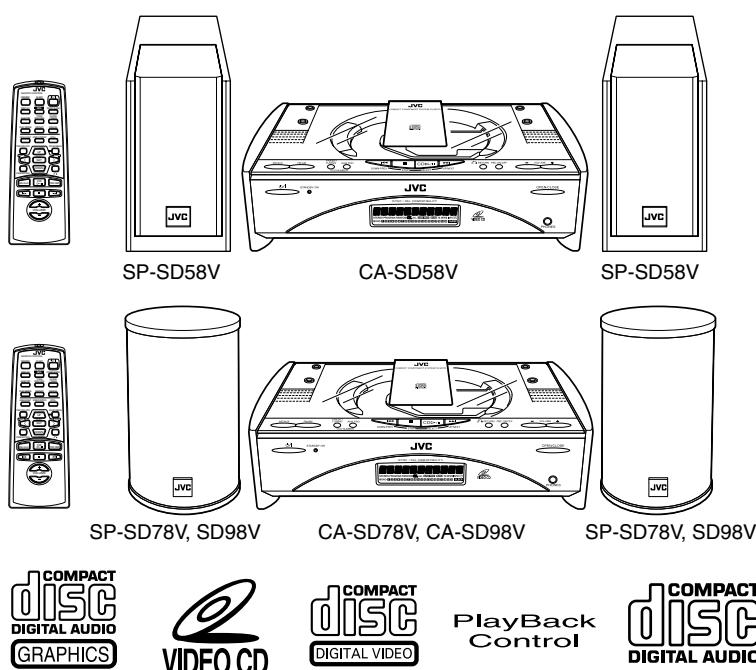


JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

FS-SD58V FS-SD78V / FS-SD98V



Area Suffix

FS-SD58V

UB Hong Kong
UF China
US Singapore

FS-SD78V / FS-SD98V

UF China
US Singapore

These models are different only speaker systems.
FS-SD78V and FS-SD98V are different only speaker cabinet.

Contents These models not have adjustment.

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Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

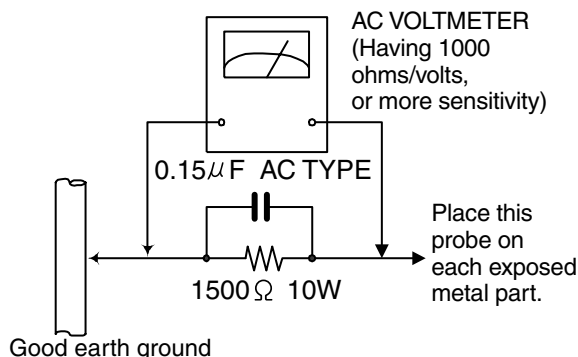
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. voltage measured Any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

Important for Laser Products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettaessa olet alltiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

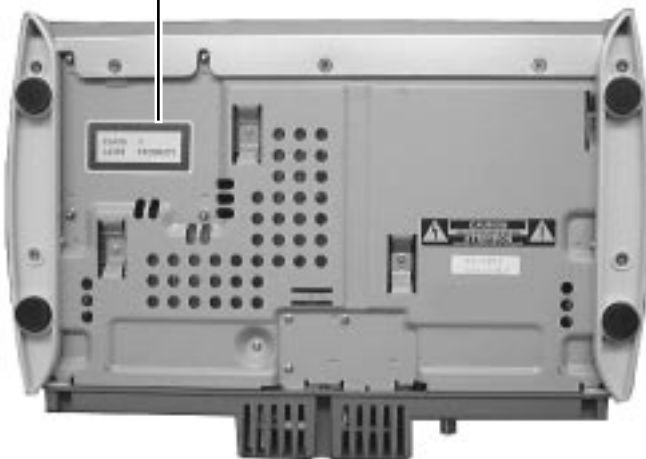
ADVARSEL : Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstrålning ved åbning,når sikkerhedsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

**CLASS 1
LASER PRODUCT**



DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Osynlig laserstrålning när denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. (s)

ADVARSEL: Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (d)

VARO: Avattaessa ja suojalukitus ohitettaessa olet alltiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)



Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.1. Grounding to prevent damage by static electricity

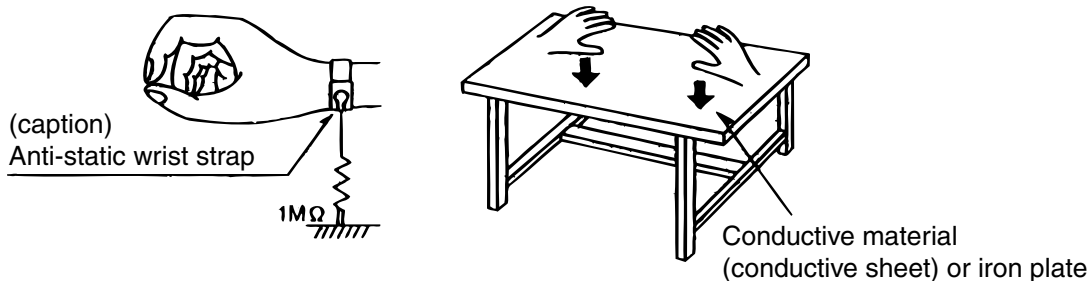
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players. Be careful to use proper grounding in the area where repairs are being performed.

1.1.1. Ground the workbench

1. Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

1.1.2. Ground yourself

1. Use an anti-static wrist strap to release any static electricity built up in your body.



1.1.3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

1.2. Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
3. Handle the flexible cable carefully as it may break when subjected to strong force.
4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

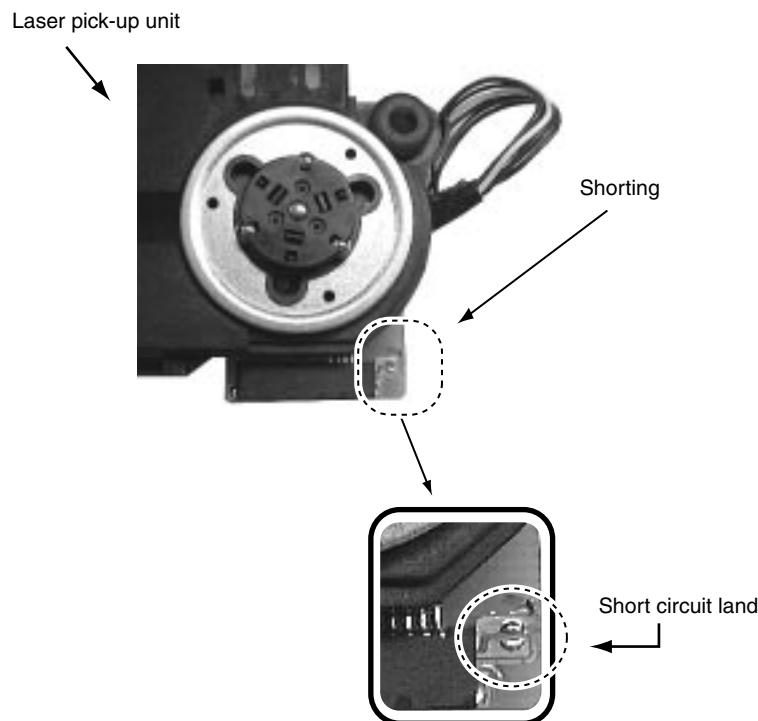
Dismantling and assembling the traverse unit

Notice regarding replacement of optical pickup

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs to the optical pickup or connected devices.

1. Do not touch the area around the laser diode and actuator.
2. Do not check the laser diode using a tester, as the diode may easily be destroyed.
3. It is recommended that you use a grounded soldering iron when shorting or removing the laser diode.
Recommended soldering iron: HAKKO ESD-compatible product
4. Solder the land on the optical pickup's flexible cable.
 - Note : Short the land after shorting the terminal on the flexible cable using a clip, etc., when using an ungrounded soldering iron.
 - Note : After shorting the laser diode according to the procedure above, remove the solder according to the text explanation.

KSM-770ABA



Disassembly method

<Main body>

■Removing the CD door (See Fig.1)

1. Remove the four screws **A** attaching the CD door on the upper side of the body.

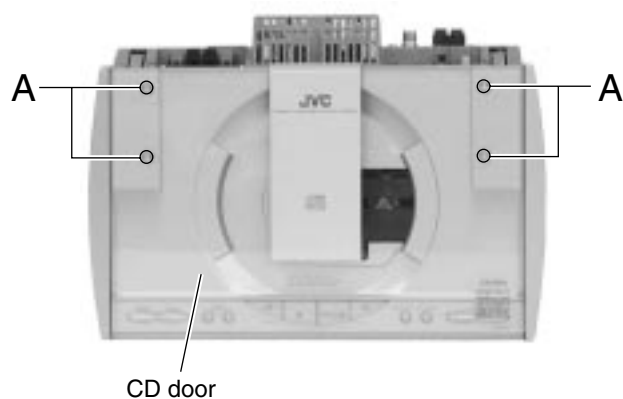


Fig.1

■Removing the rear cover (See Fig.2)

- Prior to performing the following procedure, remove the CD door.
1. Remove the ten screws **B** and the five screws **C** attaching the rear cover on the back of the body.

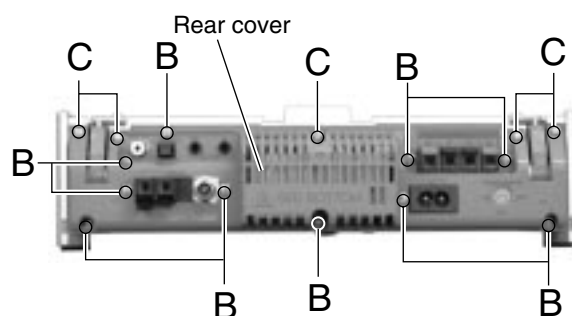


Fig.2

■Removing the right and left covers (See Fig.3)

- Prior to performing the following procedure, remove the CD door, the rear cover.
1. Remove the four screws **D** attaching the side covers on the bottom of the body.
 2. Move the left cover backward and remove outward. Also remove the right cover in the same way.

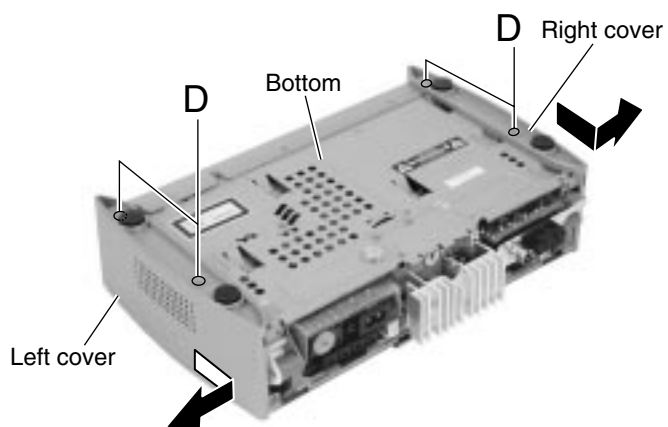


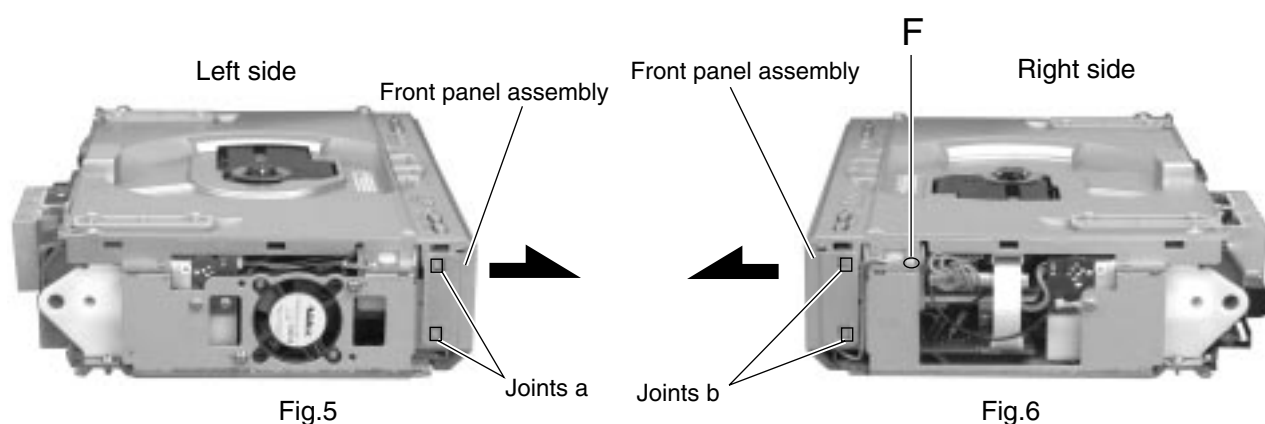
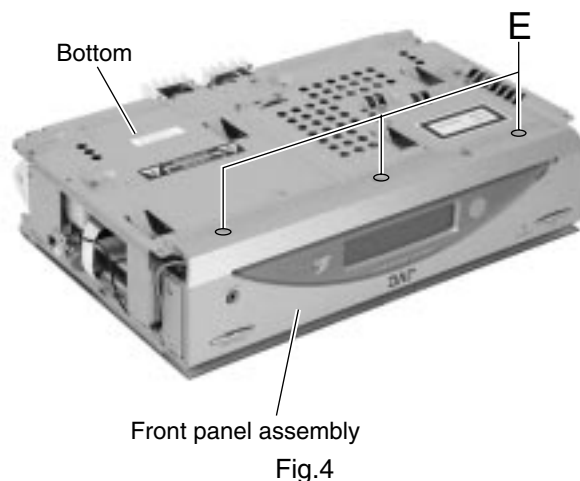
Fig.3

■ Removing the front panel assembly (See Fig.4 to 6)

- Prior to performing the following procedure, remove the CD door, the rear cover and the side covers.

1. Remove the three screws **E** on the bottom of the body.
2. Release two joints **a** and two joints **b** on both sides of the body using a screwdriver and remove the front panel assembly toward the front.

