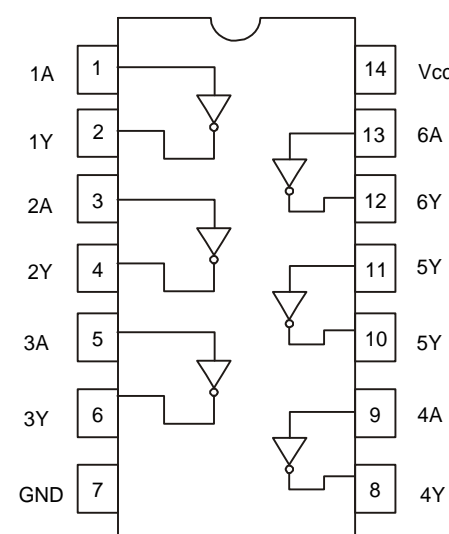
**U31 WM8746EDS**



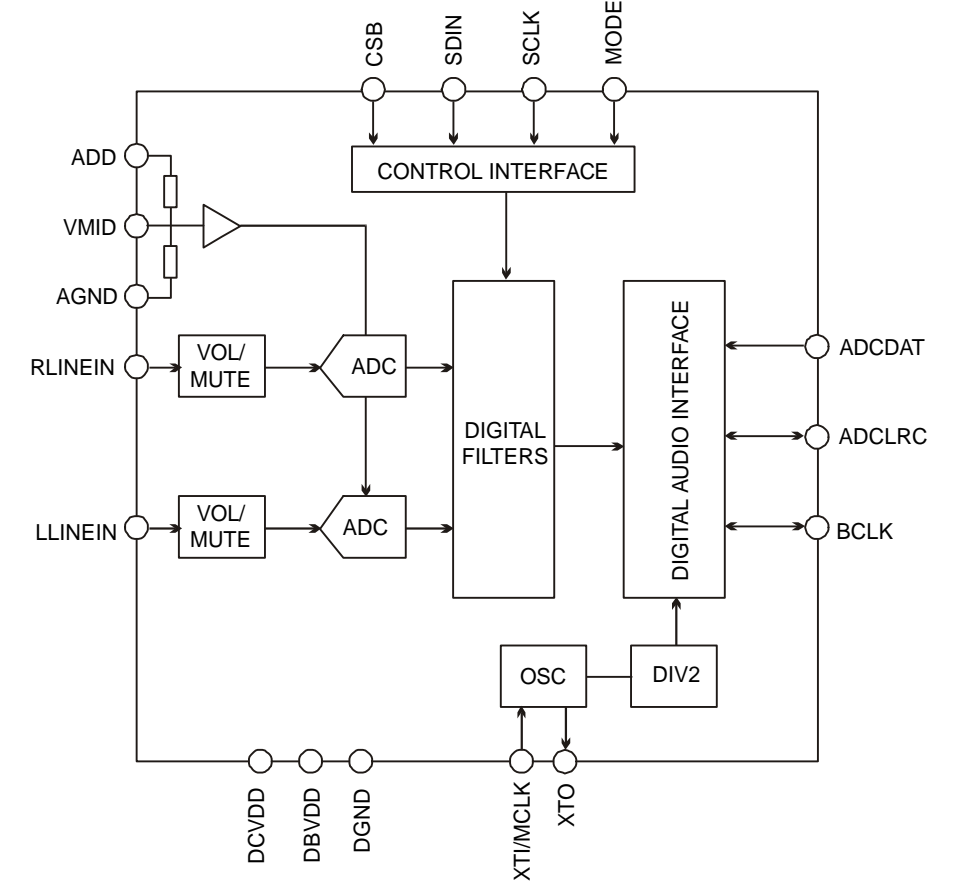
**U4 FAN8082**



**U26 TC74HCU04AF**



**U25 WM8739**



**IC301 TMP-87EP26F PINS DESCRIPTION**

Pin	Port Nome	Pin Name	Description
1	VSS	VSS	Ground
2	XOUT	XOUT	8MHz
3	XIN	XIN	8MHz
4	/RESET	RESET	
5	P2.2(XTOUT)	CS	CS to Display driver
6	P2.1(XTIN)	CLK	Clock to Display driver
7	TEST	TEST	
8	P2.0 (INT5/STOP)	STOP*	Poewer Down detector
9	P4.0 (INT3/TC3)	IR*	Remote controller
10	P4.1 (PWM/PDO)	CLKSHIFT	Clock shift on tuner
11	P4.2 (/SCK1)	RDSCLK*	RDS Clock input pin
12	P4.3 (SI1)	REDSDAT*	RDS Data input pin
13	P4.4 (SO1)	Tuner-/DVD	Selection of Tuner or DVD
14	P4.5 (/SCK2)	DVD-VCLK*	DVD VFD Clock pin
15	P4.6 (SI2)	DVD-VDAT*	DVD VFD Data pin
16	P4.7 (SO2)		
17	P0.0	/OE	373 OE pin
18	P0.1	LE	373 LE pin
19	P0.2	DOUT	Data input from Display Driver
20	P0.3	PLL-CLK	Tuner Clock pin
21	P0.4	PLL-PERIOD	Tuner Period pin
22	P0.5	STEREO	Tuner STEREO input pin
23	P0.6	DVD-ACT	(Not used)
24	P0.7	DVD-IR	IR signal to DVD
25	P1.0 (/INT0)	SHORT-CIRCUIT	Speaker Short circuit detect
26	P1.1 (INT1)		
27	P1.2 (INT2/TC1)	DVD-VCS	DVD CS to Display driver
28	P1.3 (DVO)	CH-MUTE	
29	P1.4 (PPG)	AUX	Channel Mute pin
30	P1.5 (TC2)	DVD-PWR	AUX Channel Selection
31	P1.6	MAIN-PWR	DVD Power control pin
32	P1.7	SYSMUTE	Main Power control pin
33	P3.0	VRDDIN	System Mute
34	P3.1	VFDCS	Data output to Display driver
35	P3.2	VFDCCLK	Clock to Display driver
36	P3.3	PLL-DATA	Tuner Data pin
37	P3.4	SCL	I2C Clock pin for Volume IC
38	P3.5	SDA	I2C Data pin for Volume IC
39	P3.6	CH-MUTE	Channel mute pin
40	P5.0 (AIN0)	COUNTRY	Tuner Country selection
41	P5.1(AIN1)	SIGNAL-DET	Tuner Signal Strength detection
42	P5.2 (AIN2)	JOG-VOL+	Jogger Volume +
43	P5.3 (AIN3)	JOG-VOL-	Jogger Volume -
44	P5.4 (AIN4)	KEY0	Keyboard
45	P5.5 (AIN5)		
46	P5.6 (AIN6)	AM-STEP	Tuner AM Step selection
47	P5.7 (AIN7)		
48	VAREF	VAREF	Analog VCC
49	BOOT	BOOT(H-Program)	Program Data to EEPROM
50	VSS	VSS	Ground
51	VDD	VDD	+5V
52	P8.0 (SEG39)		
53	P8.1 (SEG38)		
54	P8.2 (SEG37)		

**IC301 TMP-87EP26F PINS DESCRIPTION - CONTINUED**

Pin	Port Nome	Pin Name	Description
55	P8.3 (SEG36)		
56	P8.4 (SEG35)		
57	P8.5 (SEG34)		
58	P8.6 (SEG33)		
59	P8.7 (SEG32)		
60	P7.0 (SEG31)		
61	P7.1 (SEG30)		
62	P7.2 (SEG29)		
63	P7.3 (SEG28)		
64	P7.4 (SEG27)		
65	P7.5 (SEG26)		
66	P7.6 (SEG25)		
67	P7.7 (SEG24)		
68	P6.0 (SEG23)		
69	P6.1 (SEG22)	RVS_SW	3-CD Tokyo Pigeon Changer
70	P6.2 (SEG21)	FWD_SW	3-CD Tokyo Pigeon Changer
71	P6.3 (SEG20)	OPCL_SW	3-CD Tokyo Pigeon Changer
72	P6.4 (SEG19)	CN1_SW	3-CD Tokyo Pigeon Changer
73	P6.5 (SEG18)	CN2_SW	3-CD Tokyo Pigeon Changer
74	P6.6 (SEG17)	HOME_SW	3-CD Tokyo Pigeon Changer
75	P6.7 (SEG16)	EXTRA_SW	3-CD Tokyo Pigeon Changer
76	P9.0 (SEG15)	CMF	3-CD Tokyo Pigeon Changer
77	P9.1 (SEG14)	DMR	3-CD Tokyo Pigeon Changer
78	P9.2 (SEG13)	DMF	3-CD Tokyo Pigeon Changer
79	P9.3 (SEG12)	DMR	3-CD Tokyo Pigeon Changer
80	SEG11		
81	SEG10		
82	SEG9		
83	SEG8		
84	SEG7		
85	SEG6		
86	SEG5		
87	SEG4		
88	SEG3		
89	SEG2		
90	SEG1		
91	SEG0		
92	COM3		
93	COM2		
94	COM1		
95	COM0		
96	VLC	LCD Power	
97	PD0		
98	PD1		
99	PD2		
100	VDD	VDD	

### U16 ZR36732PQC PINS DESCRIPTION

Pin No.	Pin Name	Type	Description
<b>Reset, Standby and Idle Status Interface</b>			
124	RESET#	I	Reset input. Once de-asserted, the Decoder starts the initialization process.
122	STNDBY#	I	Stand-by input. When asserted together with RESET#, all outputs and bidirectional pins float, such that the Decoder is electrically disconnected from its surroundings. All internal clocks are disabled, and the power consumption is minimized.
160	IDLE	3-S	Idle, Init and Reset states indication output.
<b>Host Interface</b>			
2	HWID	I	Determines the width of the host interface data bus. It is allowed to be changed only during RESET. A low level (GNPD) configures the Decoder to an 8-bit host data interface, a high level (VDDP) to 16-bit width.
1	HORD	I	Determines the order of bytes on the host interface data bus in case of 16-bit width (HWID at VDDP). It is allowed to be changed only during RESET. A low level (GNPD) configures the Decoder to input/output the m.s. Byte on HD [ 15:8 ]; A high level (VDDP) to input/output the m.s. byte on HD [ 7:0 ], Must be at GNPD if the host data bus is 8 bits.
4	HTYPE	I	Determines the protocol type for the 8 and 16 bits modes host interface. It is allowed to be changed only during RESET. A low level (GNPD) configures the Decoder to type A, a high level (VDDP) to type B.
17,18 20,21 22,23 24,25	HD[7],HD[6] HD[5],HD[4] HD[3],HD[2] HD[1],HD[0]	3-S	For 16 bits mode, the 8 I.S. Data lines of host data bus. For 8 bits mode, only these signals are defined as host data signals.
9,11 13,15	HD[11],HD[10] HD[9],HD[8]	3-S	When HWID is connected to VDDP, these are data lines 11:8 of the 16-bit host data bus.
5,6 7,8	HD[15],HD[14] HD[13],HD[12]	3-S	When HWID is connected to VDDP, these are data lines 15:12 of the 16-bit host data bus. When HWID is connected to GNPD, these are the CD-DSPI <sup>2</sup> S input port pins as explained in the CD-DSP pin description.
27,28 29,30	HA[3],HA[2] HA[1],HA[0]	I	Host address inputs. These input signals indicate the register accessed in every cycle on the host interface.
32	HCS#	I	Host chip-select input.
31	HWR#-HR/W#	I	In host protocol Type A (HTYPE= GNPD): HR/W# This input determines the direction of the host access. In host protocol Type B (HTYPE=VDDP): HWR#. Host write input.
34	HRD#-HDS#	I	In host protocol Type A (HTYPE = GNPD): HDS#. Data strobe input (active low) In host protocol Type B (HTYPE=VDDP): HRD#. Host read input. (active low.)
36	HRDY	3-S	Host ready output. When this signal is tri-stated (i.e., it requires a pull-up resistor), up to SysConfig.CodBurstLed bytes of code can be written to the Decoder with no need to poll its condition in between. When HRDY is low during a host access, the Decoder may still receive at least two additional bytes of code without corrupting the data.
37	HIRQ#	3-S	Interrupt request. This output signal requests an interrupt from the host controller, if one of the events associated to interrupts occurs, and it is not masked-off. It is de-asserted if the host responds to the interrupt by reading the interrupt status register, or if the host disables the interrupt, or after RESET Deassertion of the HIRQ# output has two modes: De-activated and then tri-stated or directly to is a tri-state condition. The pin needs external pull-up resistor.
39	HACK#	HACK#	Host acknowledge output. In protocol A, the Decoder indicates that a read or write cycle is completed by asserting this output. In protocol B, this signal is used by the Decoder to indicate a wait state that may be used by fast hosts. In protocol B the host may ignore the HACK# signal. When this signal is deasserted it is de-activated and then tri-stated. This pin needs an external pull-up resistor.

### U16 ZR36732PQC PINS DESCRIPTION - CONTINUED

Pin No.	Pin Name	Type	Description
<b>General Purpose I/O (Host Interface)</b>			
134	GPAIO	3-S	General purpose input/output pin, monitored/controlled by the audio processor software. After RESET, this pin is defined as input. Its definition can be configured through ADP commands.
145	GPSI	I	General purpose input, monitored by the system de-multiplexer/video processor software.
143	GPSO	O	General purpose output, controlled by the system de-multiplexer/video processor software. After RESET it outputs a low level.
<b>DVD-DSP interface</b>			
151	DVDREQ	O	DVD-DSP data request output (programmable polarity)
149	DVDVALID	I	DVD-DSP data valid input (programmable polarity)
148	DVDSOS	I	DVD-DSP start of sector input (programmable polarity)
159,158 157,156 155,154 153,152	DVDAT[7],[6] DVDAT[5],[4] DVDAT[3],[2] DVDAT[1],[0]	I	DVD-DSP data input bus.
150	DVDSTRB	I	DVD-DSP data bit strobe (clock) input. Programmable polarity.
147	DVDERR	I	DVD-DSP error indication input. Programmable polarity.
5 6 7 8	CDERR CDFRM CDDAT CDCLK	I	When HWID is connected to GNPD, these are the CD DSPI <sup>2</sup> S input port pins as follows: CDERR: data error indication input CDFRM: left/right channel frame input CDDAT: data input CDCLK: bit clock input When HWID is connected to VDDP, these are HD [15:12] of the host data bus, as explained in the host interface pin description.
<b>Video Syncs and Clocks Interface</b>			
127	VCLKx2	3-S	Main video clock. 27.000MHz.
92	VCLK	3-S	A division by two of the VCLKx2 signal. This signal is used as a sync qualifier.
95	HSYNC	3-S	Horizontal sync. Polarity and duration are programmable.
93	VSYNC	3-S	Vertical sync. Polarity and duration are programmable.
96	FI	3-S	Field indication. Polarity is programmable.
<b>Analog Video Encoder Interface</b>			
102	CVBS/G/Y (DAC A)	O	When the Decoder outputs composite video, this line is CVBS When the Decoder outputs RGB, this line is the Green output When the Decoder outputs YUV, this line is the Y output
105	Y/R/V (DAC B)	O	When the Decoder outputs the composite video, this line is Y When the Decoder outputs RGB, this line is the Red output When the Decoder outputs YUV, this line is the V output
106	C/B/U (DAC C)	O	When the Decoder outputs the composite video, this line is C When the Decoder outputs RGB, this line is the Blue output When the Decoder outputs YUV, this line is the U output
103	CVBS/C (DAC D)	O	When the Decoder outputs any of the types of video, this line can be programmed to output either composite or C.
108	RSET	I	Resistive load for gain adjustment of the DACs
111	VREF	I	Voltage reference for gain adjustment of the DACs
100	COSYNC	3-S	Composite sync output, Active only when RGB analog output is selected. Otherwise, the signal is low.
<b>Digital Audio Interface</b>			
131	AMCLK	3-S	Audio Master Clock input/output. 128, 192, 256 or 384 times the sampling frequency (programmable)
133	S/PDIF (AOUT[3])	O	S/PDIF transmitter output for digital coded or reconstructed audio data. Alternately can be used as a fourth audio output. After RESET this pin outputs low level.
138,137 136	AOUT[2],[1] AOUT[0]	O	Serial outputs of digital stereo audio.

**U16 ZR36732PQC PINS DESCRIPTION - CONTINUED**

Pin No.	Pin Name	Type	Description
113	AIN	I	Serial input of digital stereo audio.
139	ALRCLK	O	Digital audio left/right select output for the audio port. Square wave, at the sampling frequency. Programmable polarity interpretation for input.
141	ABCLK	O	Digital audio bit-clock output. Data on AOUT and AIN is output or latched, respectively, with the rising or falling (programmable) edge of this clock.
<b>PLL/Clock Interface</b>			
120	GCLK	I	27.000MHz clock or crystal input for main processing clock generation.
117	GCLK1	I	27.000MHz clock input for audio master clock generation. In normal operation must be connected to GCLK.
119	XO	O	Output to a crystal that is connected to GCLK. If a crystal is not used at GCLK, XO must be left not connected.
115	PLLCFG[1]	I	PLL configuration inputs. Allowed to be changed only during RESET. In normal operation both pins must be connected to GNDP
118	PLLCFG[0]	I	
<b>SDRAM Interface</b>			
90,87 84,81 78,75 72,68 70,74	RAMDAT[15], [14],[13],[12] RAMDAT[11] [10],[9],[8] RAMDAT[7],[6]	3-S	SDRAM bidirectional data bus.
76,79 82,85 88,91	RAMDAT[5],[4] RAMDAT[3],[2] RAMDAT[1],[0]		
55,53 54,51 48,46 43,41 42,45 47,50	RAMADD[11] [10],[9],[8] RAMADD[7],[6] RAMADD[5],[4] RAMADD[3],[2] RAMADD[1],[0]	O	SDRAM address bus output.
60	RAMRAS#	O	SDRAM row select output.
61	RAMCAS#	O	SDRAM column select output.
66	PCLK	O	SDRAM clock output (Same as internal processing clock)
64	RAMDQM	O	SDRAM data masking output.
57	RAMCS0#	O	SDRAM chip select output for the lower (or only) 2MB device (16Mbit)
59	RAMCS1#	O	SDRAM chip select output for the upper 2MB device (16Mbit).
62	RAMWE#	O	SDRAM write enable output.
<b>Test Signal Interface</b>			
125	SCNENBL	I	Production test pin (connected directly to GNDP in normal operation).
129	TESTMODE	I	In normal operation this pin must be connected directly to GNDP.
112	ICEMODE#	I	In normal operation this pin must be connected directly to VDDP. If it is asserted, then the ADP goes into ICE mode. In this mode 4 of the Decoder pins turn into ICE interface pins: HD[11] = TCK - ICE interface clock HD[10] = TMS - ICE interface mode select input HD[9] = TDO - ICE interface data output HD[8] = TDI - ICE interface data input
<b>Power Signals</b>			
10,40,49 56,64,69 80,86,97 128,146	GNDP		Digital ground of 3.3 V supply.
3,16,19,26 38,44,52,58 67,71,77,83 89,94,98,99 126,135,140	V <sub>DDP</sub>		3.3V Digital power supply.

**U16 ZR36732PQC PINS DESCRIPTION - CONTINUED**

Pin No.	Pin Name	Type	Description
132	GNDP-A2		Digital ground of filtered 3.3V supply for AMCLK.
130	VDDP-A2		3.3 V filtered digital power supply for AMCLK.
14,35,73 114,144	GNDC		Digital ground of 1.8 V supply.
12,33,63 116,142	VDDC		1.8 V Digital power supply
123	GND A		Ground plane of internal PLL circuit.
121	VDDA		1.8 V Power supply for internal PLL circuit.
104	VDDDAC		3.3 V Analog power supply for the DACs.
101 107 109 110	GNDDAC_D GNDDAC_B GNDDAC_P GNDDAC_S		Grounds for the DACs 3.3V analog power supply