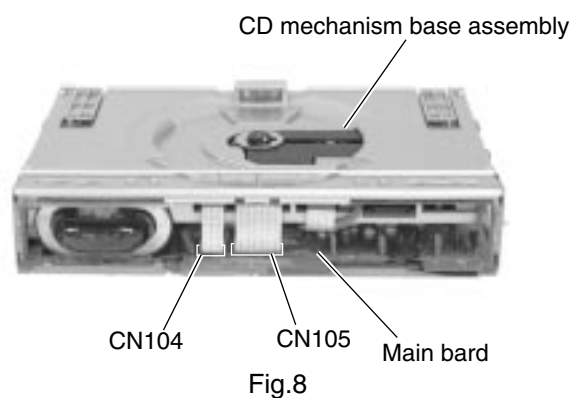
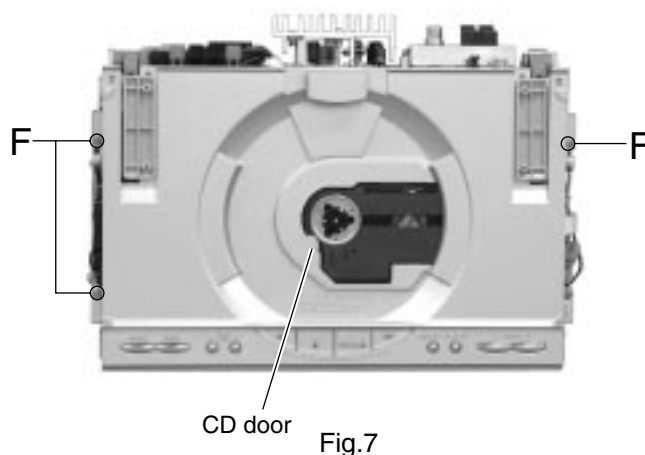
If necessary, remove the screw **F** which retains the wire extending from the front panel assembly.



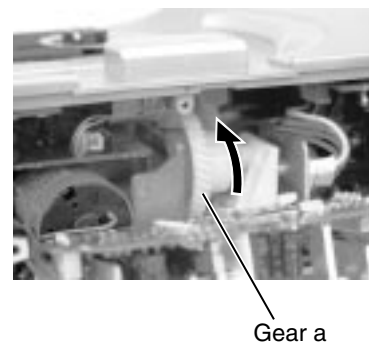
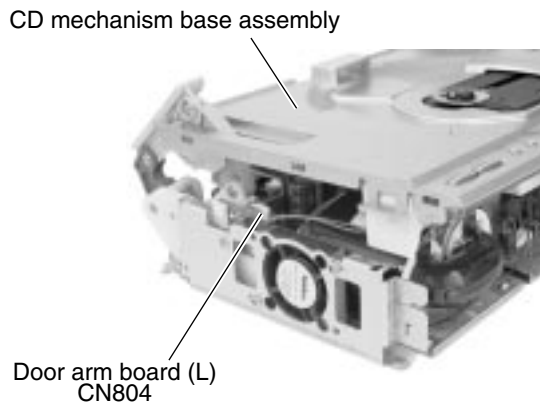
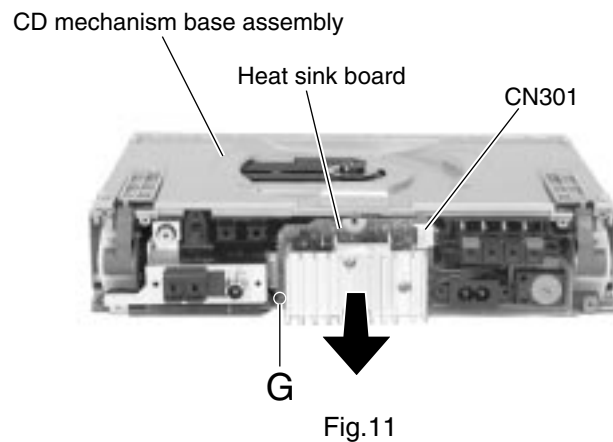
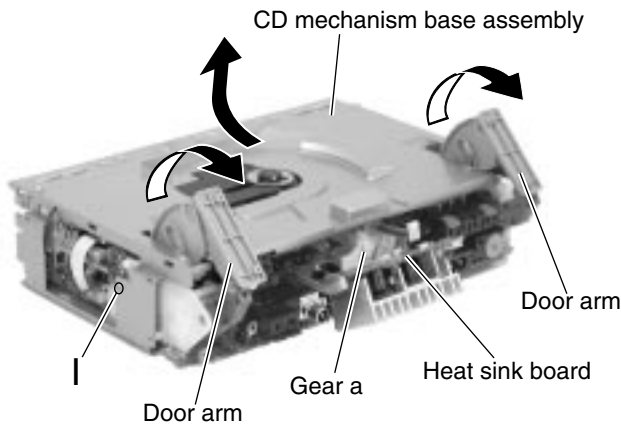
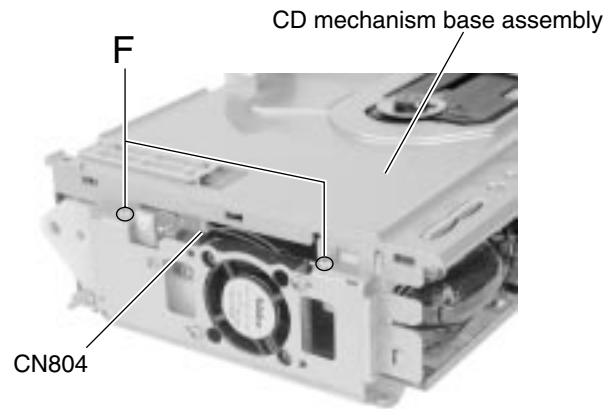
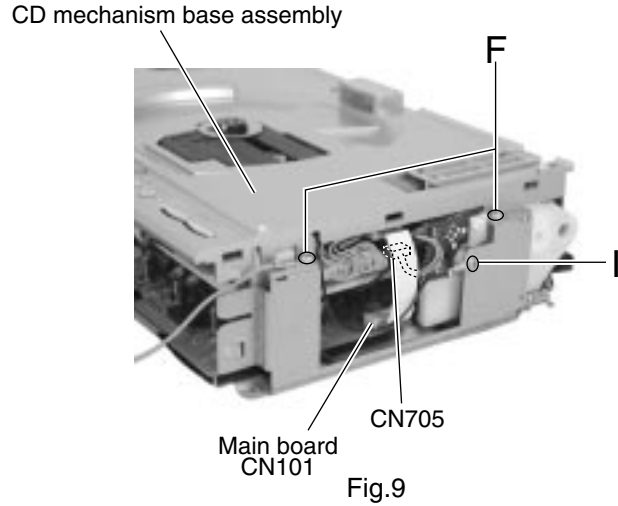
■ Removing the CD mechanism base assembly (See Fig.7 to 14)

- Prior to performing the following procedure, remove the CD door, the rear cover, the side covers and the front panel assembly.

1. Disconnect the card wire from connector CN104 and CN105 of the main board in the front part of the body. Disconnect the card wire from CN101 of the main board on the right side, and the wire from CN705 of the CD mechanism base assembly respectively.
2. Remove the four screws **F** attaching the CD mechanism base assembly on the upper side of the body. Remove the screw **I** attaching the earth terminal on the right side.



3. Remove the screw **G** attaching the heat sink board on the back of the body. Disconnect the wire from connector CN301 and pull the heat sink board fully outward.
4. Raise the right and left door arms by turning the gear **a** in the rear of the heat sink board.
5. After the CD mechanism base assembly is detached from the door arms, pull the CD mechanism base assembly toward the front and disconnect the wire from connector CN804 on the left side of the door arm board.
6. Pull out the CD mechanism base assembly toward the front.



■ Removing the door arm assembly / the door arm board (R) and (L)

(See Fig.15 to 20)

- Prior to performing the following procedure, remove the rear cover, the side covers, the front panel assembly and the CD mechanism base assembly.

1. In case that the upper parts of the door arms attached to the CD door are not level, let down them to the level position by turning the gear **a** in the direction of the arrow.

ATTENTION: When the door arms incline, the door arm assembly and the door arm board (R) and (L) may not be removed.

2. Remove the four screws **H** on the upper side and the one screw **I** on the left side of the body.
3. Remove the four screws **J** attaching the door arm board (L) and (R) on both sides of the door arm assembly.

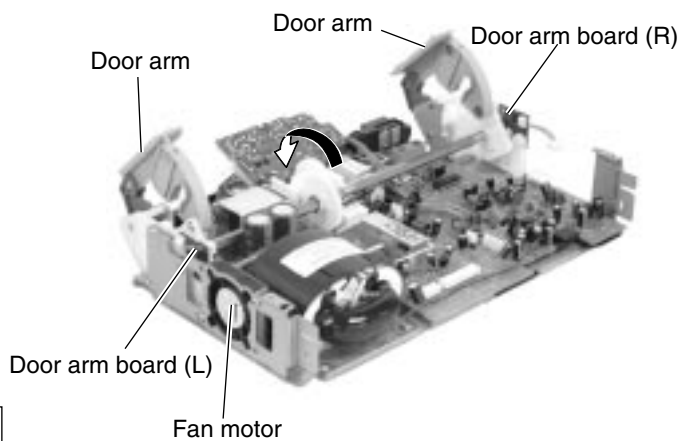


Fig.15

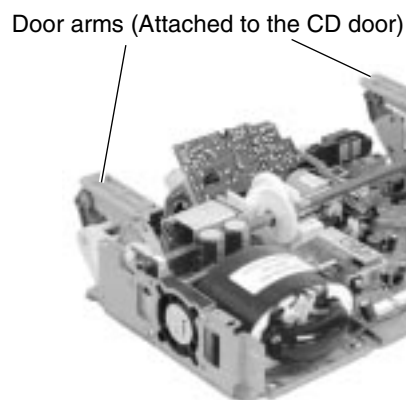


Fig.16

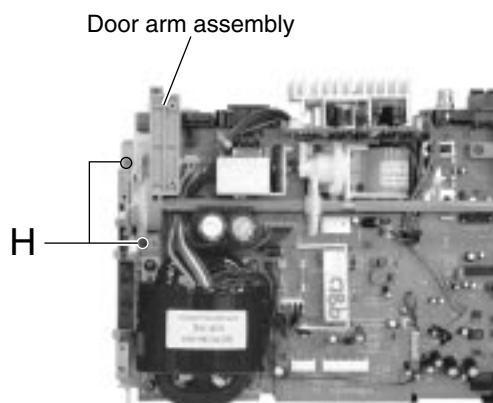


Fig.17

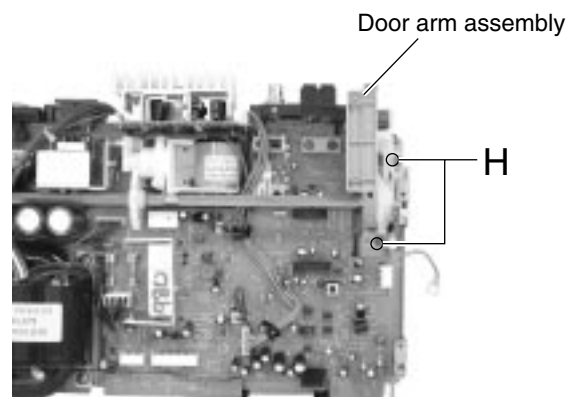


Fig.18

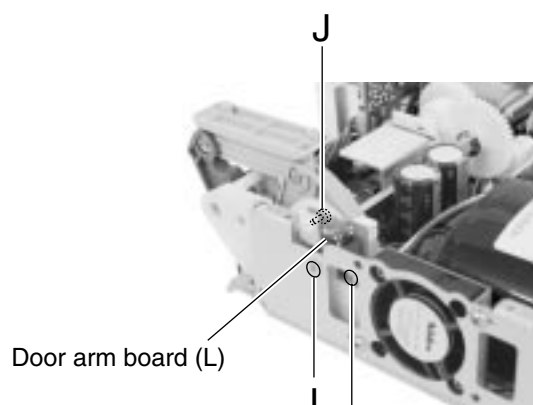


Fig.19

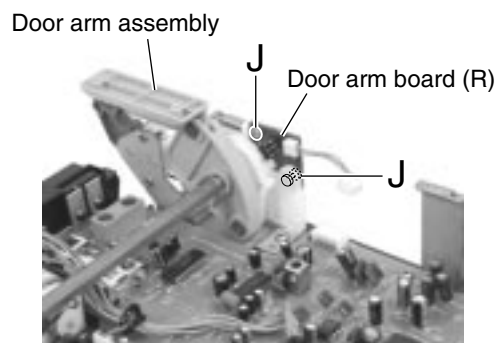


Fig.20

■ **Removing the power amplifier board**
(See Fig.21 and 22)

- Prior to performing the following procedure, remove the CD mechanism base assembly.
1. Disconnect the wires from connector CN102 and CN193 on the main board and release them from the cord stopper respectively.
 2. Remove the two screws **K** and the two screws **L** attaching the heat sink and the power amplifier board.

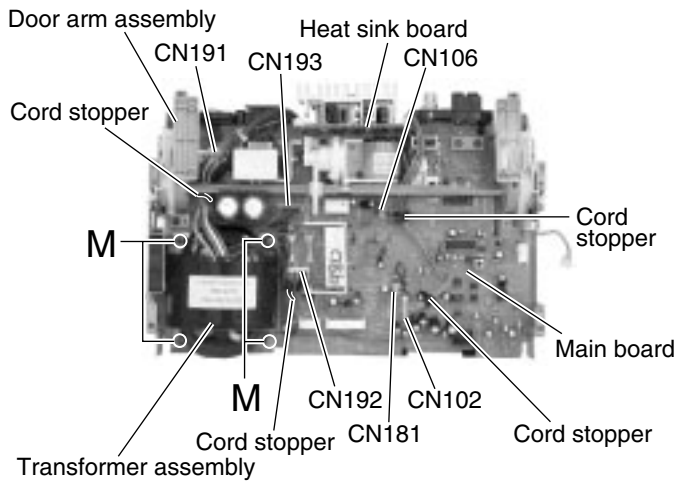


Fig.21

■ **Removing the transformer assembly**
(See Fig.21)

- Prior to performing the following procedure, remove the CD mechanism base assembly.
1. Disconnect the wires from connector CN191 and CN192 on the main board and release them from the cord stopper respectively.
 2. Remove the four screws **M** attaching the transformer assembly.

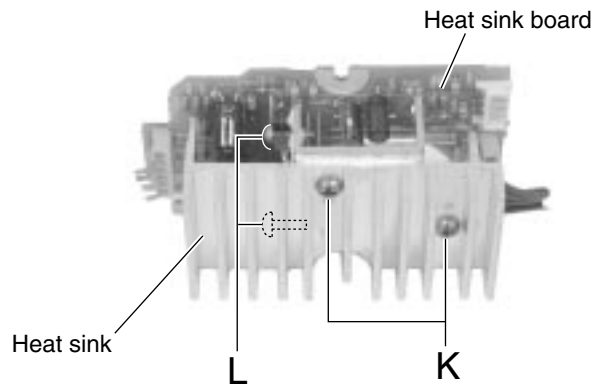


Fig.22

■ **Removing the gear motor assembly**
(See Fig.23 and 24)

- Prior to performing the following procedure, remove the CD mechanism base assembly and the door arm assembly.
1. Disconnect the wires from connector CN106 on the main board and release it from the cord stopper.
 2. Remove the three screws **N** attaching the gear motor assembly. Remove the gear motor assembly with the gear motor stopper.
 3. Remove the belt from the gear motor assembly.
 4. Remove the two screws **O** from the gear motor assembly.

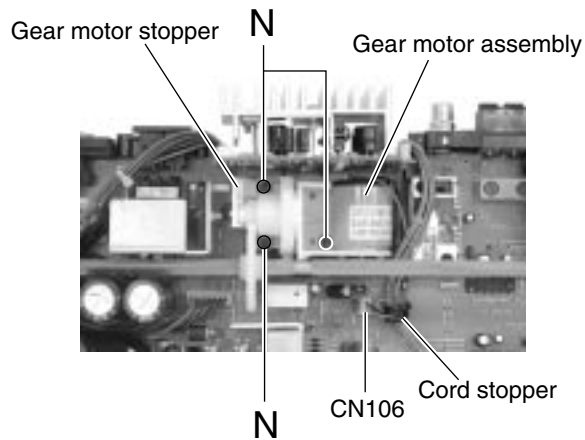


Fig.23

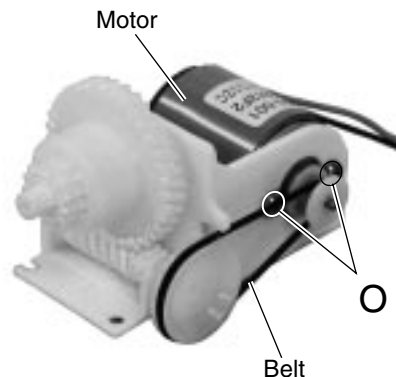


Fig.24

■ Removing the fan motor assembly (See Fig.25 and 26)

- Prior to performing the following procedure, remove the CD mechanism base assembly.
1. Disconnect the wires from connector CN181 on the main board.
 2. Remove the two screws **P** on the left side of the body. Move the fan motor assembly upward to remove it from the base chassis.
 3. Remove the two screws **Q** and the fan motor from the fan bracket.

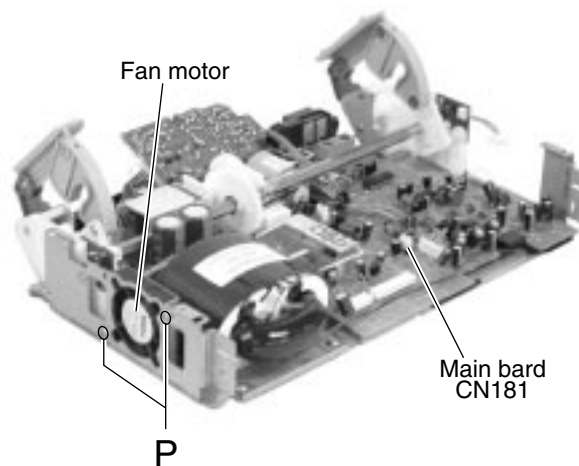


Fig.25

■ Removing the main board (See Fig.27)

- Prior to performing the following procedure, remove the CD mechanism base assembly and the door arm assembly.
- To facilitate operation process, remove the gear motor assembly before performing the following procedure.

1. Disconnect the wires from connector CN102, CN106, CN191, CN192, CN193 and CN181 on the main board.
2. Remove the five screws **R** attaching the main board with the cord clamp.

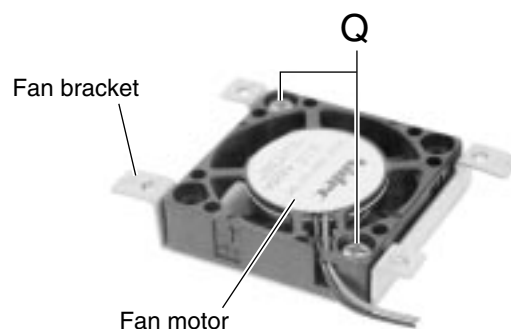


Fig.26

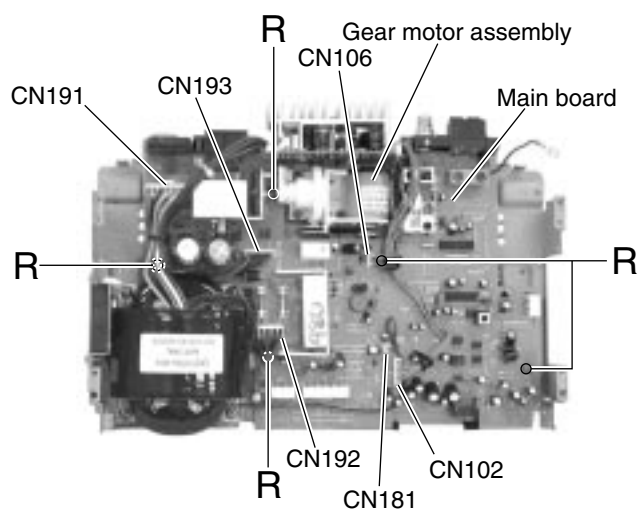


Fig.27

<Front panel assembly>

■ Removing the front panel board (See Fig.28)

- Prior to performing the following procedure, remove the front panel assembly.

1. Remove the seven screws **S** attaching the front panel board inside the front panel assembly.

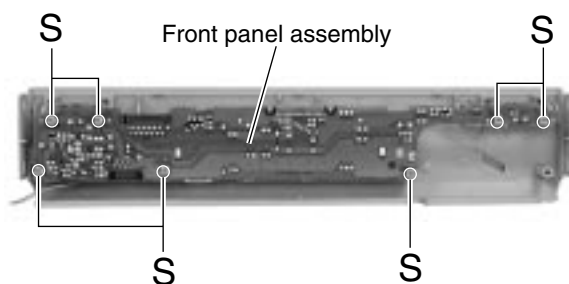


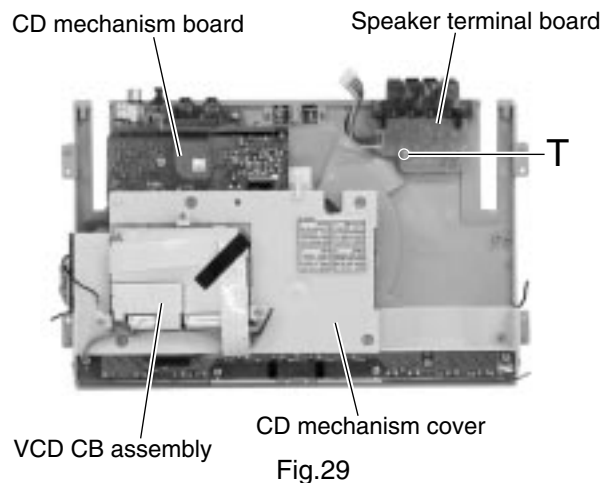
Fig.28

<CD mechanism base assembly>

- Prior to performing the following procedure, remove the CD mechanism base assembly.

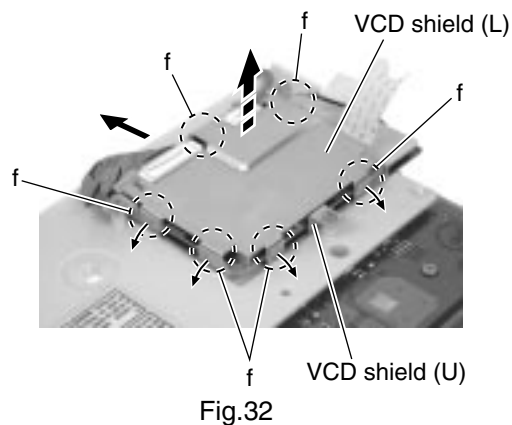
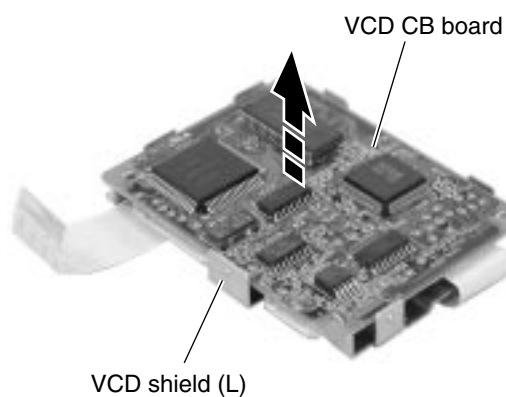
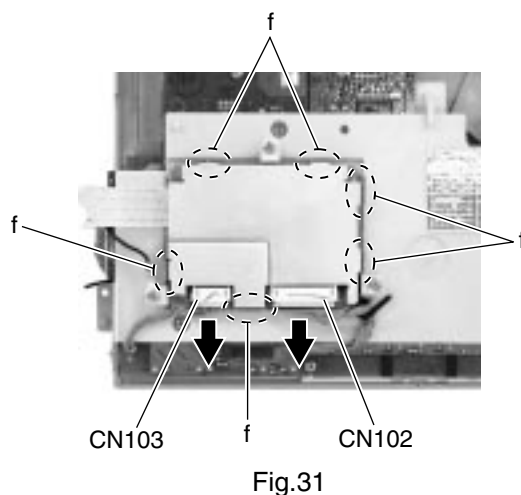
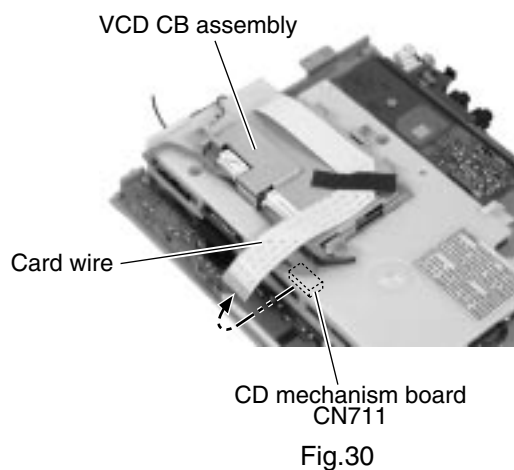
■Removing the speaker terminal board (See Fig.29)

1. Remove the screws **T** attaching the speaker terminal board on the underside of the CD mechanism base assembly.



■Removing the VCD CB assembly (See Fig.30 to 33)

1. Disconnect the card wire from connector CN711 on the CD mechanism board attached to the CD mechanism base.
2. Disconnect the wires from connector CN102 and CN103 on the VCD CB assembly.
3. Unjoint the six joints (f) with the VCD shield (L) and the VCD shield (U). Remove the VCD shield (L) in the direction of the arrow.
4. Remove the VCD CB assembly from the VCD shield (L).



■ Removing the CD mechanism board / mechanism assembly (See Fig.34 to 38)

- Prior to performing the following procedure, remove the VCD CB assembly.
1. Turn over the CD mechanism assembly and remove the screw **X** which retains the wire extending from the CD mechanism board.
 2. Remove the seven screws **U** attaching the CD mechanism cover and the CD mechanism board.
 3. Disconnect the wire from connector CN703 and CN706 on the CD mechanism board respectively.
 4. Turn back the CD mechanism assembly and detach the CD mechanism cover while pulling the CD mechanism assembly outward to release the two joint tabs marked **c**.
 5. Disconnect the card wire from the connector of the CD mechanism assembly inside the CD mechanism cover. Disconnect the wire from CN605 on the CD mechanism board. Pull the CD mechanism assembly out of the three shaft of the CD mechanism cover.

ATTENTION: When reassembling, confirm that the cushion of the CD mechanism assembly is reattached to the three shafts.

6. Remove the CD mechanism board from the CD mechanism cover.

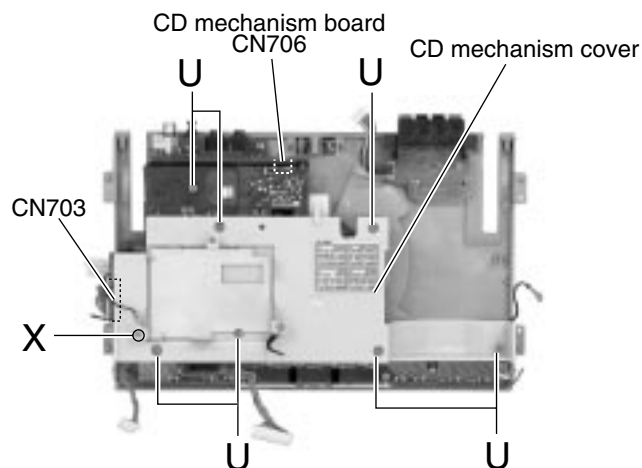


Fig.34

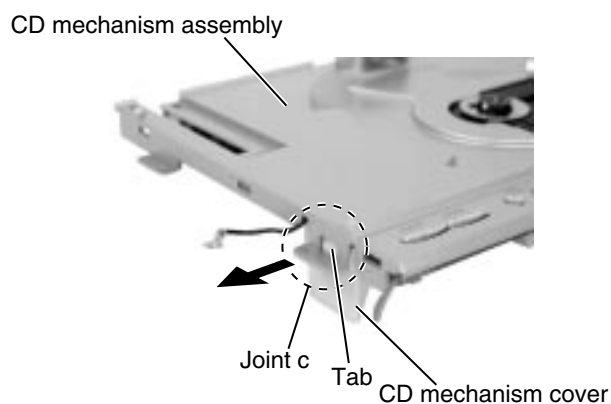


Fig.35

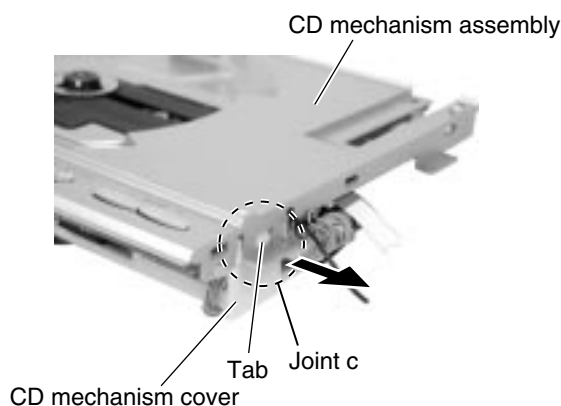


Fig.36

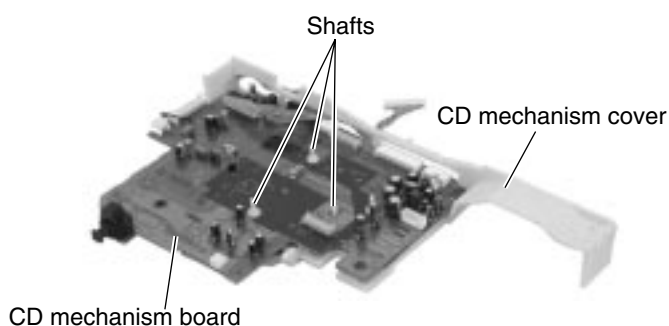


Fig.38

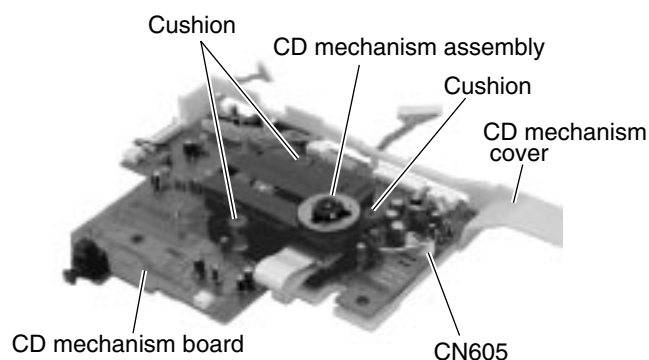


Fig.37

■Removing the jack board (See Fig.39)

- Prior to performing following procedure, remove the CD mechanism board.
1. Disconnect the wire from connector CN502 on the jack board.
 2. Remove the two screws **V** attaching the jack board.