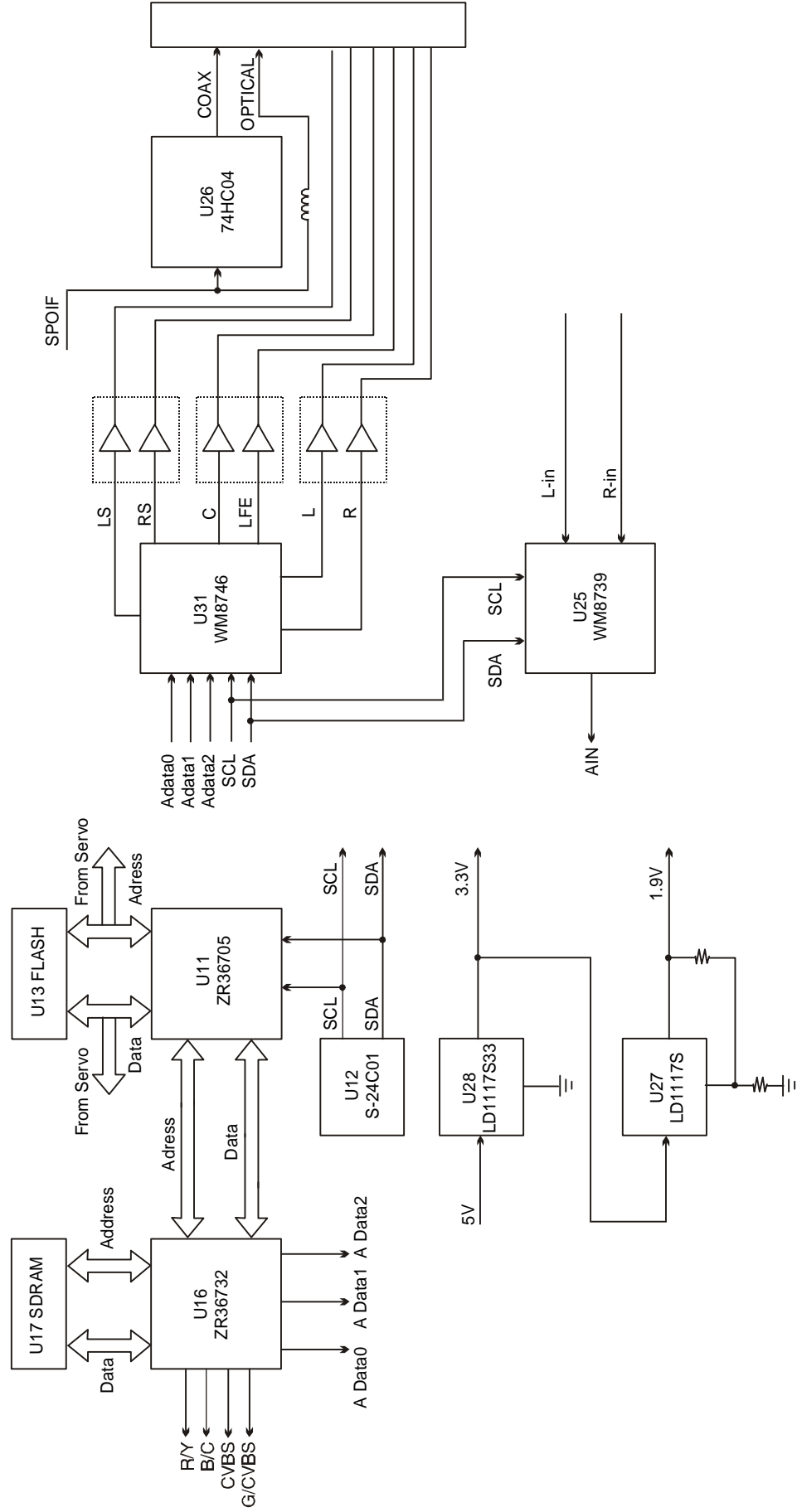
### U1 5703T (SP3721A) PINS DESCRIPTION

Pin No.	Pin Name	Type	Description
<b>Input Pins:</b>			
1,2	DVDRFP DVDRFN	I	RF Signal Inputs. Differential RF signal attenuator input pin.
63	CDRF	I	RF Signal input. Single-ended RF signal attenuator input pin
59,60	AIP,AIN	I	AGC Amplifier Inputs. Differential AGC amplifier input pins.
53,54	DIP,DIN	I	Analog inputs for RF single Buffer. Differential analog inputs to the RF single-ended output buffer and full wave rectifier.
32	FDCHG#	I	Low Impedance Enable. A TTL compatible input pin that activates the FDCHG switches. A low level activates the switches and the falling edge of the internal FDCHG triggers the fast decay for the MIRR bottom hold circuit.(open high)
49	HOLD1	I	Hold Control. A TTL compatible control pin which, when pulled high, disables the RF AGC charge pump and holds the RF AGC amplifier gain at its present value.(open high)
14-11	A,B,C,D	I	Photo Detector Interface Inputs. Inputs from the main beam photo detector matrix outputs.
8-5	A2,B2,C2,D2	I	photo Detector Interface Inputs. AC coupled inputs for the DPD from the main beam photo detector matrix outputs.
16-15	E,F	I	CD tracking Error Inputs. Inputs from the CD photo detector error outputs.
3-4	PD1,PD2	I	CD photodetector interface inputs. From the CD photo detector error outputs.
40	MEI	I	Mirror Envelope Input.The SIGO envelope input pin.
35	MIN	I	RF signal input for Mirror.AC coupled inputs for the mirror detection circuit from,the pull-in signal output.(PI)
21	DVDPD	I	APC Input. DVD APC input pin from the monitor photo diode.
23	CDPD	I	APC Input. CD APC input pin from the monitor photo diode.
25	LDON#	I	APC Output On/Off. APC output control pin. A low level activates the LD output. (open high)
<b>Output Pins:</b>			
62,61	ATOP/ATON	O	Differential Attenuator Output.Attenuator outputs.
52,51	FNP,FNN	O	Differential Normal Output.Filter normal outputs.
57	SIGO	O	Single Ended Normal Output.Single-ended RF output.
64	CDRFDC	O	CD RF Signal Output.Single ended CD RF summing output.
42	FE	O	Focusing Error Signal Output. Focus error output-reference to VCI.
41	TE	O	Tracking Error Signal Output. Tracking error output reference to VCI.
43	CE	O	Center Error Signal Output. Center error output reference to VCI.
34	MEVO	O	SIGO Bottom Envelope Output.Bottom envelope for Mirror detection.
37	DFT	O	Defect Output. Pseudo CMOS output.When a defect is detected,the DFT output goes high.Also the servo AGC output can be monitored at this pin,when CAR bits 7-4 are '0011'.
29	MIRR	O	Mirror Detect Output. Mirror Detect comparator output. Pseudo CMOS output.
36	PI	O	Pull-in Signal Output.The summing signal output of A,B,C,D or PD1,PD2 for mirror detection. Reference to VCI.
22	DVDLD	O	APC output DVD APC output pin to control the laser power.
24	CDLD	O	APC output CD APC output pin to control the laser power.
<b>Analog pins:</b>			
56	BYP	I/O	The RF AGC integration capacitor CBYP,is connected between BYP and VPA.
9	CP	I/O	Differential Phase tracking LPF pin. An external capacitance is connected between this pin and the CN pin.
10	CN	I/O	Differential Phase tracking LPF pin. An external capacitance is connected between this pin and the CP pin.
45	LCP	-	Center Error LPF Pin.An external capacitance is connected between this pin and the LCN pin.
44	LCN	-	Center Error LPF Pin.An external capacitance is connected between this pin and the LCP pin.
30	MP	-	MIRR signal Peak hold pin. An external capacitance is connected to between this pin and VPB.

### U1 5703T (SP3721A) PINS DESCRIPTION - CONTINUED

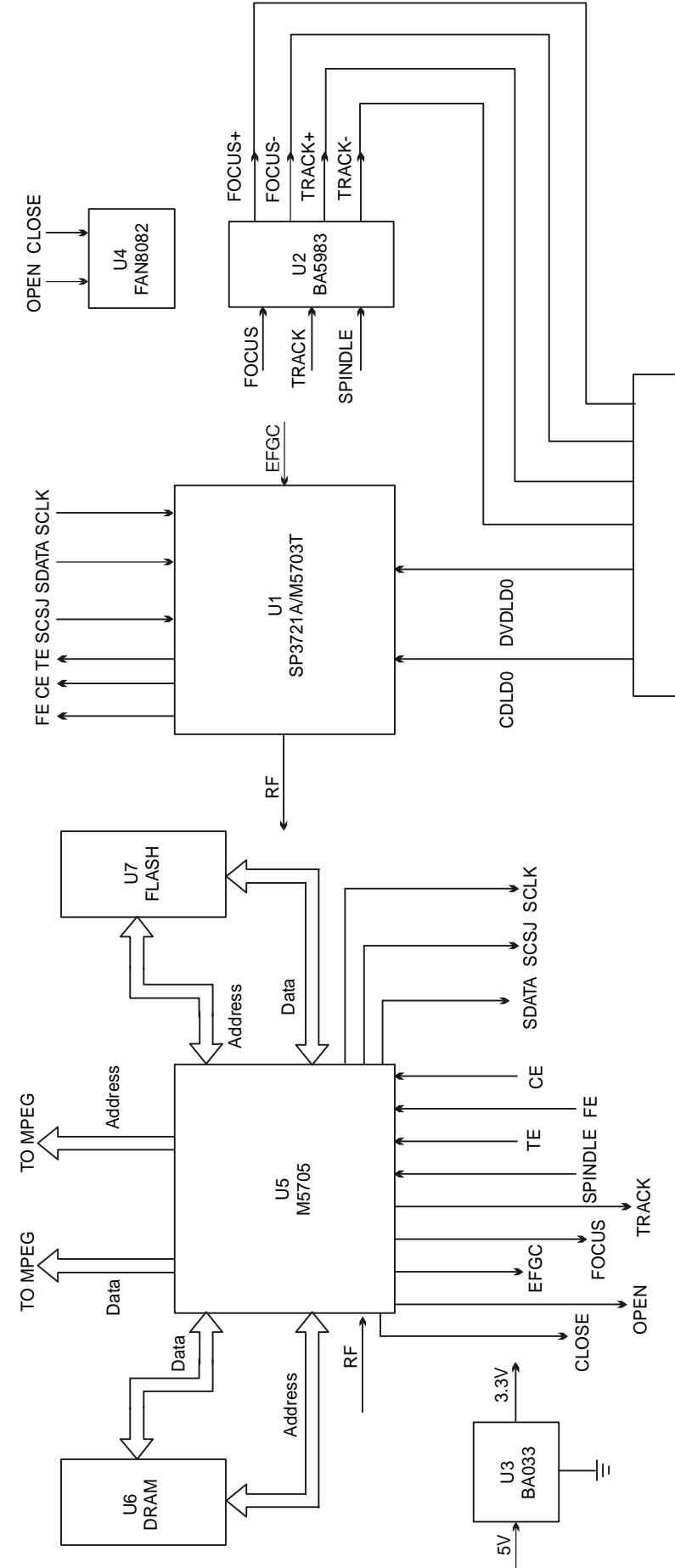
Pin No.	Pin Name	Type	Description
31	MB	-	MIRR signal Bottom hold pin. An external capacitance is connected to between this pin and VPB.
39	MEV	-	Sigo Bottom Envelope pin. An external capacitance is connected between this pin and VPB.
17	CDTE	-	CD Tracking. E-F Opamp output for feedback.
38	TPH	-	PI Top Hold pin. An external capacitance is connected between this pin and VPB.
26	VC	-	Reference Voltage output. This pin provides the internal DC bias reference voltage (+2.5V fix). Output impedance is less than 50ohms.
27	VC1	-	Reference Voltage input. DC bias voltage input for the servo input reference.
18	VC12	-	Reference Voltage Input. DC bias voltage input for the servo input reference.
55	RX	-	reference Resistor Input. An external 8.2kohm,1% resistor is connected from this pin to ground to establish a precise PTAT (proportional to absolute temperature) reference current for the filter.
33	MLPF	-	MIRR signal LPF pin An external capacitance is connected between this pin and VPB.
19	NC	-	No Connect.
<b>Serial Port Pins:</b>			
48	SDEN	I	Serial Data Enable. Serial Enable CMOS input.A high level input enables the serial port.(not to be left open)
47	SDATA	I/O	Serial Data.Serial data bi-directional CMOS Pin. NRZ programming data for the internal registers is applied to this input.(Not to be left open).
46	SCLK	I	Serial Clock Serial Clock CMOS input. The clock applied to this pin is synchronized with the data applied to DSATA.(Not to be left open)
<b>Power Pins:</b>			
58	VPA		Power. Power supply pin for the RF block and serial port.
28	VPB		Power. Power supply pin for the servo block.
50	VNA		Ground. Ground pin for the RF block and serial port.
20	VNB		Ground. Ground pin for the servo block.

MPEG SECTION

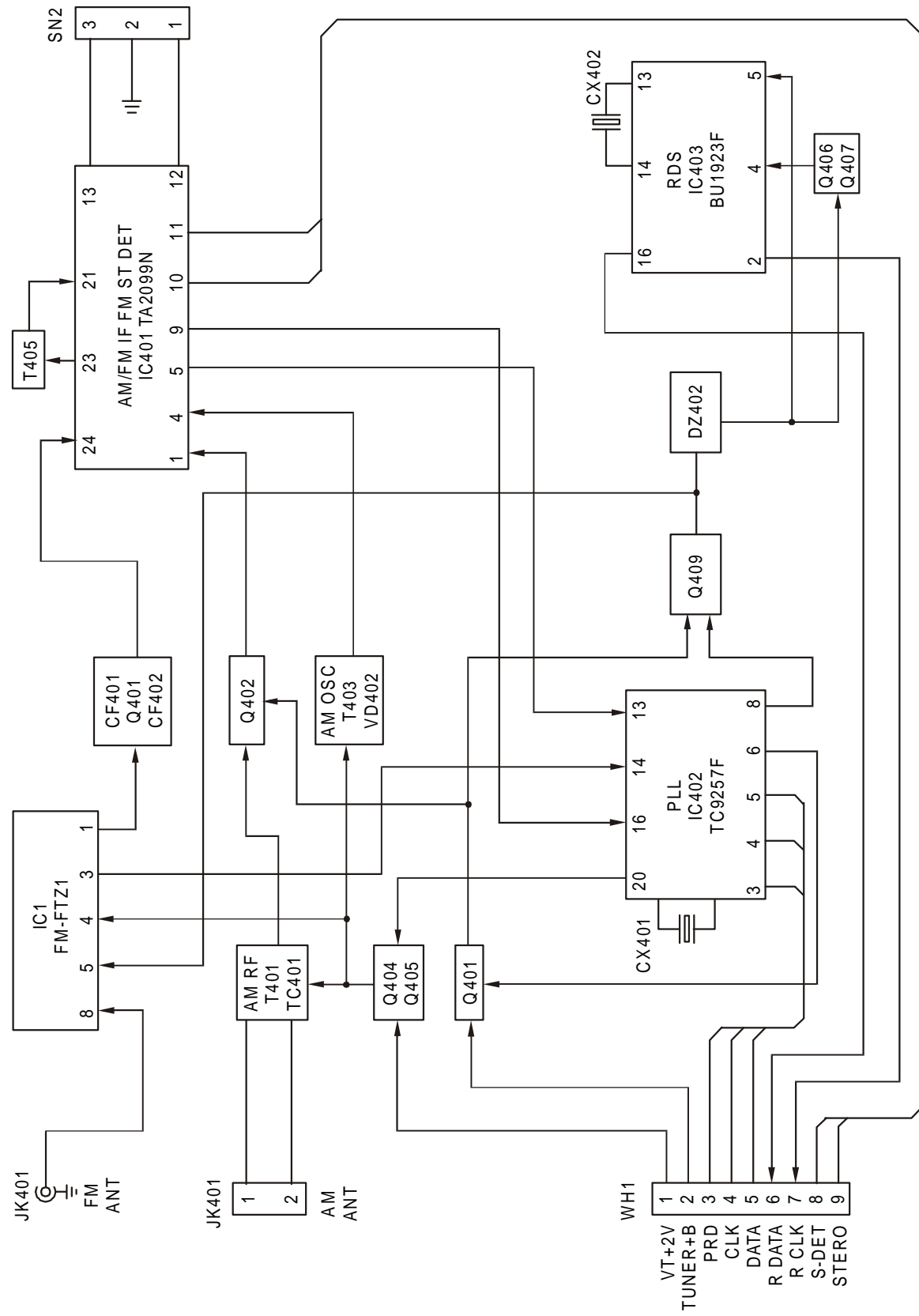


BLOCK DIAGRAMS

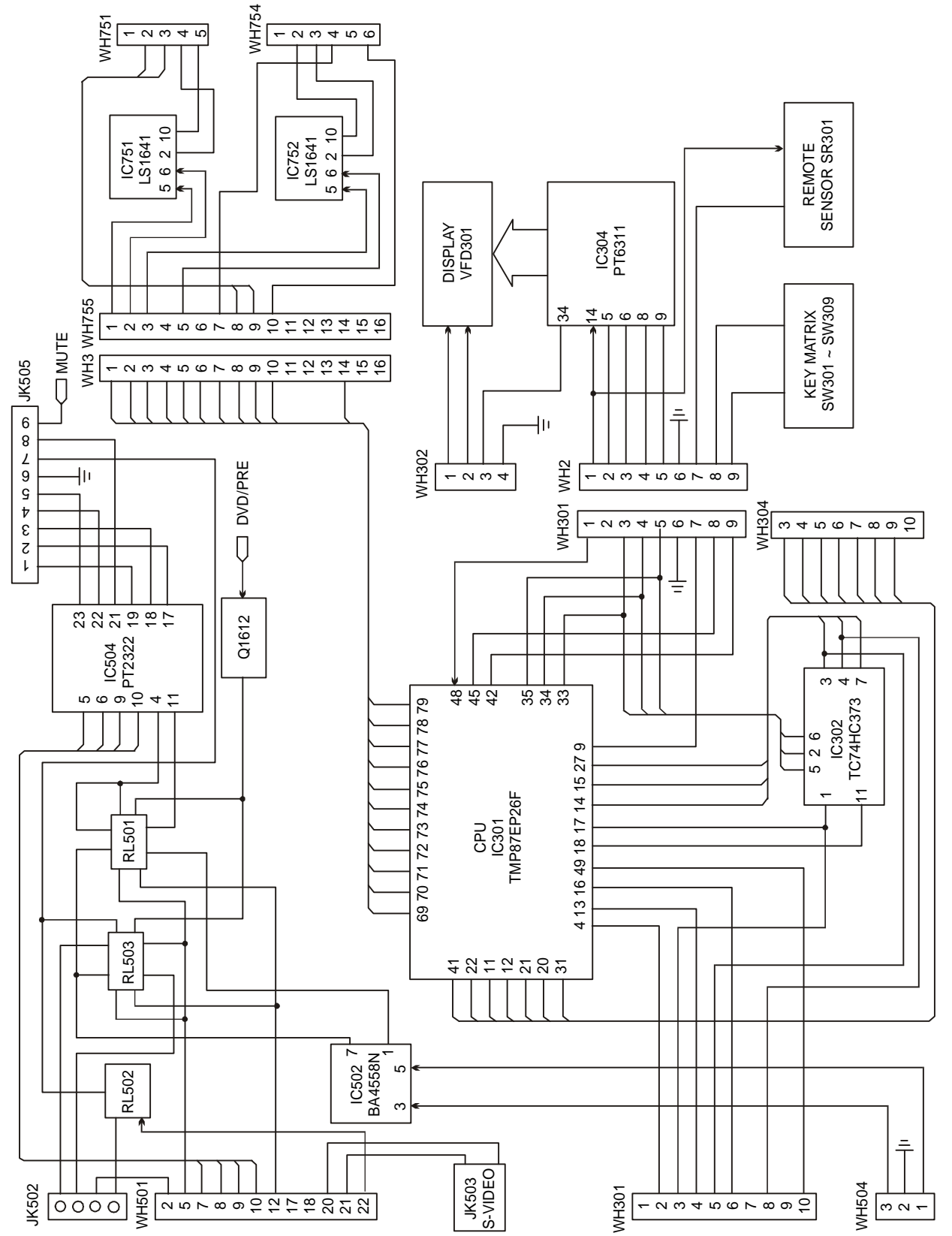
SERVO SECTION



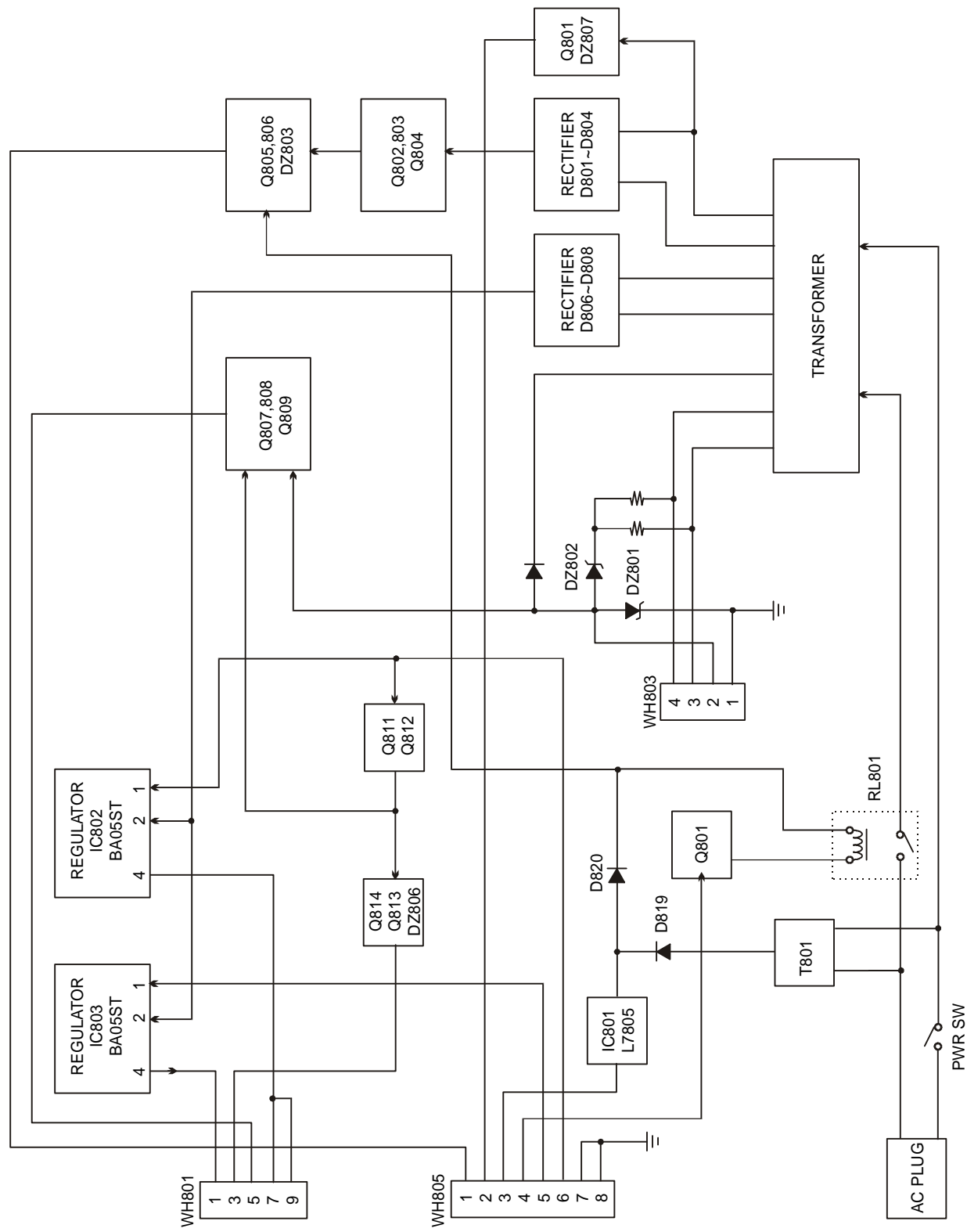
# TUNER SECTION



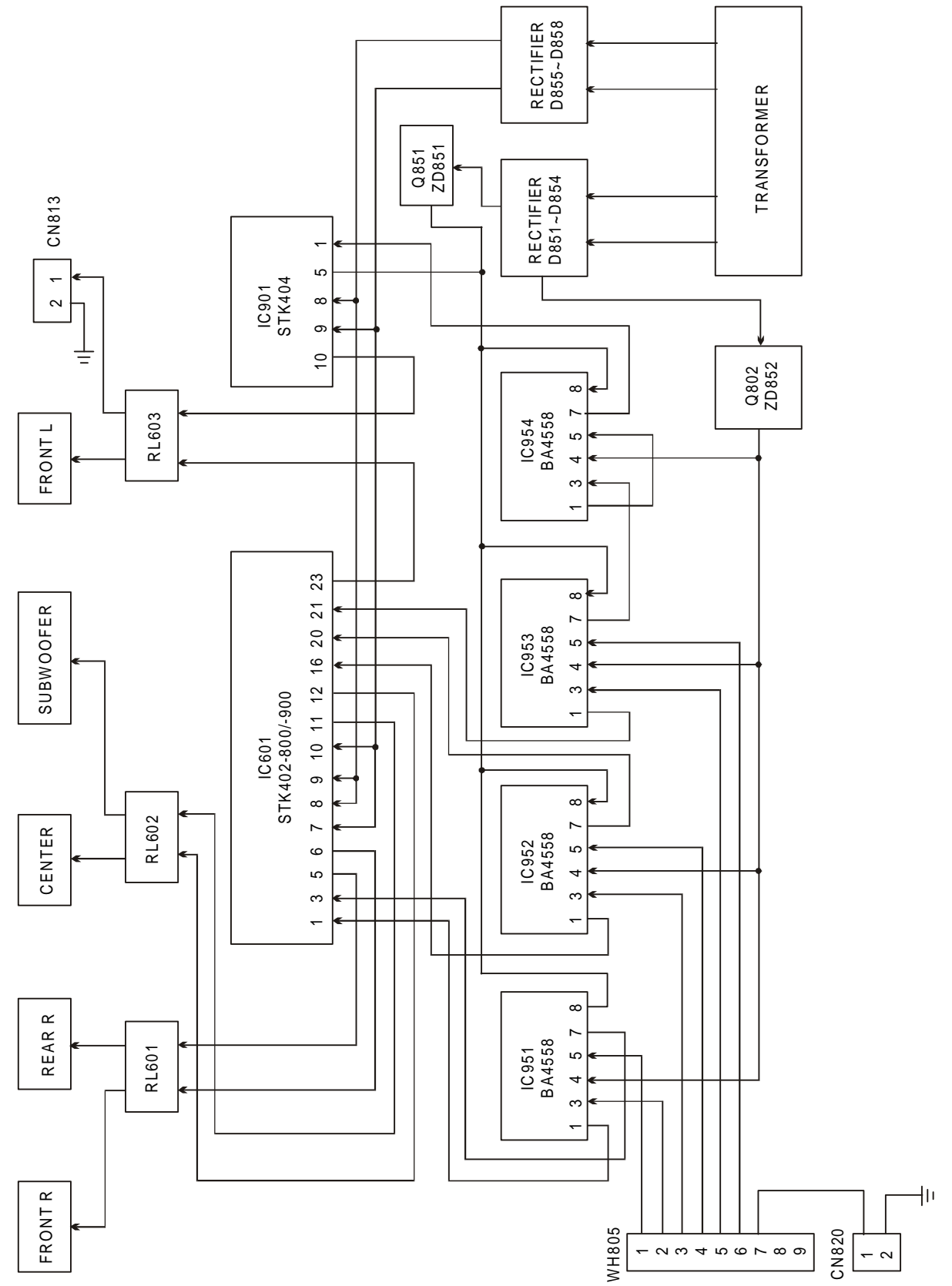
# CPU & CONTROL SECTION



POWER SUPPLY SECTION



POWER AMPLIFIER SECTION FOR SUB-WOOFER



**EXPLODED DRAWING PARTS LIST**

Ref. No.	Description	Mfr's Part No.	Qty.
<b>MAIN UNIT</b>			
1	MIRROW DVD DOOR, T=3.0mm, S:255.85x17mm, w/PNT (BACK), w/ADH.TAPE	512-S13138-xxx	1
2	DVD DOOR SPRING	561-S13117-000	2
3	FRONT PANEL, C.GREY 7C (HIPS) CAV:1 w/SPY,PNT	500-S13101-xxx	1
4	POWER KNOB, MOLD C.GREY 7C, (ABS) CAV:1, w/SPY	510-S13106-xxx	1
5	POWER KNOB BRACKET	605-S13114-000	1
6	DISPLA & KEY BOARD STS131-30-01-03	033-ST1313-101	1
7	VFD-2COL100x20.5SM-033P VACUUM FLUORESCENT DISPLAY #VFD20-1002 (ZEL)	115-001002-000	1
8	FUNCTION/PAUSE/SKIP KNOB SET, C.GREY 7C (ABS), CAV:1, w/SPY & PNT	510-S13107-xxx	1
9	REMOTE SENSOR LENS, MOLD TRANS.GREY(J-52858), (PMMA) CAV:4	500-S13105-000	1
10	SENSOR BRACKET, CAV.2 (ABS)	505-S13125-000	1
11	REMOTE SHIELDING, T=0.3mm E.G. STEEL	609-ST6142-000	1
12	DVD DOOR, MOLD C.GREY 7C (HIPS) CAV:2, w/SPY & PNT	500-S13102-xxx	1
13	MIRROW LCD DISPLAY, T=3.0mm, 100.85x17.5mm, w/PNT (BACK), w/ADH. TAPE	512-S13137-xxx	1
14	VOLUME KNOB, MOLD L.GREY(A50277) (ABS) CAV:4, w/CHROME SILVER	510-262810-010	1
15	LIGHT GUIDE, MOLD TRANSPARENT (PMMA) CAV:6	509-S13130-000	3
16	OPEN/CLOSE/DISC KNOB SET, MOLD C.GREY 7C (ABS) CAV:1, w/SPY & PNT	510-S13108-xxx	1
17	DISC INDICATION BOARD STS131-30-01-06	033-ST1313-300	1
18	DISPLAY PCB BRACKET, STEEL	605-S13129-000	1
19	VOLUME KNOB SHAFT, MOLDED BLACK, CAV.1 (ABS)	503-262811-000	1
20	VOL.KNOB SPRING WIRE, DIA:0.4mm MUSIC WIRE	561-S13120-000	1
21	VOLUME KNOB SHAFT BKT, MOLDED BLACK, CAV.1 (ABS)	505-262812-000	1
22	ZORAN PCB BRACKET, MOLDED BLACK, CAV.2 (ABS)	505-S13110-000	4
23	MAIN PCB BRACKET, MOLDED BLACK, CAV.7 (ABS) 9/MAIN PCB TO BTM CAB.	505-S13109-000	9
24	MPEG+SERVO BOARD STS21AAS-01-02	033-ST21A-101	1
25	HEATSINK, 0.5mm TIN PLATE	613-DV3231-000	2
26	HEATSINK, ALUMINIUM	613-ST2228-000	1
27	DVD MEC BRACKET-2, CAV.2 (ABS)	505-S13122-000	1
28	MAIN BOARD STS131-30-01-01	033-ST1313-300	1
29	DVD MEC BRACKET-4, CAV.2 (ABS)	505-S13124-000	1
30	DVD MEC BRACKET-1, CAV.2 (ABS)	505-S13121-000	1
31	DVD MEC BRACKET-3, CAV.2 (ABS)	505-S13123-000	1
32	DVD BRACKET	605-S13116-000	1
33	DVD MECHANISM w/SAMSUNG CMS-B31TG6U	3DV-9SMTB	1
34	HOLDER, DVD MEC., T=1.0mm STEEL	605-S13149-000	1
35	SOCKET HOLDER, CAV.8 (ABS)	505-ST6136-000	1
36	RGB CONNECTOR SOCKET 21 PINS JK701	135-HRC021-210	1
37	TOP PANEL, T=0.6mm E.G. STEEL, w/SPY	600-262834-xxx	1
38	TUNER BOARD STS131-30-01-02	033-ST1313-100	1
39	HEATSIN, 111.0x15.6x23mm (L) AL EXTRVSION	613-S13142-000	1
40	SCART PCB BRACKET, MOLDED BLACK, CAV.1 (ABS)	505-S13118-000	2
41	BACK PLATE, T=0.3mm BLK PC, w/PNT, w/CE/DOU.M/ZONE/ 2/75 ohm/SCART	650-S13131-030	1
42	POWER TRANSFORMER	123-xxxxxx-xxx	1

**EXPLODED DRAWING PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
43	MOTRO DRIVER BOARD STS131-30-01-04	033-ST1313-102	1
44	FUSE BOARD STS131-30-01-05	033-ST1313-300	1
45	REAR PANEL, T=0.8mm STEEL, w/PNT	600-S13133-xxx	1
46	FAN SHIELDING PLATE, 0.5mm THK METAL MESH SHEETL	650-DV3239-000	1
47	POWER TRANSFORMER	123-xxxxxx-xxx	1
48	PUSH SWITCH 2P2T PS3-22SP-W4CW-3.2	021-032222-000	1
49	POWER SWITCH BRACKET,	605-S13115-000	1
50	BRACKET, FUSE PCB, MOLDED BLACK, CAV.1	505-S13111-000	2
51	BOTTOM CABINET, 0.8mm E.G. STEEL	600-S13112-000	1
52	RUBBER FOOT, 10x10x2.0mm BLACK (NC RUBBER), w/SELF-ADHESIVE	700-630141-000	4
	HANDLE, MOLD BLACK (P.P) CAV:4, w/RECYCLE MARK ENGRAVE	504-ST6145-000	2
	METAL WASHER 3.5x10x0.5mm 4/TF	532-203510-050	4
	FIBRE WASHER Ø2.6xØ6x0.4mm 4/CONTROL PCB	532-302606-040	4
	FIBRE WASHER Ø4.4xØ10x1mm (94V0) 8/BTM CAB.	532-304410-100	8
	SPRING WASHER 3mm Zn 4PCS/TF	532-403000-000	4
	DIFFUSE PLATE, D207 12.5x8x0.10mm, T=0.1mm	650-S13144-000	3
	SHIELDING PLATE, TIN PLATE, THK=0.3mm	650-ST2120-000	1
	SEPARATING PLATE, FIBRE PAPER, THK=0.4mm	650-ST2121-000	1
	HEATSINK INSULATOR, THK 0.25mm, 28x28mm	700-DV3232-000	1
	REMOTE SENSOR INVISIBLE FELT 1/R/C RECEIVER	700-SD1614-000	1
	FELT A, 80x20x0.3mm HIMERON, w/SONY T-3500, 1/BTM CAB.	700-SDC018-000	1