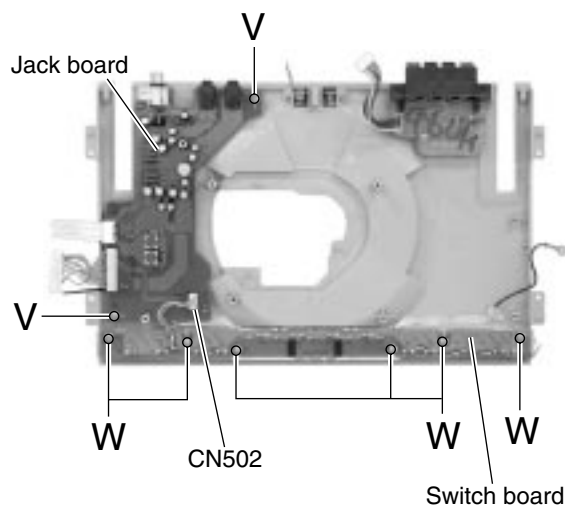


Fig.39

■Removing the switch board (See Fig.39)

- Prior to performing following procedure, remove the CD mechanism board.
1. Disconnect the wire from connector CN502 on the jack board.
 2. Remove the six screws **W** attaching the switch board.

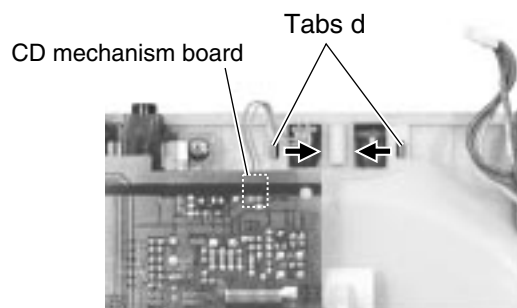


Fig.40

■Removing the LED board (See Fig.40 and 41)

1. Disconnect the wire from connector CN706 on the CD mechanism board on the underside of the CD mechanism base assembly.
2. Push inward the two tabs **d** attaching the LED board case and release them.
3. Pull out the LED board from the LED board case.

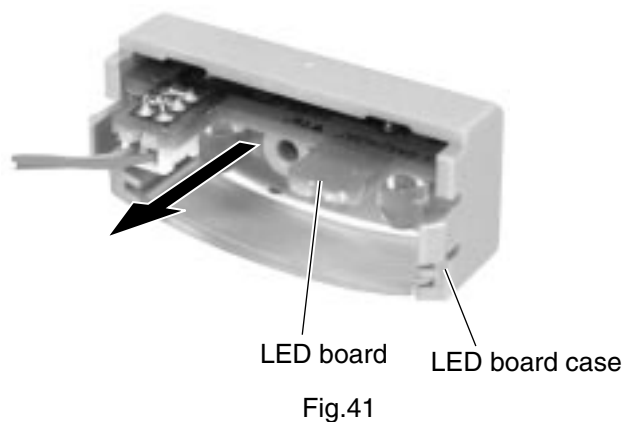


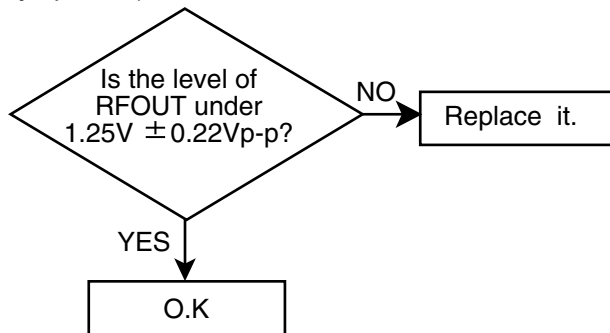
Fig.41

Maintenance of laser pickup

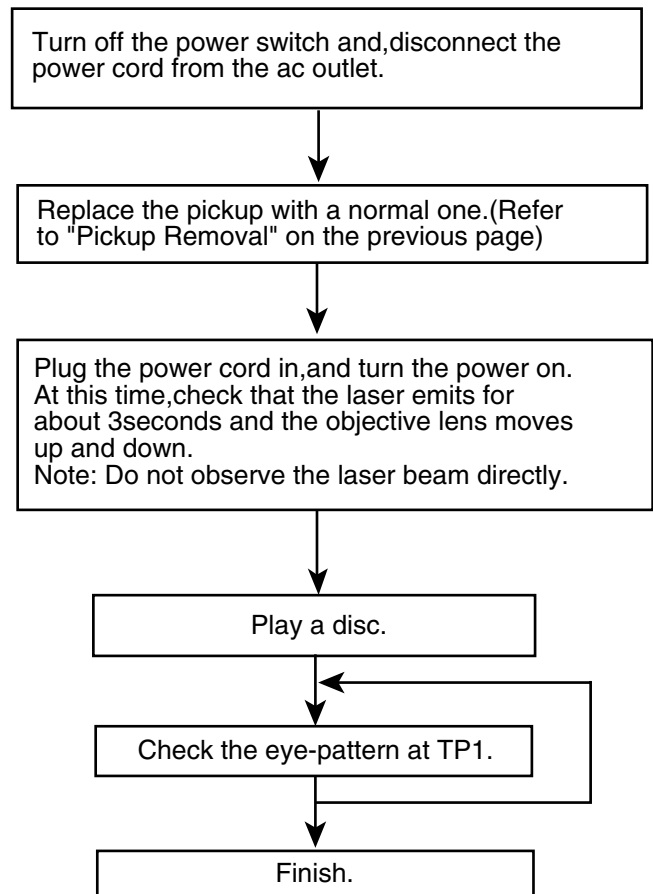
- (1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

- (2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.

1. The level of RF output (EFM output:amplitude of eye pattern) will below.

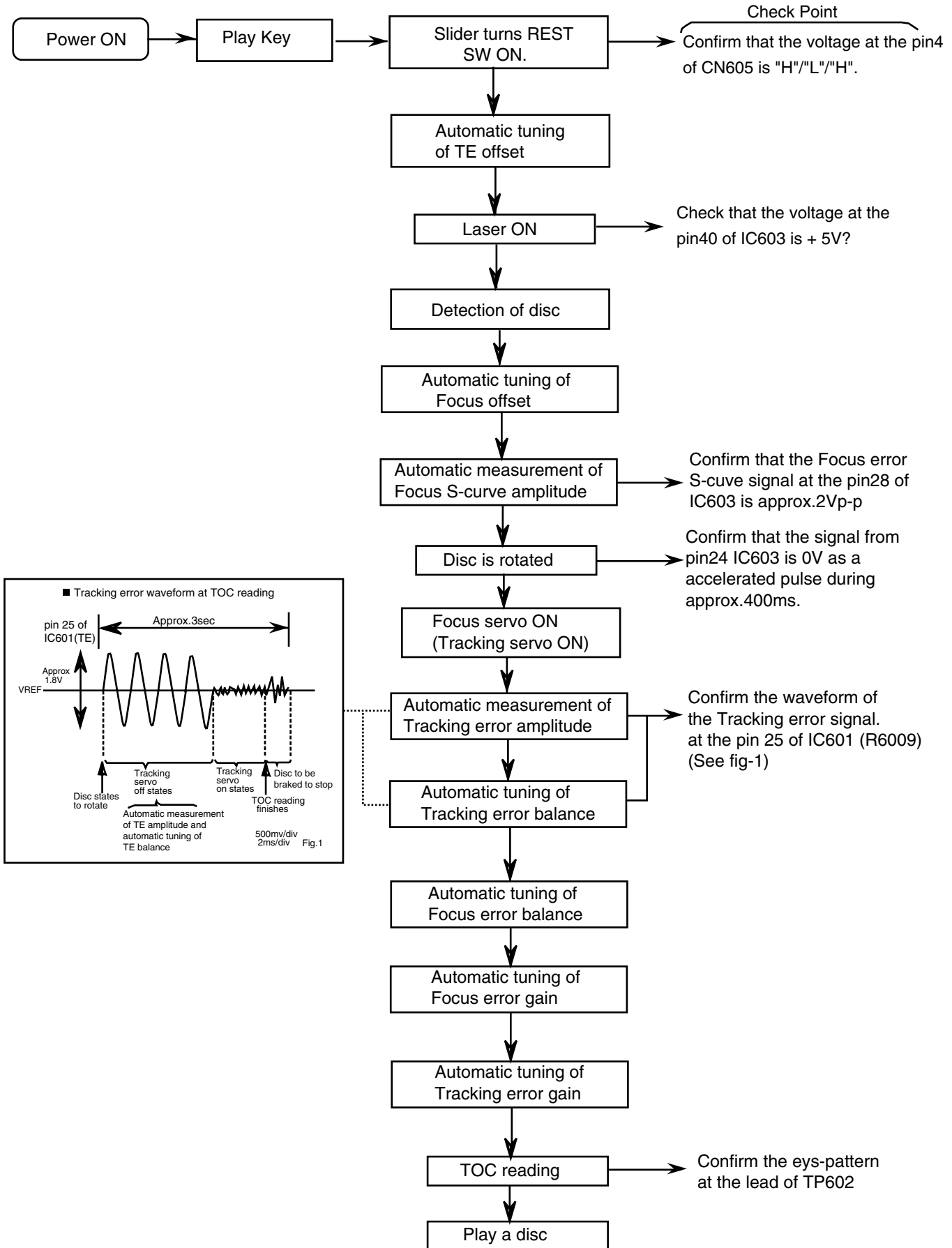


Replacement of laser pickup



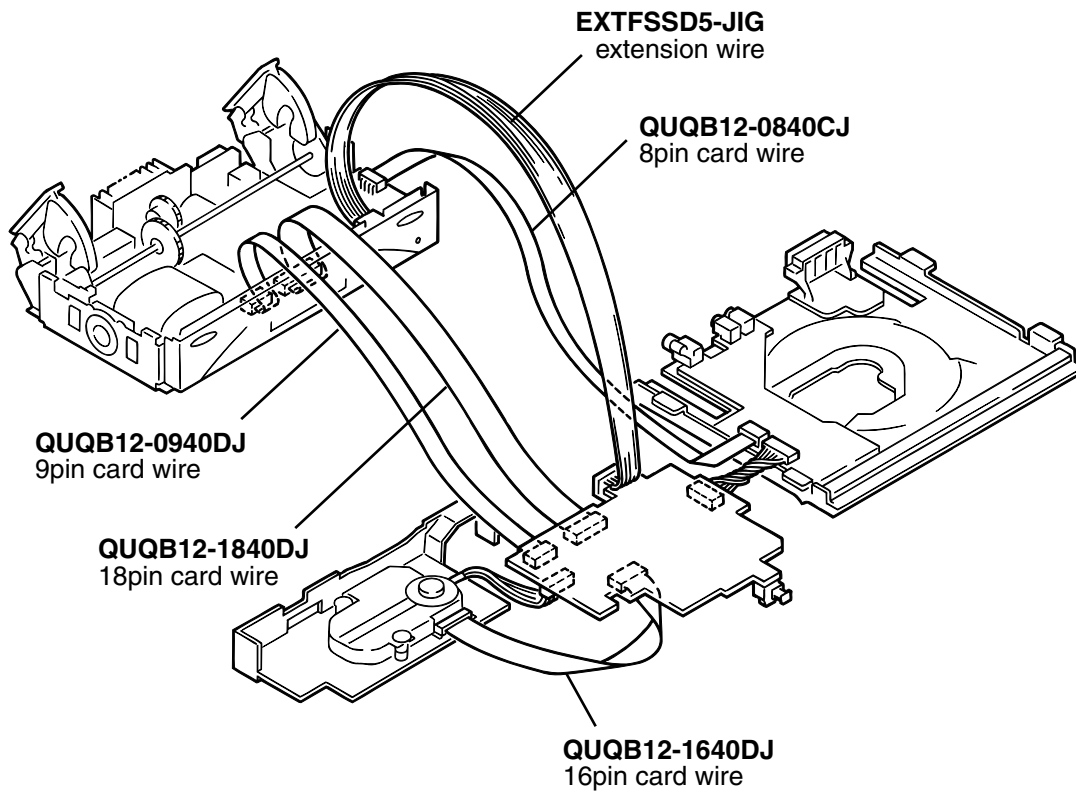
- (3) Semi-fixed resistor on the APC PC board The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value,the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

Flow of functional operation until TOC read



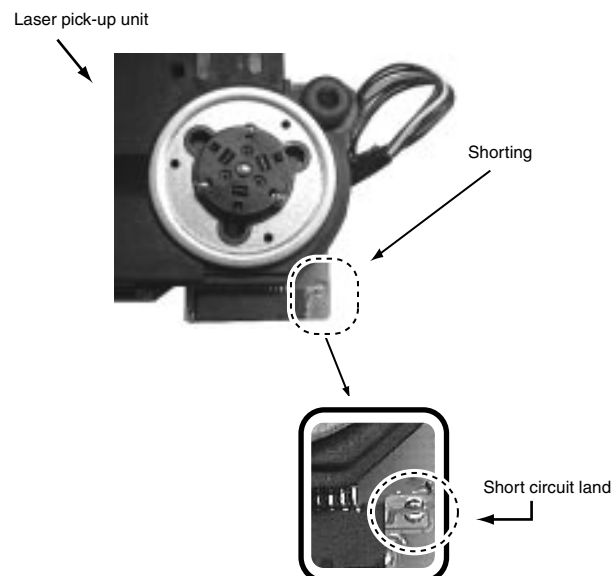
Method of connecting treatment device wire

When the KSM-770ABA mechanism is used, the expansion cable is used as follows.