	2-SIDED TAPE (TSB#9871833400)		
	FELT B, 30x15x0.3mm HIMERON, w/SONY T-3500, 2/BTM CAB.	700-SDC019-000	2
	2-SIDED TAPE (TSB#9871833300)		
	FELT B, 50x15x0.3mm HIMERON, w/SONY T-3500 2-SIDED TAPE, (T#9871858900)	700-SDC019-001	3
	FOAM CUSHION, 1.5mm EVA	700-ST2113-000	1
	RUBBER PAD (DISPLAY) 10x5x3.8mm (NC) RUBBER, 2/LCD	700-ST2522-000	2
	ST25-22 10x5x3.8mm (NC) RUBBER w/SELF ADHESIVE		
	SCREW ST2x6mm, PB BRASS BASED 1/POWER KNOB TO BKT	720-050200-060	6
	2/DVD DOOR SPRING TO F.CAB		
	3/VOL.KNOB		
	SCREW ST2x6mm, BB BRASS BASED	720-110200-060	2
	SCREW ST2x10mm BB BRASS BASED 6/CONTROL PCB	720-110200-100	6
	SCREW ST3x8mm, BB HEAD V5.9-6.3, 8/DECK BKT TO GUIDE BASE	720-110300-080	21
	BB BRASS BASED 9/BACK PLATE TO PCB BKT		
	4/BTM CAB. TO SERVO PCB BKT		
	SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED 2/TUNING PCB	720-110300-100	6
	4/SERVO PCB TO BKT		
	SCREW 2.6x6mm, PM BRASS BASED (M3H)	721-010260-060	4
	4/FAN SHIELDING PLATE-BACK PLATE		
	SCREW 3x10mm, PM BRASS BASED 1/HOLDER DVD MEC.	721-010300-100	1
	SCREW 3x8mm BM BRASS BASED 4PCS/TF	721-040300-080	4
	SCREW 3x6mm BB T.T.S. (PTB 3x6NI)	722-080300-060	2
	SCREW ST3x8mm BB T.T.S. (B TYPE), 2/MAIN PCB TO HEAT SINK	722-080307-082	6
	CBTS(P)-Z CHROMATE PLATING CBTB (3x8MC) 4/POWER IC TO HEAT SINK		
	SCREW 3x6mm BB T.T.S. (S TYPE) NI PLATED, 13/DECK BKT TO BTM CAB.	722-080308-060	17
	(TSB#9878107200) 4/PCB TO BTM CAB.		
	SCREW 3x12mm T.T.S. BB (S TYPE) 4/FAN-R.CAB	722-080308-120	4
	SCREW 3x38mm BB T.T.S. (S TYPE) 2/BKT TO BTM CAB.	722-080308-380	2

**EXPLODED DRAWING PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
	SCREW 2x4mm, BM (S TYPE) T.T.S. (STB 2x4 MC)	1/POWER BKT 722-100200-040	1
	(F722-080300-050) SCREW ST3x5mm BB T.T.S.,	2/B.CAB.-F.CAB. 722-100300-050	25
	(S TYPE) (STB3x5NI)	2/C.CAB. -POWER BKT	
		2/POWER - BKT	
		4/T.CAB.-B.CAB.	
		5/R.CAB.-B.CAB.	
		10/DVD MECH-B.CAB.	
	SCREW 3x15mm BM T.T.S. (S TYPE) NI PLATED	9/MAIN PCB TO BTM CAB. 722-100308-150	9
	SCREW 2x6mm, PM T.T.S.	1/POWER BKT 722-110200-060	1
	NUT M2.6x0.45 Ni	725-000026-450	4
		4/FAN SHIELDING PLATE-BACK PLATE	
	NUT M3x0.5 PITCH Ni	4/TF 725-000030-500	4
	4" CABLE/PLASTIC TIE (SKB-1M/CV-100) (CdF)	727-000100-000	7
	METAL TIE WIRE CLAMP M3 L60 (TSB#9872700800)	727-000360-000	2
	PVC TUBE AWG1 INNER DIA. 7.35mm DC-3,	UNIT"M" 728-000073-000	0.16
	(DAE CHANG) (UL/CSA APP.) TRANSPARENT		
	PVC HEAT SHRINKABLE TUBE DIA. 3mm (UNITUBE),	UNIT"M" 728-015030-001	0.057
	(UL/CSA APP) (CdF)		
	*CdF PVC HEAT SHRINKABLE TUBE DIA.3.5mm,	UNIT"M" 728-015035-000	0.07
	(UNITUBE) (UL/CSA APP)		
	SOLDERING WIRE 60/40, DIA:0.8mm TYPE,	UNIT"KG" 055-006040-108	0.003
	#115B/115A (FOR CD ICS) BRAND "SOLNET"		
	SOLDERING WIRE 60/40 DIA. 1.2mm, EX Rsn60A 1.2B	UNIT"KG" 055-006040-112	0.0094
	SOLDERING BAR (PURE TIN) SN 99.9%	UNIT"KG" 055-100000-001	0.001
	SOLDERING BAR 60/40 SIGMA/KESTER	UNIT"KG" 055-106040-001	0.025
	SOLDER PASTE SN63/PB36.5/AG0.5 (500GM/CAN),	UNIT"GM" 055-300000-006	1.35
	(SS58-M992MES)		
	SPONGE, SIZE:15mmx15mmx10mm	700-0228A3-000	1
	METAL TIE (CdF)	727-000001-000	4
	4" CABLE/PLASTIC TIE (SKB-1M/CV-100) (CdF)	727-000100-000	7
	PVC HEAT SHRINKABLE TUBE DIA. 3mm (UNITUBE),	UNIT"M" 728-015030-001	0.084
	(UL/CSA APP) (CdF)		
	*CdF PVC HEAT SHRINKABLE TUBE DIA.3.5mm,	UNIT"M" 728-015035-000	0.11
	(UNITUBE) (UL/CSA APP)		
	*CdF FUSE HOLDER, HTF-015	550-790000-000	4
<b>DVD MECHANISM - 3DV-9SMTB</b>			
1	PVC WASHER DIA:3.2x13x0.5mm BLACK	532-503213-050	1
2	METAL WASHER Ø4.5xØ12.0x1.0mm CHROMATE PLATING	532-204512-100	1
3	CD COVER, MOLDED BLACK, CAV:1 (HIPS)	500-3DV906-000	1
4	CHUCK PULLEY, MOLDED BLACK, CAV.2 (ABS)	509-DVD301-000	1
5	TURNTABLE CHANGER, MOLD BLACK 11273, CAV:1 (ABS)	509-3CDT02-001	1
6	RULLER TT RUBBER, DIA 10x4.95mm (RUBBER) (2ND SOURCE)	700-3CD193-000	3
7	(F700-3CD113-000) T.T. ROLLER, MOLDED WHITE, CAV:12 (POM)	509-3CD113-000	3
8	LEAF SWITCH LSA-1119H	022-001119-000	1
9	MIRCO SWITCH MLS-1	023-000001-001	1
10	SPRING WIRE, DIA 0.6mm S.S WIRE (STEEL)	561-3CD159-000	1
11	(F700-3CD111-000) CABINET RETURN GEAR, MOLDED WHITE,	509-3CD111-000	1
	CAV:6 (POM)		
12	(F700-3CD116-000) CABINET LOAD GEAR, MOLDED WHITE,	509-3CD116-000	1
	CAV:6 (POM)		
13	(F700-3CD119-000) CABINET IDLER, MOLDED WHITE, CAV:2 (POM)	509-3CD119-000	1

**EXPLODED DRAWING PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
14	(F700-3CD121-000) CABINET PULLEY GEAR, MOLDED WHITE,	509-3CD121-000	1
	CAV:4 (POM)		
15	TRAY SQUARE BELT, DIA 47.5x1.5mm (RUBBER) (2ND SOURCE)	700-3CD190-000	1
16	GEAR BASE, MOLDED BLACK, CAV.1 (HIPS)	500-3DV902-000	1
17	GUIDE BASE, MOLDED BLACK, CAV.1 (HIPS)	500-3DV903-000	1
18	DVD-FLC-01-SAMG-N DVD MECHANISM,	163-000216-000	1
	FOR CD-R CMS-S21MG6 (SAMSUNG)		
19	SPRING DAMPER, DIA 0.5mm S.S WIRE (STEEL)	561-3CD157-000	1
20	CD CUSHION MAT, HARDNESS 40DEG +-3DGE (BUTYL RUBBER)	700-3CD705-000	4
21	(F550-3CD145-000) BASE HINGE HOLDER, T=1.0mm,	605-3CD145-000	2
	(EL-GAVANISED STEEL PLT)		
22	CD MECHANISM BASE (SAMSUNG) MOLDED BLACK,	509-3DV904-000	1
	CAV.1 (HIPS)		
23	WIRE HOLDER, 1.0mm PVC SHEET (PVC)	650-3DV907-000	1
24	SQUARE BELT, DIA 45x1.4mm (RUBBER) (2ND SOURCE)	700-3CD191-000	1
25	MOTOR-DC-005V-NORMAL 5V #PM7I50T32-2 WITH PULLEY	151-055032-000	1
26	(F700-3CD112-000) PULLY GEAR, MOLDED WHITE, CAV:4 (POM)	509-3CD112-000	1
27	(F550-3CD305-000) BASE HOLDER, T=1.5mm (GALVANISED PLATE)	605-3CD305-000	1
28	SPRING PLATE, 0.3mm THK STAINLESS STEEL	650-3CD306-001	1
29	(F700-3CD105-000) CAM. GEAR, MOLDED WHITE, CAV:2 (POM)	509-3CD105-000	1
30	(F700-3CD162-000) CAM. GEAR SHAFT, DIA 4.0x41.06mm,	603-3CD162-000	1
	(STEEL) w/ELECTRO-PLATING		
31	GEAR BRACKET, T=1.0mm, w/65 (ASSY),	605-3CD153-000	1
	EL-GAVANISED STEEL PLATE (STEEL)		
32	PULLEY GEAR SHAFT, DIA 3.0x13.0mm (STEEL),	603-3CD165-000	1
	w/ELECTRO-PLATING		
33	LEAF SWITCH LS-121-0A (LUP FUNG)	022-001210-001	1
34	(F700-3CD108-000) LOAD GEAR, MOLDED WHITE, CAV:4 (POM)	509-3CD108-000	1
35	(F700-3CD118-000) IDLER GEAR, MOLDED WHITE, CAV:2 (POM)	509-3CD118-000	1
36	(F70-3CD109-000) CHANGER LEVER, MOLDED WHITE,	509-3CD109-000	1
	CAV:4 (POM)		
37	(F700-3CD163-000) LOAD GEAR SHAFT, DIA 3.0x30.36mm,	603-3CD163-000	1
	(STEEL) w/ELECTRO-PLATING		
38	(F700-3CD120-000) PINION GEAR, MOLDED WHITE (POM)	509-3CD120-000	1
39	(F700-3CD115-000) TRAY MOTOR PULLY, MOLDED WHITE,	509-3CD115-000	1
	CAV:6 (POM)		
40	SENSOR BOARD 3CD3-01-01	033-003CD3-100	1
41	TENS SPRING, DIA 0.35mm STAINLESS STEEL WIRE (STEEL)	561-3CD156-000	1
42	(F700-3CD110-000) LOCK LEVER, MOLDED WHITE, CAV:4 (POM)	509-3CD110-000	1
43	(F700-3CD164-000) ROUND STOPPER PIN (STEEL),	609-3CD164-000	1
	w/ELECTRO-PLATING		
44	CHASSIS, MOLDED BLACK 11274, CAV.1 (HIPS)	509-3DV901-000	1
45	MOTOR-DC-006V-NORMAL 6V #PM7I60T22-1 (SANKO)	151-066022-000	1
46	CHUCK PLATE, DIA:19.9/DIA:3.5x0.8 ELECTROLYTIC ST. PLATE	650-DVD303-000	1
47	CHUCK YOKE, MOLDED BLACK, CAV.2 (ABS)	509-DVD302-000	1
48	(F550-3CD114-000) ROUND STOPPER HOLDER, MOLDED BLACK,	505-3CD114-000	1
	CAV:8 (POM)		
	METAL WASHER 3.5x14x0.5mm	4/CD DECK 532-203514-050	4
	CHUCK PVC PLATE, 17x3.5x0.2	650-ST1339-000	1
	(F723-047238-000) CD SCREW S:2x17,	723-047238-001	4
	w/WASHER YELLOW ZINC PLATING #7238-61R		

**EXPLODED DRAWING PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
	METAL WASHER Ø2.6xØ8.0x0.5mm CHROMATE PLATING	532-202608-050	4
	METAL WASHER Ø3.2xØ12.0x1.0mm CHROMATE PLATING	532-203212-100	2
	FIBRE WASHER Ø2.6xØ6x0.4mm	532-302606-040	1
	SPECIAL WASHER, DIA 10x0.25, T=0.25 PC PLATE (PC)	532-3CD176-000	1
	PVC WASHER Ø7.05xØ11.0x0.8mm, 1/TURNTABLE CHANGER	532-503CD4-190	1
	PVC TRANSPARENT (PVC)		
	PVC WASHER Ø7.05xØ11.0x0.5mm, 1/TURNTABLE CHANGER	532-503CD4-200	1
	PVC TRANSPARENT		
	STOPPER PLATE, T=0.5mm PC SHEET (PC)	650-3CD307-000	2
	FOAM RUBBER, 6x5x4.5mm (HARDNESS 60 PAD CORD) 1/GUIDE BASE	700-0CDD48-001	1
	ROUND STOPPER, DIA 5.2x2.0mm	700-3CD194-000	1
	TURNTABLE CHANGER, MOLD BLACK 11274, CAV:1 (ABS)	509-3CDT02-002	1
	SCREW ST2.6x8mm BB T.T.S. (B TYPE), 1/CAB. PULLEY GEAR	720-110260-08Z	3
	CBTS(P)-Z CHROMATE PLATING (BTB 2.6x8 MC) 1/CAB. IDLER GEAR		
	1/CAB. LOAD GEAR		
	SCREW ST3x8mm, BB HEAD V5.9-6.3, 2/WIRE HOLDER-BASE	720-110300-080	6
	BB BRASS BASED 4/PCB COVER-CHASSIS		
	SCREW ST4x25mm, BB CHROMATE PLATING	720-110400-252	1
	FOR DAMPER SPRING-BASE CD MECHANISM		
	SCREW 2.6x2mm, PM CHROMATE PLATING 2/TURNTABLE MOTOR	721-010260-020	2
	SCREW 2x5mm BB T.T.S. (B TYPE), 1/INDER GEAR	722-080200-052	2
	w/CHROMATE PLATING (BTB 2x5 MC) 1/LEFT SWITCH		
	SCREW 3x10mm BB T.T.S. (P TYPE) BLACK 1/CD COVER TO CHANGER	722-080300-101	1
	SCREW ST3x10mm BB T.T.S. (P TYPE), 1/LOCK COVER	722-080309-102	9
	CBTS(P)-Z CHROMATE PLATING (CPTB 3x10MC) 2/CD MECH.TO CAB.TOP		
	4/GEAR BRACKET		
	2/CD COVER		
	SCREW 2.6x4mm PM T.T.S., TYPE S, 2/TRAY MOTOR	722-110260-042	2
	w/CHROMATE-PLATING (SMP 2.6x4 MC)		
	SCREW 2.6x6mm PM T.T.S., TYPE S, 1/SPRING PLATE	722-110260-062	1
	w/CHROMATE-PLATING (STP 2.6x6 MC)		
	METAL TIE (CdF)	727-000001-000	2
	4" CABLE/PLASTIC TIE (SKB-1M/CV-100) (CdF)	727-000100-000	5
	PVC HEAT SHRINKABLE TUBE DIA. 3mm (UNITUBE), UNIT"M"	728-015030-001	0.04
	(UL/CSA APP) (CdF)		

**CENTER SPEAKER PORTION - SSQC3**

1	SPEAKER CLOTH #FP-662-0WT (SILVER GREY) (230mmX160mm)X1PC/SET	662-0FP662-000	0.0252
	WIDTH:60"-62" UNIT"YD"		
2	SPEAKER CLOTH MESH, CAV.2 (HIPS)	509-SQC303-000	1
3	SPEAKER PANEL, MOLD CNS-0360 (HIPS), w/SPY	500-SQC301-xxx	1
4	SPK00003"008OHM0050W w/BK DOME PAPER CAP	131-308050-010	1
	#LF77SZ4307G55C8AS19PDB (GGEC)(L0234)		
5	HOLE COVER, MOLD CNS-0360 (HIPS), CAV:8	500-SSQ104-000	2
6	SPEAKER CABINET, MOLD GREY (CNS-0360) (HIPS), w/ENGRAVING	500-SQC102-000	1
7	PUSH TERMINAL BOARD PT-213-03 BLACK, RED,	118-000213-000	1
	MSP-105H-03 BLACK, RED		
	SPK. BOX FELT 80x8x0.3mm, BLACK, 2/SPK CAB.	700-993856-000	2
	(TSB#PM0005432010) (CdF)		
	SPEKAER GASKET, 1.5 THK FOAM RUBBER	700-SQC204-000	1
	SCREW ST3x20mm, PAB BRASS BASED 4/CAB.-SPK PANEL	720-010300-200	4