First short-circuit the pickup circuit before removing the pickup. Then carry out the replacement. Refer to "Dismantling and assembling the traverse unit" on page 1-5.

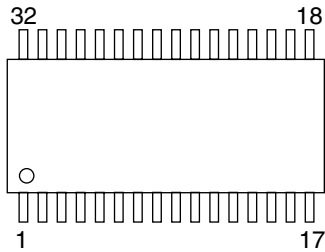
KSM-770ABA



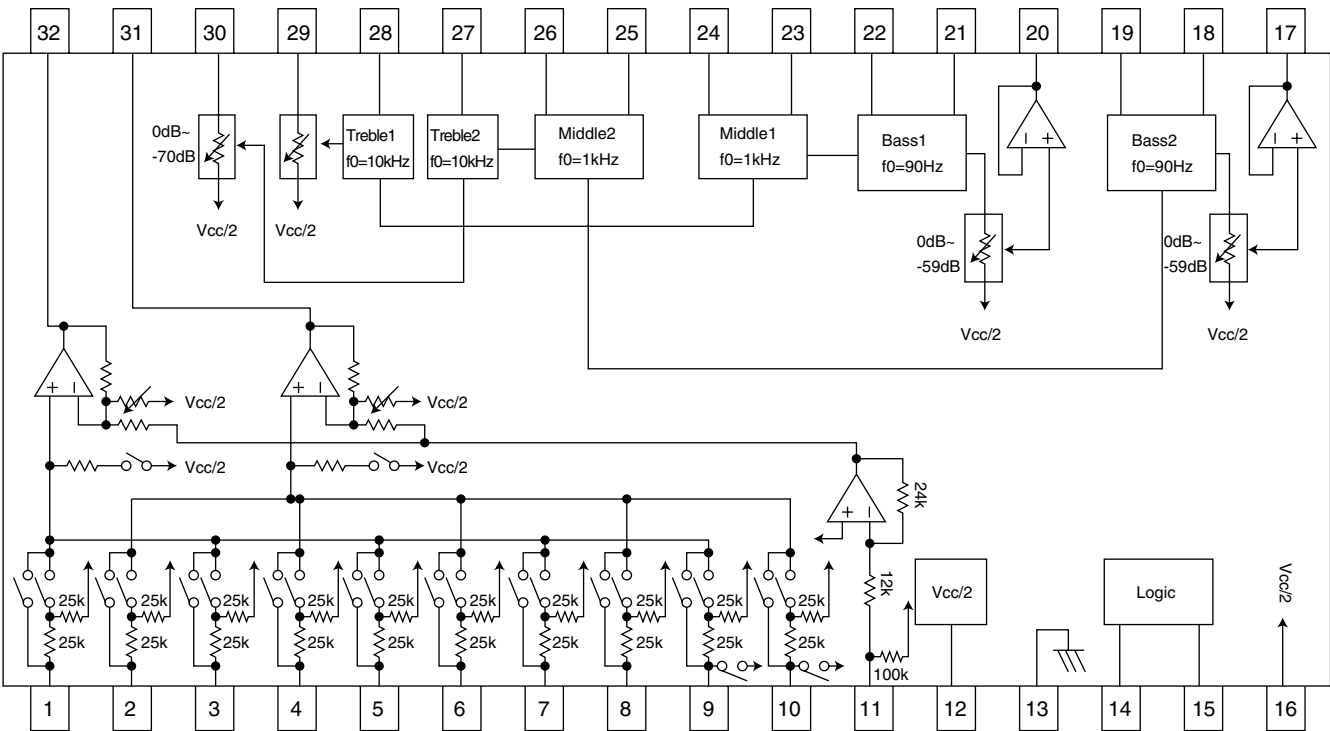
Description of major ICs

■BD3861FS-X (IC501) : Audio sound control

1. Pin layout



2. Block diagram

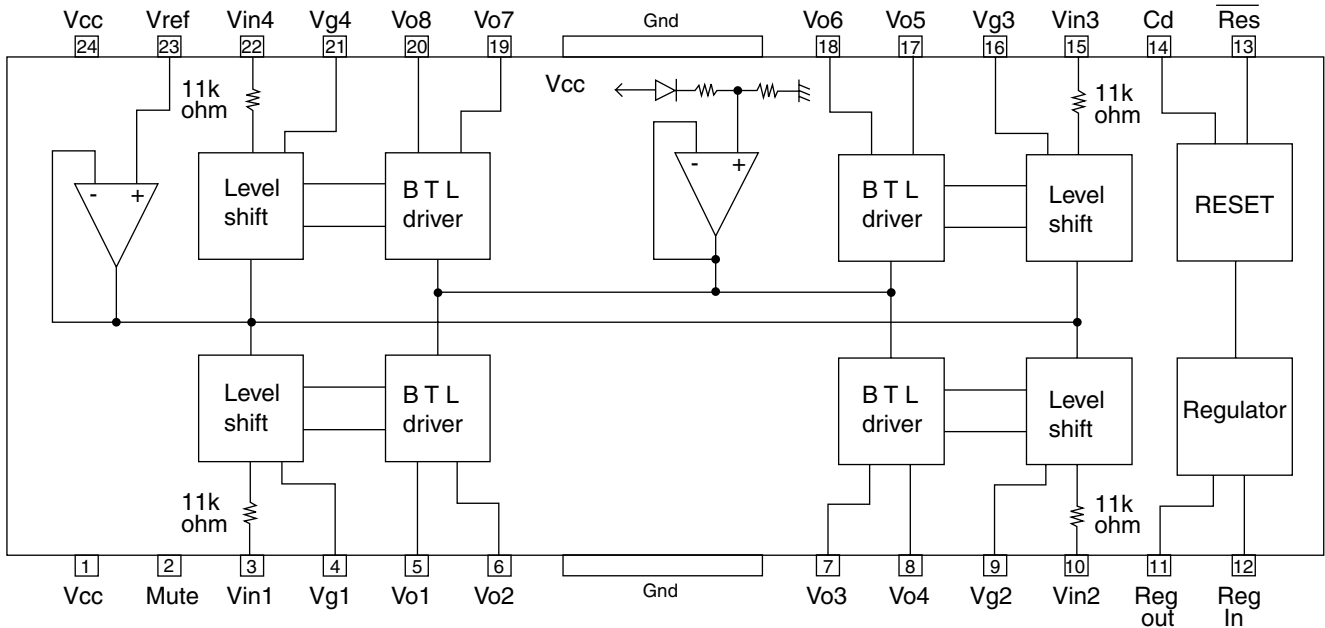


3. Pin function

Pin No.	Symbol	Function		Symbol	Function
1	A1	CH1 input pin A	17	OUT2	CH2 output pin
2	A2	CH2 input pin A	18	BASS21	CH2 bass filter setting pin
3	B1	CH1 input pin B	19	BASS22	CH2 bass filter setting pin
4	B2	CH2 input pin B	20	OUT1	CH1 output pin
5	C1	CH1 input pin C	21	BASS11	CH1 bass filter setting pin
6	C2	CH2 input pin C	22	BASS12	CH1 bass filter setting pin
7	D1	CH1 input pin D	23	MID11	CH1 middle filter setting pin
8	D2	CH2 input pin D	24	MID12	CH1 middle filter setting pin
9	E1	CH1 input pin E	25	MID21	CH2 middle filter setting pin
10	E2	CH2 input pin E	26	MID22	CH2 middle filter setting pin
11	MIC	Microphone input pin	27	TRE2	CH2 treble filter setting pin
12	FIL	Filter pin	28	TRE1	CH1 treble filter setting pin
13	GND	Ground pin	29	VOL1	CH1 input volume input pin
14	DATA	Serial data latch receiving pin	30	VOL2	CH2 input volume input pin
15	CLK	Serial clock receiving pin	31	GOUT2	CH2 input gain output pin
16	Vcc	Power supply pin	32	GOUT1	CH1 input gain output pin

■ LA6541-X(IC602) : Servo Driver

1. Pin Layout & Block Diagram

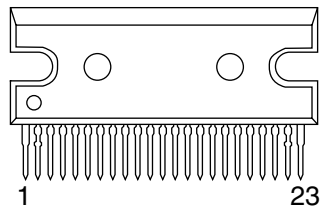


2. Pin functions

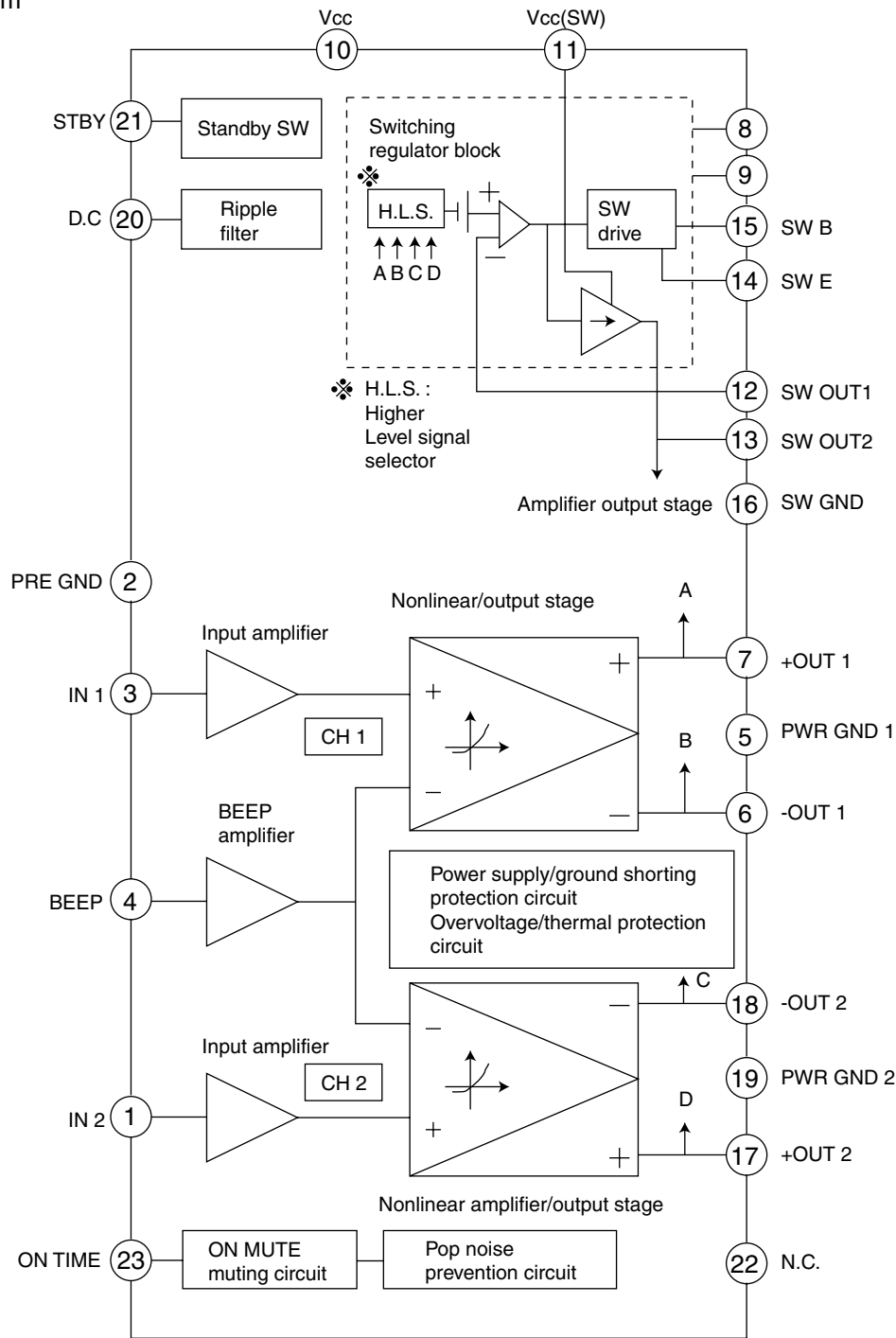
Pin No.	Symbol	Function
1	Vcc	Power supply (Shorted to pin 24)
2	Mute	All BTL amplifier outputs ON/OFF
3	Vin1	BTL AMP 1 input pin
4	Vg1	BTL AMP 1 input pin (For gain adjustment)
5	Vo1	BTL AMP 1 input pin (Non inverting side)
6	Vo2	BTL AMP 1 input pin (Inverting side)
7	Vo3	BTL AMP 2 input pin (Inverting side)
8	Vo4	BTL AMP 2 input pin (Non inverting side)
9	Vg2	BTL AMP 2 input pin (For gain adjustment)
10	Vin2	BTL AMP 2 input pin
11	Reg Out	External transistor collector (PNP) connection. 5V power supply output
12	Reg In	External transistor (PNP) base connection
13	Res	Reset output
14	Cd	Reset output delay time setting (Capacitor connected externally)
15	Vin3	BTL AMP 3 input pin
16	Vg3	BTL AMP 3 input pin (For gain adjustment)
17	Vo5	BTL AMP 3 output pin (Non inverting side)
18	Vo6	BTL AMP 3 output pin (Inverting side)
19	Vo7	BTL AMP 4 output pin (Inverting side)
20	Vo8	BTL AMP 4 output pin (Non inverting side)
21	Vg4	BTL AMP 4 output pin (For gain adjustment)
22	Vin4	BTL AMP 4 output pin
23	Vref	Level shift circuit's reference voltage application
24	Vcc	Power supply (Shorted to pin 1)

■ LA4905 (IC301) : 2ch BTL power IC

1. Pinlayput



2. Block diagram

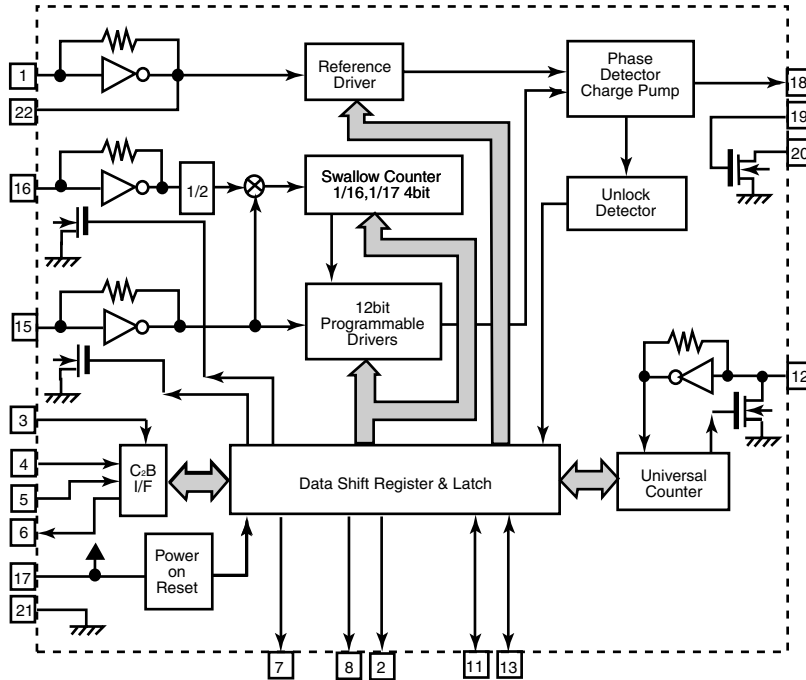


■ LC72136N (IC2) : PLL Frequency synthesizer

1. Pin layout

XT	1	22	XT
FM/AM	2	21	GND
CE	3	20	LPFOUT
DI	4	19	LPFIN
CLOCK	5	18	PD
DO	6	17	VCC
FM/ST/VCO	7	16	FMIN
AM/FM	8	15	AMIN
	9	14	
	10	13	IFCONT
SDIN	11	12	IFIN

2. Block

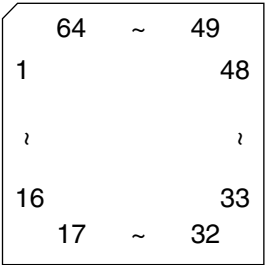


3. Function

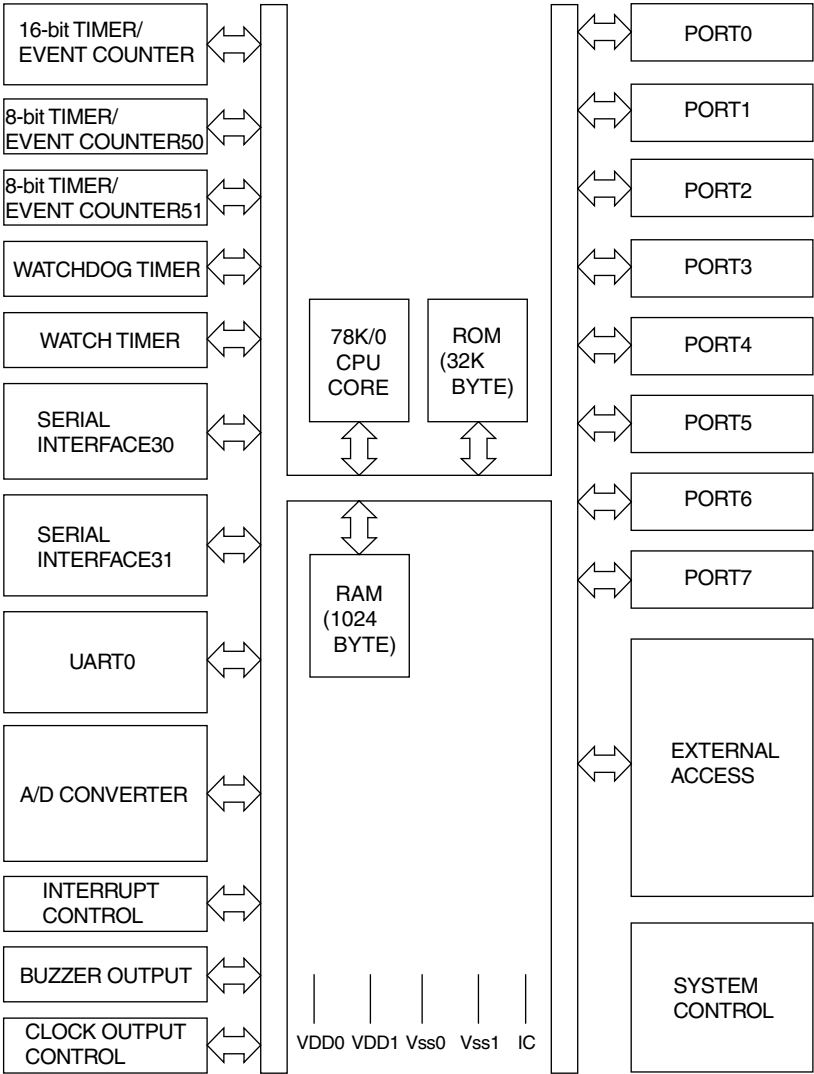
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	FM/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the serial data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power supply(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	AM/FM	O	Open state after the power on reset	19	LPFIN	I	Input for active lowpassfilter of PLL
9	LW	I/O	Input/output port	20	LPFOUT	O	Output for active lowpassfilter of PLL
10	MW	I/O	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	XT	I	X'tal oscillator(75KHz)

■ UPD780024AGKB09 (IC701) : CPU

1. Pin layout



2. Block diagram



3. Pin function

UPD780024AGKB09

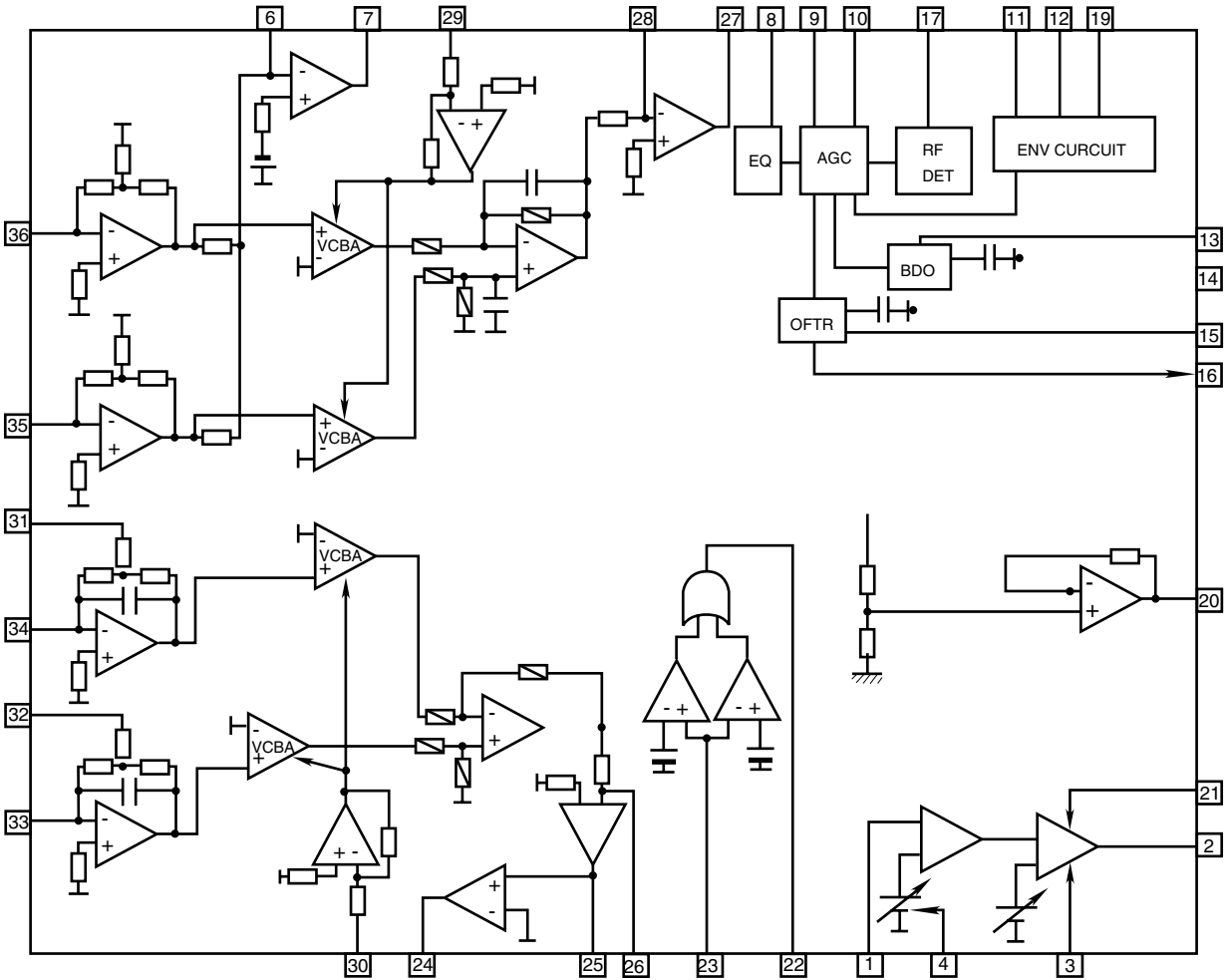
Pin No.	Symbol	I/O	Function
1	MT0	O	CD door motor control signal 0 output
2	MT1	O	CD door motor control signal 1 output
3	MTS	O	Motor speed control output (L:Normal, H:Slow)
4	BLCTL	O	Back light power supply control output
5	AHB	O	AHB ON/OFF control signal output (L:ON, H:OFF)
6	SMUTE	O	System mute control signal output
7	TUST	O	Tuner control strove output
8	CDLED	O	CD LED control signal output (L:OFF, H:ON)
9	VSS0	-	Ground at port section
10	VDD0	-	Power supply at port section
11	MPX	I	Stereo indicator control signal input (L:Stereo)
12	RDSDI	I	RDS data input
13	DRMUTE	O	Driver mute output
14	SCD	I	Voltage detection for safety of CD
15	TUDATA(I)	I	Tuner control data input
16	TUDATA(O)	O	Tuner control data output
17	TUCK	O	Tuner control clock output
18	SUBQ	I	CD control Q code input
19	XRST	O	CD control reset signal output
20	SQCK	O	CD control Q code clock signal output
21	MLD	O	CD control command load signal output
22	MDATA	O	CD control command data signal output
23	MCLK	O	CD control command clock signal output
24	VDD1	-	Power supply without port section
25	AVSS	-	Ground of A/D converter
26	STAT	I	CD control status signal input
27	REST	I	CD rest switch detection signal input
28	KEY1	I	Main body top section tact switch detection signal input
29	KEY2	I	Main body top section tact switch detection signal input
30	KEY3	I	Main body front section tact switch detection signal input
31	SAFETY	I	Voltage detection for safety
32	LDCK	I	CD door motor lock detection signal input
33	VERSION	I	Version detection
34	AVREF	I	Reference voltage input for A/D converter
35	AVDD	-	Analog power supply for A/D converter
36	RESET	I	System reset signal input
37	XT2	-	Sub clock
38	XT1	I	Sub clock signal input 32.768kHz
39	IC	I	Connect to VSS0 or VSS1
40	X2	-	Main clock
41	X1	I	Main clock signal input 4.19MHz
42	VSS1	-	Ground without port section
43	REM	I	Remote controller signal input
44	RDSCK	I	RDS clock signal input
45	XKILL	O	Sub clock OSC control signal output
46	BEAT	O	Main clock shift control signal output
47	BUP	I	Back up detection signal input
48	+BCTL	O	Power supply control at back up operating
49	VDATA	O	BD3861FS (VOL & FUNC IC) control data signal output
50	VCLK	O	BD3861FS (VOL & FUNC IC) control clock signal output
51	DOOR1	I	Cd door position detection switch input
52	DOOR2	I	CD door position detection switch input
53	DOOR3	I	CD door position detection switch input
54	LOMUTE	O	LINE OUT muting control signal output
55	RS	O	LCD driver control resistor select signal output
56	E	O	LCD driver control enable signal output
57	D84	O	LCD driver control data bus signal output
58	D85	O	LCD driver control data bus signal output
59	D86	O	LCD driver control data bus signal output
60	D87	O	LCD driver control data bus signal output
61	DIMMER	O	Back light DIMMER control signal output
62	POUT	O	Power supply control signal output for amp section
63	FTU	O	Power supply control signal output for TUNER function
64	FCD	O	Power supply control signal output for CD function

■ AN8806SB-W(IC601) :RF&SERVO AMP

1.Pin layout

PD 1	36 PDAC
LD 2	35 PDBD
LDON 3	34 PDF
LDP 4	33 PDE
VCC 5	32 PDER
RF- 6	31 PDFR
RF OUT 7	30 TBAL
RF IN 8	29 FBAL
C.AGC 9	28 EF-
ARF 10	27 EF OUT
C.ENV 11	26 TE-
C.EA 12	25 TE OUT
CS BDO 13	24 CROSS
BDO 14	23 TE BPF
CS BRT 15	22 VDET
OFTR 16	21 LD OFF
/NRFDET 17	20 VREF
GND 18	19 ENV