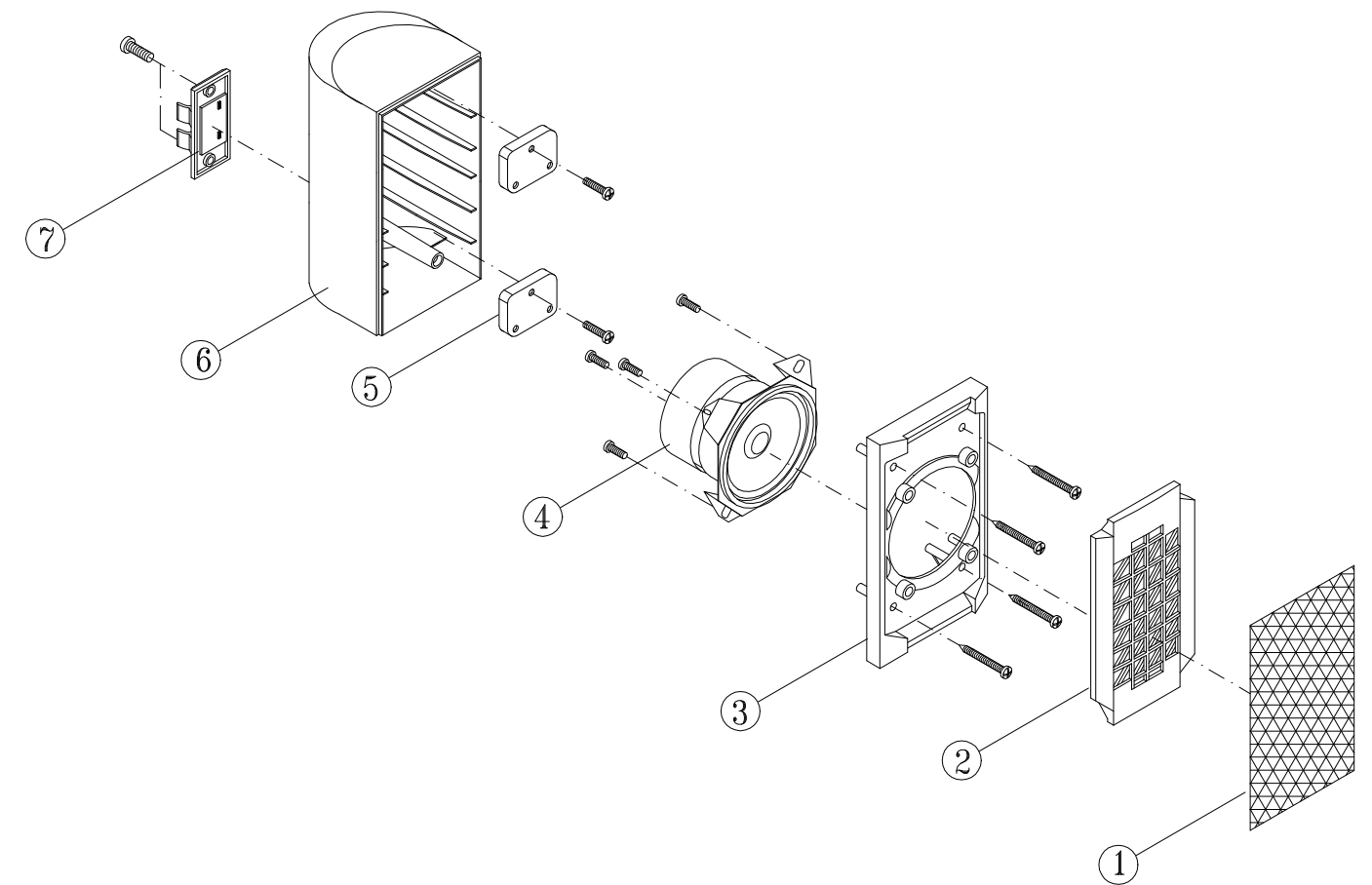
**EXPLODED DRAWING PARTS LIST - CONTINUED**

Ref. No.	Description	Mfr's Part No.	Qty.
	SCREW ST3x8mm, BB HEAD V5.9-6.3, BB BRASS BASED	720-110300-080	2
	2/PUSH TERMINAL BOARD-SP CAB.		
	SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED 4/SPK-SPK PANEL	720-110300-100	4
<b>SUB-WOOFER PORTION - SWT1A</b>			
1	SUB WOOFER PANEL, MOLD CNS0360 (HIPS), w/SPY & PNT	500-SWT106-xxx	1
2	LED BOARD SWT1-01-06	033-00SWT1-600	1
3	SUB-WOOFER TUBE, MOLD L.GREY (CNS-0360) (HIPS) CAV:4	509-SWT202-000	1
4	SW BOX, 15mm PARTICAL BD, 220x380x285mm, 660-SWT107-xxx		1
	SIL PVC MOKU ME-2907, w/SPY (30W)		
5	SPEAKER POST ADAPTOR, MOLDED NATURAL, CAV.8 (ABS)	503-650127-000	6
6	RUBBER STAND, 22x8mm, BLACK, 7900, K-1S	700-021000-000	4
7	SPK006.5"004OHM0120W w/BK DOME PAPER CAP	131-6540A0-010	1
	#SW165RZ5802G100F4AS36PFB (L0257)		
8	SPEAKER MESH, MOLDED BLACK, CAV.2 (HIPS) REV.1	509-299973-001	1
9	SPEAKER CLOTH #FP-662-0WT (SILVER GREY), FOR SUBWOOFER (320x320mm)	662-0FP662-000	0.07
	WIDTH:60"-62" UNIT"YD"		
10	AMP. BRACKET, MOLD L.GR(CNS-0360) (HIPS 94V2) CAV:1	505-SWT104-000	1
11	(F550-823843-000) L BRACKET, MOLDED NATURAL (ABS)	505-823843-000	2
12	SUB-WOOFER RECTIFIER BOARD SWT1-01-05	033-00SWT1-600	1
13	(F550-266422-000) MOUNTING BRACKET, MOLDED NATURAL, 505-266422-000		2
	CAV.8 (ABS)		
14	CONNECTION BOARD SWT1-01-04	033-00SWT1-600	1
15	POWER TRANSFORMER	123-xxxxxx-xxx	1
16	SUB-WOOFER AMPLIFIER BOARD SWT1-01-02	033-00SWT1-600	1
17	(F550-630123-000) PCB CONNECTION BRACKET, 505-630123-000		4
	MOLDED BLACK, CAV.4 (ABS)		
18	SUB-WOOFER AMPLIFIER BOARD SWT1-01-03	033-00SWT1-600	1
19	SOCKET HOLDER, CAV.8 (ABS)	505-ST6136-000	1
20	SUB-WOOFER AMPLIFIER BOARE SWT1-01-01	033-00SWT1-600	1
21	IC BRACKET, 1.0mm THK E.G. STEEL	605-SWT112-000	1
22	HEAT SINK, EXTRUDE ALUMINIUM	613-SWT111-000	1
23	BACK COVER PLATE, 1.2mm THK E.G. STEEL, w/PNT, 650-SWT109-xxx		1
	S:313x194.5mm		
24	HEAT SINK COVER, MOLD L.GREY (CNS-0360) (HIPS) CAV:1	500-SWT108-000	1
25	SHIELDING BOARD SWT1-01-07	033-00SWT1-100	1
	METAL WASHER 3.5x10x0.5mm 4/SW BOX	532-203510-050	4
	FIBRE WASHER 3x8x1mm (NF77) 6/HEAT SINK	532-303008-100	6
	FIBRE WASHER Ø3.5x8x0.4mm (DIA:3x8x0.4mm) 2/AMP PCB	532-303508-040	2
	SPRING WASHER 4mm BLACK 6/TF	532-404000-000	6
	TUBE CUSHION, 5mm THK RUBBER FOAM, 1.5/SPEAKER	700-299633-000	1.5
	w/DOUBLE SIDE TAPE		
	SOUND TUBE GASKET, DIA:68x1.5mm EVA	700-SWT213-000	1
	SCREW ST2.6x8mm, PAB (M3 HEAD) (M3H), 12/PCB BKT	720-010260-080	12
	BRASS BASED		
	SCREW ST3x8mm, BB HEAD V5.9-6.3, 2/L BKT	720-110300-080	4
	BB BRASS BASED 2/MOUNTING BKT		
	SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED 9/PCB	720-110300-100	27
	SCREW ST2.6x6mm BB BRASS BASED 2/LED PCB	720-110260-060	2
	WOOD SCREW ST4x20mm PWA CHIT BOARD, 8/AMP BKT-SUB WOOFER BOX	720-180400-202	8
	W=9.5-10mm YELLOW ZINC		
	SCREW M3x8 PM BLACK ZINC 4/HEAK SINK COVER	721-010300-081	4

### EXPLODED DRAWING PARTS LIST - CONTINUED

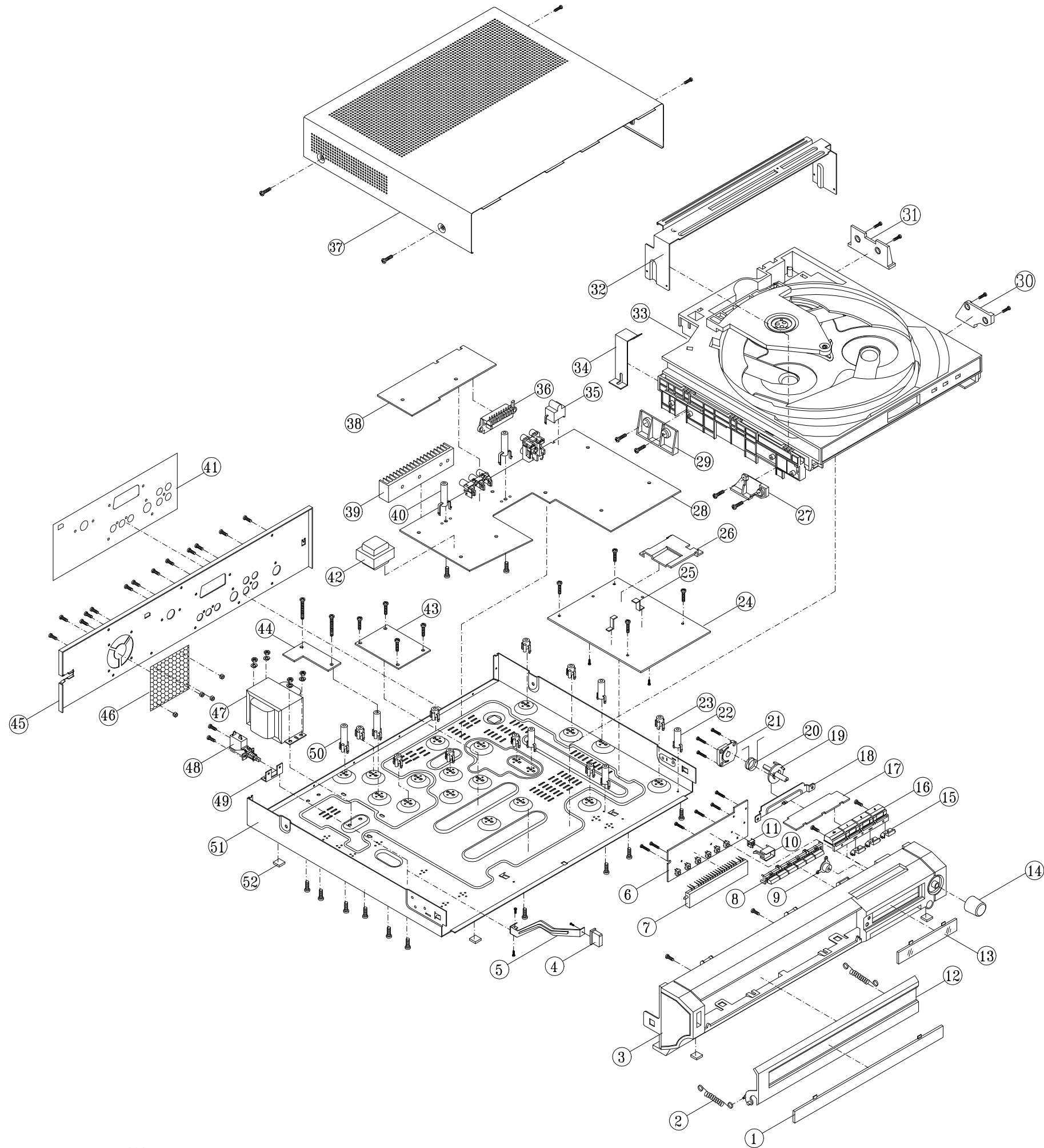
Ref. No.	Description	Mfr's Part No.	Qty.	
	WOOD SCREW ST3x12mm BA CHIT BOARD	4/RUBBER STAND	720-190300-120	18
		4/SPK-SW BOX		
		6/SPK POST ADAPTOR TO SW BOX		
		4/SUB WOOFER TUBE TO SW BOX		
	SCREW 4x16mm, PM	6/TF	721-010400-160	6
	SCREW ST3x8mm BB T.T.S. (B TYPE),	6/HS-BACK PLATE	722-080307-082	6
	CBTS(P)-Z CHROMATE PLATING CBTB 3x8 MC)			
	SCREW ST3x16mm BB T.T.S. (B TYPE) CBT(P)-Z	4/POWER IC	722-080307-160	4
	NUT M4	6/TF	725-000040-000	6
	SOLDERING WIRE 60/40 DIA. 1.2mm, EX Rsmn60A 1.2B	UNIT"KG"	055-006040-112	0.0015
	4" CABLE/PLASTIC TIE (SKB-1M/CV-100) (CdF)		727-000100-000	4
	PVC TUBE AWG3 INNER DIA:6.0mm (UL/CSA APP.),	UNIT"M"	728-000060-001	0.16
	(DAE CHANG/TAE IK)			
	PVC TUBE AWG1 INNER DIA. 7.35mm DC-3,	UNIT"M"	728-000073-000	0.75
	(DAE CHANG) (UL/CSA APP.) TRANSPARENT			
	*CdF PVC HEAT SHRINKABLE TUBE DIA.3.5mm,	UNIT"M"	728-015035-000	0.04
	(UNITUBE) (UL/CSA APP)			
	*CdF FUSE HOLDER, HTF-015		550-790000-000	8
<b>4-SPEAKER PORTION - SSQ3</b>				
1	SPEAKER CLOTH #FP-662-0WT (SILVER GREY)	(200mmx160mm)x4	662-0FP662-000	0.0875
	WIDTH:60"-62"	UNIT"YD"		
2	SPEAKER CLOTH MESH, CAV.4 (HIPS)		509-SSQ303-000	4
3	SPEAKER PANEL, MOLD CNS-0360 (HIPS), w/SPY		500-SSQ301-xxx	4
4	SPK00003"008OHM0050W w/BK DOME PAPER CAP		131-308050-010	4
	#LF77SZ4307G55C8AS19PDB (GGEC)(L0234)			
5	HOLE COVER, MOLD CNS-0360 (HIPS) CAV:8		500-SSQ104-000	4
6	SPEAKER CABINET, MOLD GREY (CNS-0360) (HIPS),		500-SSQ102-000	4
	w/ENGRAVING			
7	PUSH TERMINAL BOARD PT-213-03 BLACK, RED,		118-000213-000	4
	MSP-105H-03 BLACK, RED			
	FELT B, 50x15x0.3mm HIMERON, w/SONY T-3500,	4/SET	700-SDC019-001	4
	2-SIDED TAPE (T#9871858900)			
	SCREW ST3x35mm, PAB (M3.5 HEAD) BRASS BASED	16/CAB.-SPK PANEL	720-010300-350	16
	SCREW ST3x8mm, BB HEAD V5.9-6.3,	8/PUSH TER.BOARD-SPK CAB.	720-110300-080	8
	BB BRASS BASED			
	SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED	16/SPK-SPK PANEL	720-110300-100	16