2.Block diagram



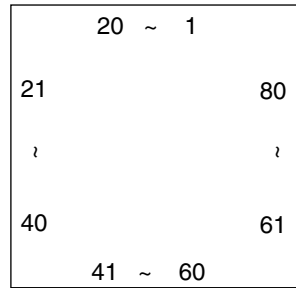
3. Pin function

AN8806SB-W

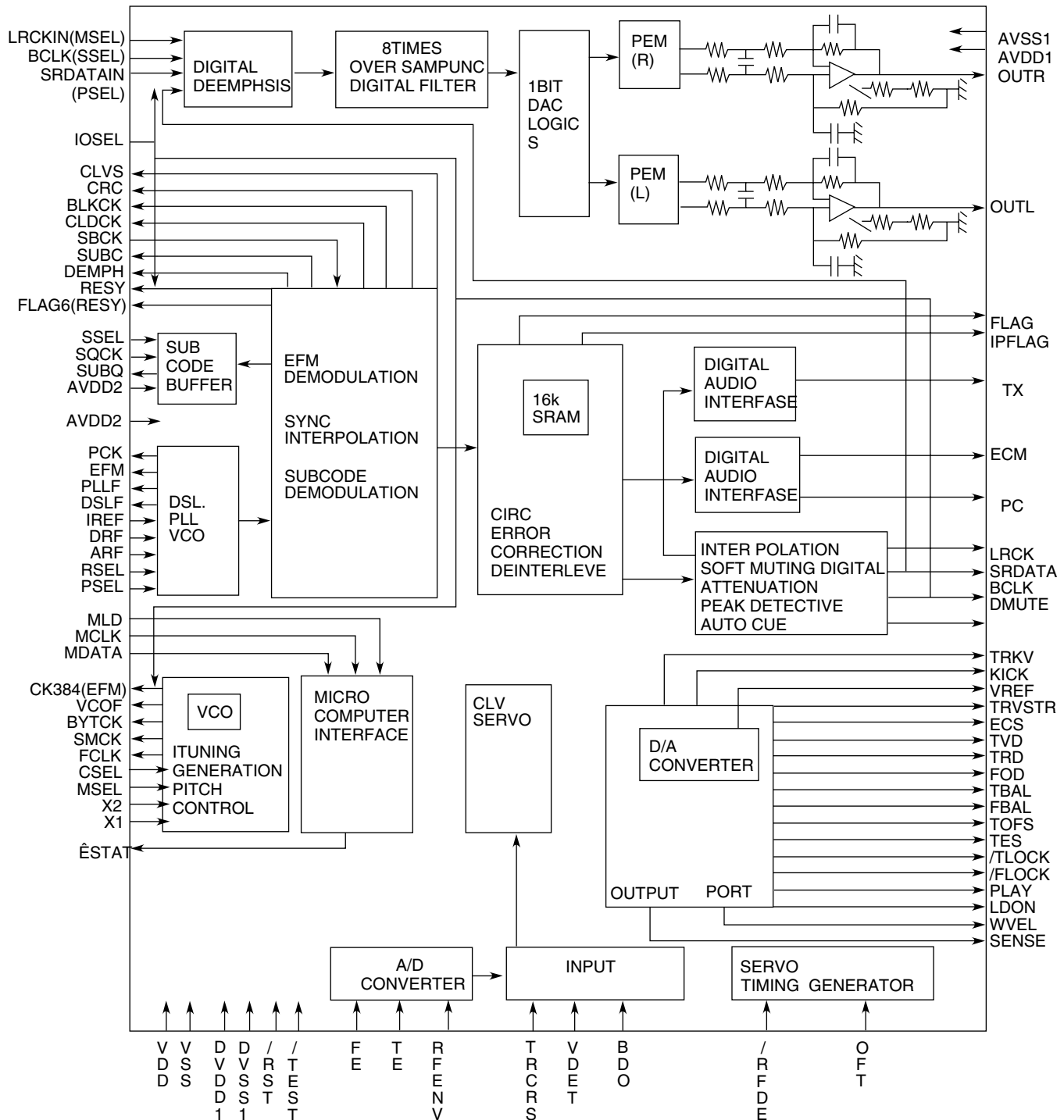
Pin No.	symbol	I/O	Function
1	PD	I	APC amp . Input terminal
2	LD	O	APC amp . Output terminal
3	LD ON	I	LD ON/OFF control terminal
4	LDP	--	Connect to GND
5	VCC	--	Power supply
6	RF-	I	RF amp . Reversing input terminal
7	RF OUT	O	RFamp . Output terminal
8	RF IN	I	AGC input terminal
9	C.AGC	I/O	AGC loop filter connection terminal
10	ARF	O	ARF output terminal
11	C.ENV	I/O	RF detection capacity connection terminal
12	C.EA	I/O	HPF-amp capacity connection terminal
13	CS BDO	I/O	Capacity connection terminal for RF discernment side envelope detection
14	BDO	O	BDO output terminal
15	CS BRT	I/O	Capacity connection terminal for RF discernment side envelope detection
16	OFTR	O	OFTR output terminal
17	/NRFDET	O	RFDET output terminal
18	GND	--	Connect to GND
19	ENV	O	3TENV output terminal
20	VREF	O	VREF output terminal
21	LD OFF	--	APC OFF control terminal
22	VDET	O	VDET output terminal
23	TE BPF	I	VDET input terminal
24	CROSS	O	CROSS output terminal
25	TE OUT	O	TE amp . Output terminal
26	TE-	I	FE amp . Reversing input terminal
27	FE OUT	O	FE amp . output terminal
28	FE-	I	FE amp . Reversing input terminal
29	FBAL	I	F.BAL control terminal
30	TBAL	I	T.BAL control terminal
31	PDFR	I/O	I-V amp conversion resistance adjustment terminal
32	PDER	I/O	I-V amp conversion resistance adjustment terminal
33	PDF	I	I-V amp input terminal
34	PDE	I	I-V amp input terminal
35	PD BD	I	I-V amp input terminal
36	PD AC	I	I-V amp input terminal

■ MN35510(IC603):Digital servo & Digital signal processor

1. Terminal Layout



2. Block Diagram

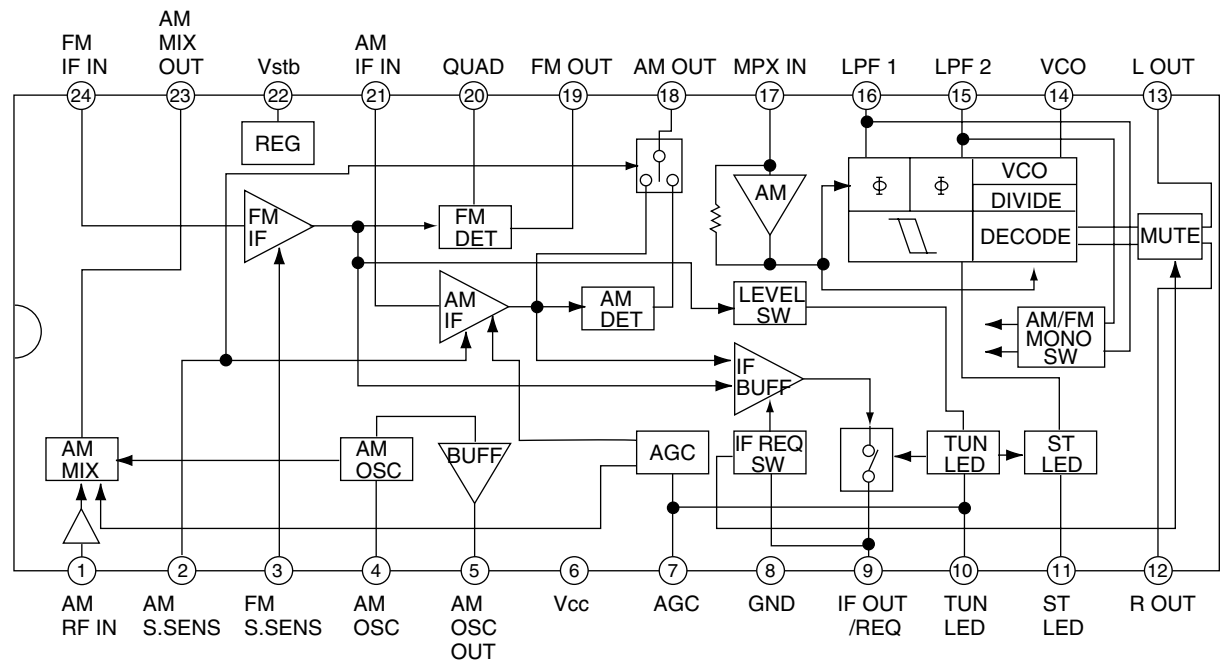


3. Description

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output(H:shunt)
2	LRCK	O	Not used	42	PLAY	—	Not used
3	SRDATA	O	Not used	43	WVEL	—	Not used
4	DVDD1	—	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	—	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	Micom command clock signal input (Data is latched at signal's rising point)	47	DSLIF	I/O	Loop filter pin for DSL
8	MDATA	I	Micom command data input	48	PLLF	I/O	Loop filter pin for PLL
9	MLD	I	Micom command load signal input	49	VCOF	—	Not used
10	SENSE	O	Sence signal output	50	AVDD2	—	Power supply(Analog)
11	FLOCK	O	Focus lock signal output Active :Low	51	AVSS2	—	Connected to GND(Analog)
12	TLOCK	O	Tracking lock signal output Active :Low	52	EFM	—	Not used
13	BLKCK	O	sub-code - block - clock signal output	53	PCK	—	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	—	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	—	Not used
16	DMUTE	—	Connected to GND	56	SBCK	—	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	—	Connected to GND(for X'tal oscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	—	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	—	Not used	60	VDD	—	Power supply(for X'tal cscillation circuit)
21	TRV	O	Traverse enforced output	61	BYTCK	—	Not used
22	TVD	O	Traverse drive output	62	CLDCK	—	Not used
23	PC	—	Not used	63	FLAG	—	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	—	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	—	Not used
26	KICK	O	Kick pulse output	66	CLVS	—	Not used
27	TRD	O	Tracking drive output	67	CRC	—	Not used
28	FOD	O	Focus drive output	68	DEMPH	—	Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	—	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	—	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	—	pull up
32	FE	I	Focus error signal input(Analog input)	72	AVDD1	—	Power supply(Digital)
33	TE	I	Tracking error signal input(Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input(Analog input)	74	AVSS1	—	Connected to GND
35	VDET	I	Vibration detect signal input(H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input(H:off track)	76	RSEL	—	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	—	Connected to GND
38	RFDET	I	RF detect signal input(L:detect)	78	PSEL	—	Connected to GND
39	BDO	I	BDO input pin(L:detect)	79	MSEL	—	Connected to GND
40	LDON	O	Laser ON signal output(H:on)	80	SSEL	—	Pull up

■ TA2057N (IC1) : FM/AM IF AMP & Detector

1.Block Diagrams

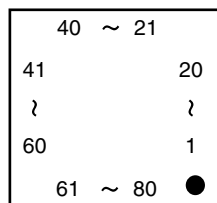


2.Pin Function

Pin No.	I/O	Symbol	Function	Pin No.	I/O	Symbol	Function
1	I	AM RF	AMRF signal input	13	O	Lch OUT	Output Lch
2		AM S.SENS		14	O	VCO	Voltage controlled terminal
3		FM S.SENS		15	O	LPF2	When voltage of terminal is MONO at "H" and ST at "L"
4	-	AM OSC	AM local oscillation circuit	16	O	LPF1	When voltage of terminal is AM at "H" and FM at "L"
5	O	AM OSC OUT	AM local oscillation signal output	17	I	MPX IN	Multi plex signal input
6	-	VCC	Power supply	18	O	AM OUT	AM detection signal output
7	I	AGC	AGC voltage input terminal	19	O	FM OUT	FM detection signal output
8	-	GND	Connect to GND	20	I	FM QUAD	Bypass to FMIF
9	O	IF OUT	IF REQ signal output to IC2	21	I	AM IF IN	Input of AMIF signal
10	O	TU IND	Indicator drive output when tuning	22	-	Vst	Fixed voltage output terminal
11	O	ST IND	Stereo indicator output "H"mono . "L"stereo	23	O	AM MIX OUT	Output terminal for AM mixer
12	O	Rch OUT	Output Rch	24	I	FM IF IN	Input of FMIF signal

■ UPD780053GC-031(IC711):CD/VCD Control

1. Terminal layout



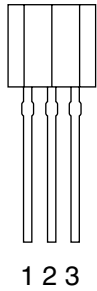
2Pin function

UPD780053GC-031

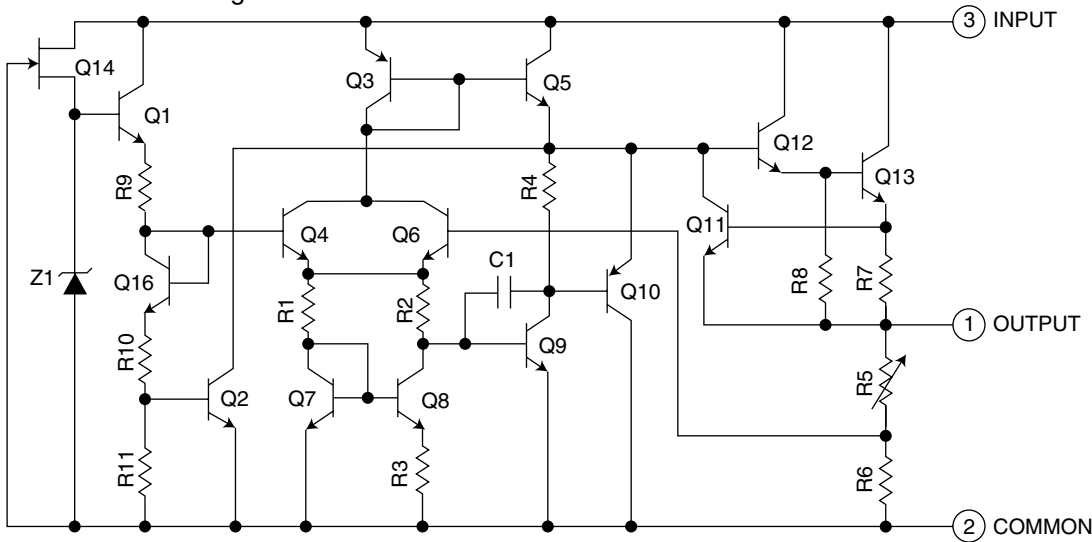
Pin No.	Symbol	I/O	Function
1	MLD	O	Micon command load signal output
2	MDATA	O	Micon command data output
3	MCLK	O	Micon command clock signal output(Data is latched at signal's rising point)
4	AVSS	-	GND
5	REST	I	Rest switch input
6	XRST	O	Reset signal input (L:Reset)
7	A-REF1	-	Connect to Vdd
8	SUBQ	I	Sub Q code input
9	NC	-	Non connection
10	SQCK	O	Outside clock for sub-code Q resister output
11	KCMD	-	GND
12	MSTAT	-	GND
13	KCLK	O	CD Micon control commend clock (Tuner:L)
14	OSOFF	I	OSD Input of deletion demand signal of display(L:OSD Off)
15	MRDY	I	CD Micon control Detection of state of command possible reception
16	NC	-	Non connection
17	SRDATA	O	Serial data output terminal
18	SRCLK	O	Serial clock output terminal
19~32	NC	-	Non connection
33	VSS1	-	GND
34~39	NC	-	Non connection
40	FCD	O	Function CD output terminal
41	MREQ	O	Transfer request data to IC111
42	VCDRST	O	VCD Reset signal output terminal
43	VCDEMP	O	VCD empty signal output terminal
44~59	NC	-	Non connection
60	CDMRST	O	CD Mechanism reset signal output terminal
61	STAT	I	CD Status signal input terminal
62	HREC		
63	HRDY		
64~66	NC	-	Non connection
67	V3S0	-	GND
68	VDD1	-	Connect to Vdd
69	X2	I	Input of X'tal oscillation circuit
70	X1	O	Output of 16.9344MHz X'tal oscillation circuit
71	IC	-	GND
72	XT2	-	Non connection
73	XT1	-	Connect to Vdd
74	VDD0	-	Connect to Vdd
75	AVREF0	-	GND
76~78	NC	-	Non connection
79	DMUTE	-	Connected to GND
80	DRMUTE	O	All BTL amplifiel outputs ON/OFF