### EXPLODED DRAWING - CENTER SPEAKER (SSQC3)

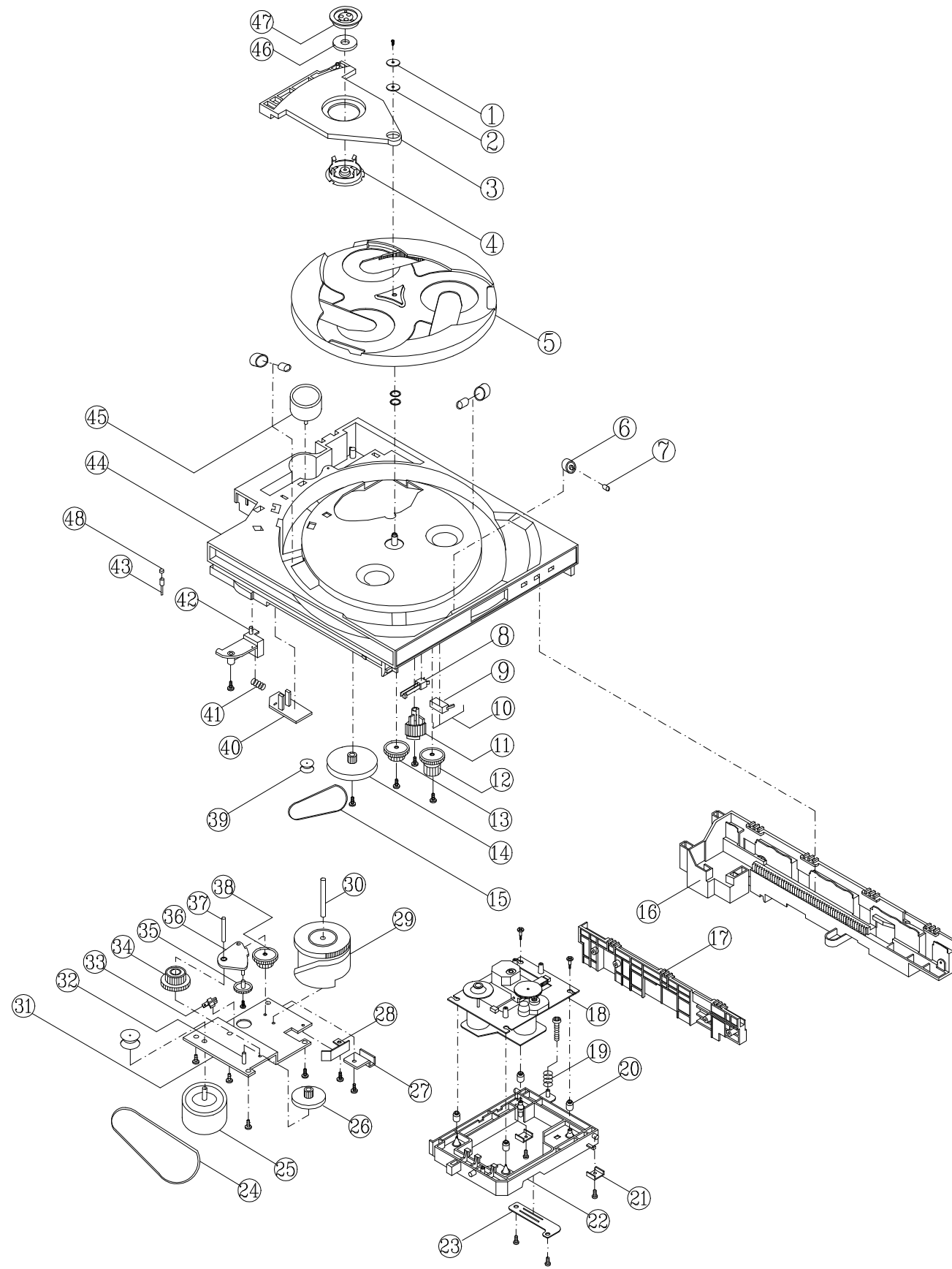




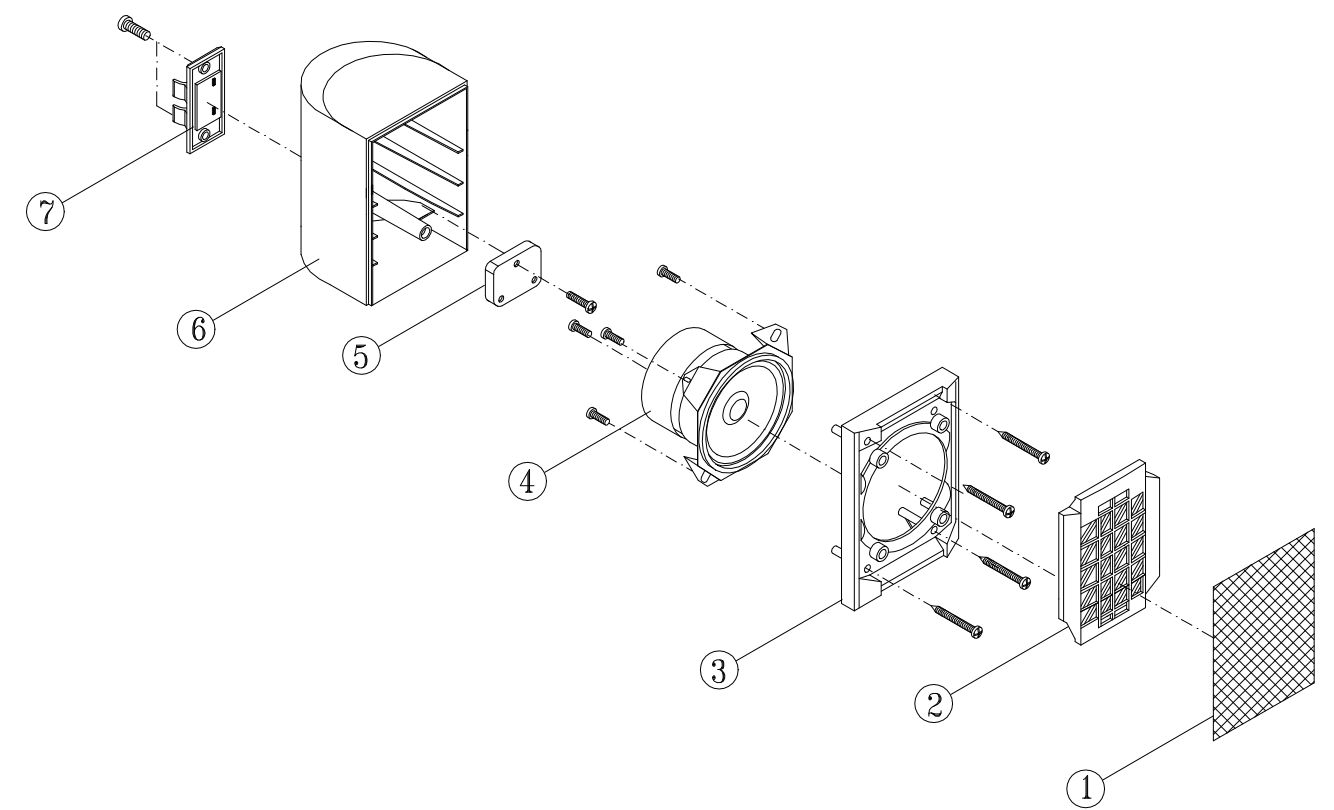
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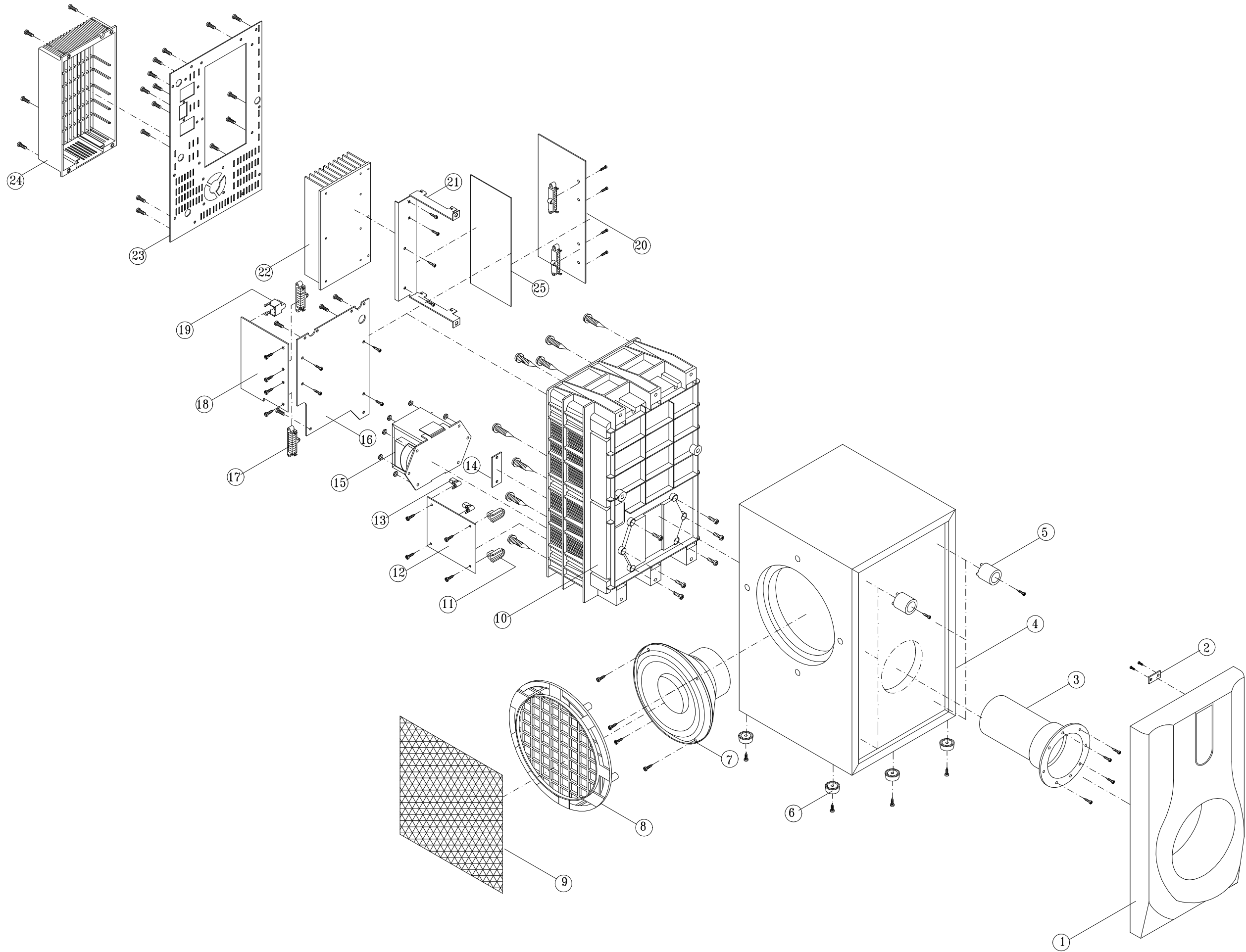
# EXPLODED DRAWING - DVD MECHANISM



# EXPLODED DRAWING - 4-SPEAKER (SSQ3)



# EXPLODED DRAWING - SUB-WOFOER (SWT1A)



**NOTES:**

***MARCH, 2003***