KIA78S06P-T (IC702) : Regulator

1. Pin layout

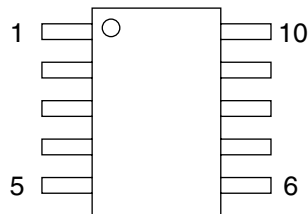


2. Block diagram



TA8409F-W (IC108) : Bridge driver

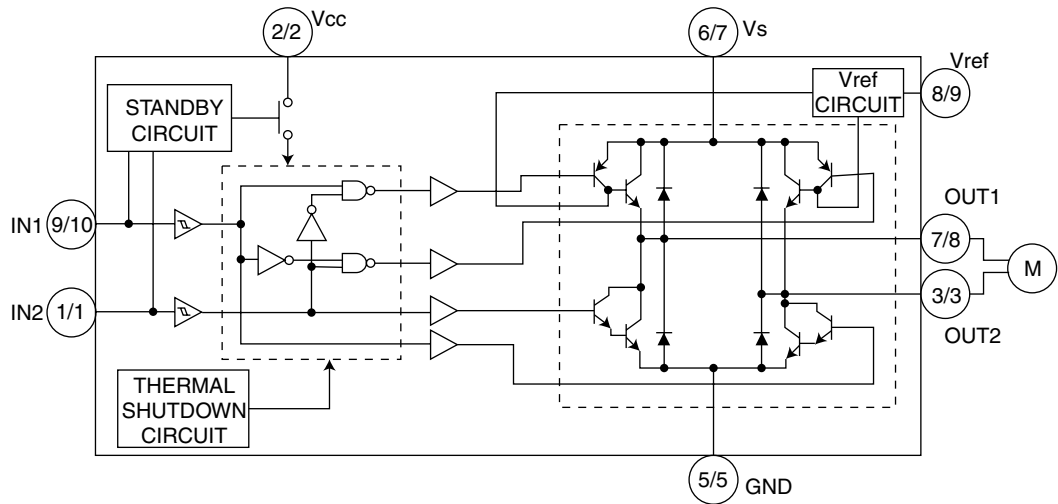
1. Pin layout



2. Pin function

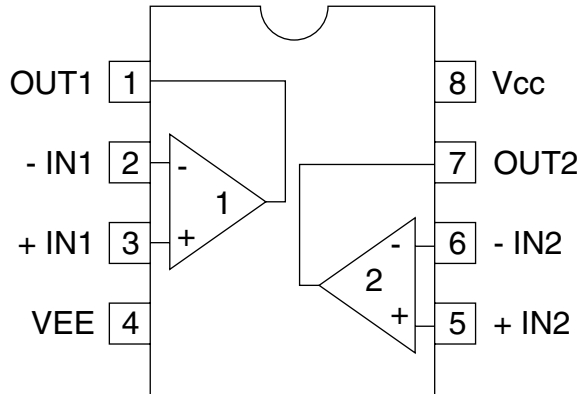
Pin No.	SYMBOL	FUNCTION
1	IN2	INput terminal
2	Vcc	Supply voltage terminal for logic
3	OUT2	Output terminal
4	NC	Non connection
5	GND	GND terminal
6	NC	Non connection
7	Vs	Supply voltage terminal for motor driver
8	OUT1	Output terminal
9	Vref	Reference voltage terminal for control circuit
10	IN1	Input terminal

3. Block diagram

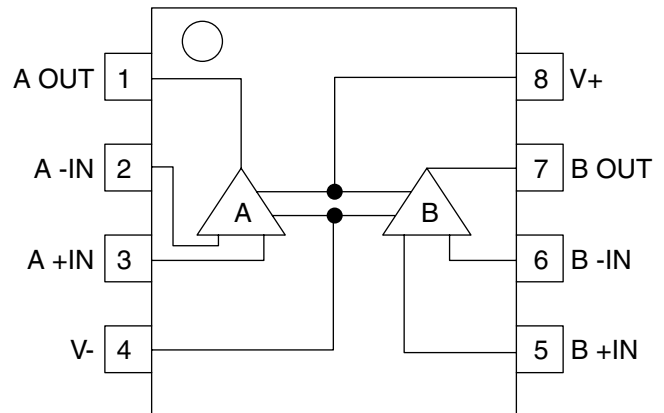


■ **BA15218F-W (IC102) : Dual ope. amp.** ■ **NJM4580D-D (IC101) : Dual ope amp.**

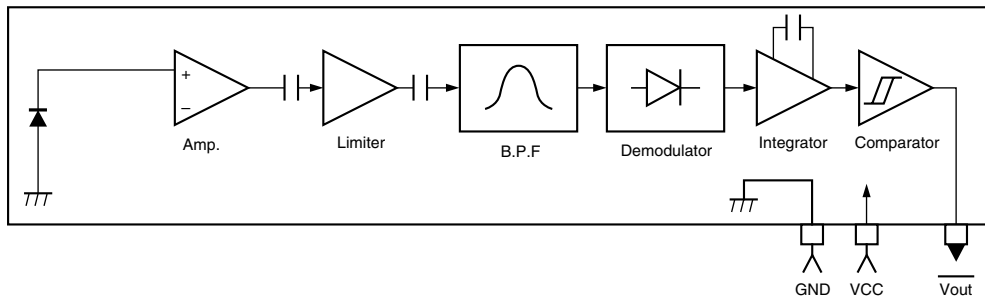
1. Pin layout & Block diagram



1. Pin layout & Block diagram

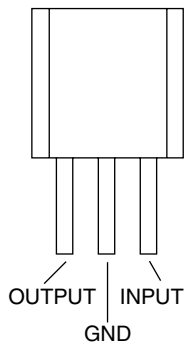


■ **GP1U271X (IC801) : Receiver for remote**

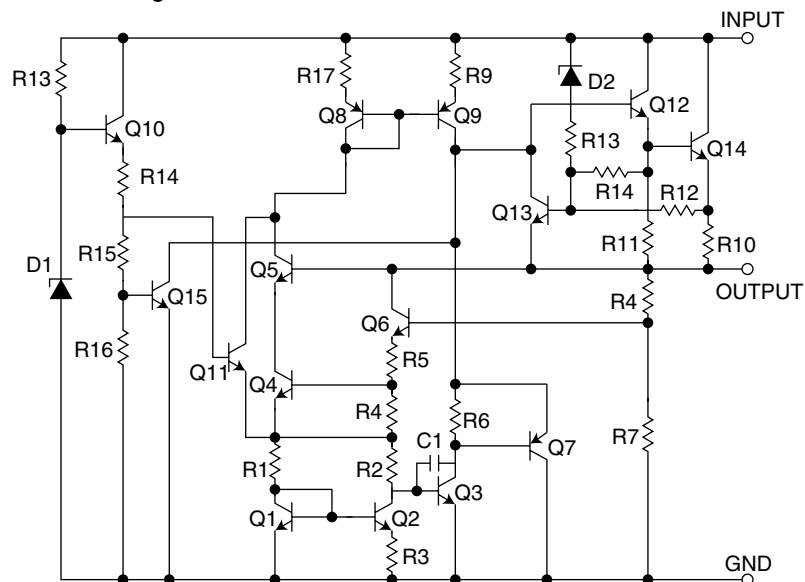


■ **UPD78L5J-T (IC191) : Regulator**

1. Pin layout

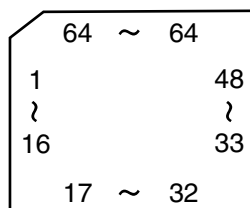


2. Block diagram



■ MN171601AK8J2(IC111):HOST Micro computer

1. Terminal layout

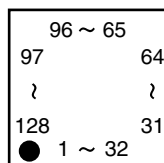


2. Pin function

Pin No.	Symbol	I/O	Function
1	480RST	O	Reset signal output.
2	MREQ	I	Input the transfer request data signal.
3	ACTINT	I	Interact 2 signal input.
4	GDET	I	CD-G detect terminal H:CD-G
5	GND	-	Connected to GND.
6	DTACK	I	Acknowledge signal input.
7	GND	-	Connect to GND.
8	GND	-	Connect to GND.
9	DIR	I/O	Input/Output control for IC114.
10	N/PAL	-	Not use.
11	ENCRST	O	Encoder reset signal output terminal.
12	W/R	I/O	Read/Write signal input/output.
13 ~ 15	HA0 ~ 2	O	Address signal output for MPEG LSI.
16	DS	O	Data strobe signal output.
17 ~ 24	HD0 ~ 7	I/O	Data terminal for MPEG LSI.
25 ~ 39	SA0 ~ 14	O	SRAM address signal output.
40	SCS	O	SRAM chip select signal output.
41 ~ 48	SD1 ~ 18	I/O	SRAM data Input /Output terminal .
49	SR/W	I/O	SRAM read/write signal input/output.
50	PAL60	-	Not use.
51	RESET	I	Reset signal input.
52	X1	-	Non connect.
53	X2	-	Non connect.
54	VSS	-	Connect to GND.
55	OSC2	-	Non connect.
56	OSC1	I	Clock input terminal.
57	VDD	-	Power supply.
58	HREQ	O	Communication signal output.
59	SRCLK	O	Clock signal for data request.
60	M2HDT	O	Serial data output.
61	M2MDT	I	Serial data input.
62	HRDY	O	Communication signal output.
63	VCD/G	O	Video switch switching signal output.
64	PALCDG	O	CD-G PAL/NTSC clock select terminal.

■ CL480-F1(IC101):MPEG-1 AUDIO/VIDEO DECODER

1. Terminal layout

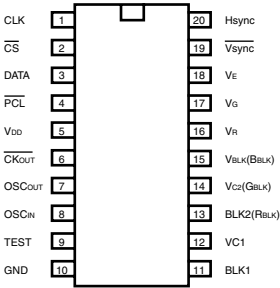


2. Pin function

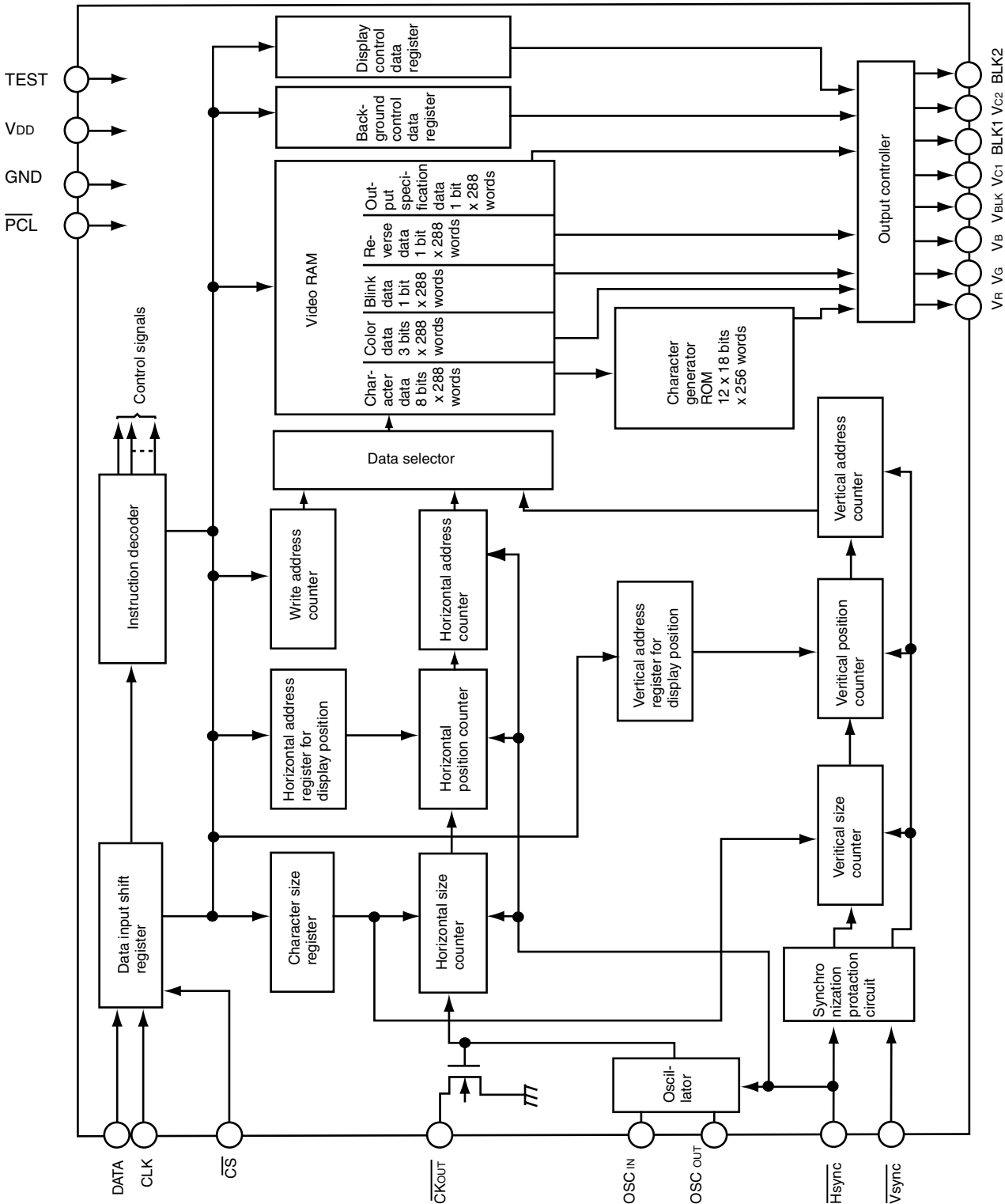
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	HA2	I	Host address.	78~80	VD10~12	O	Video data terminal(G24/Y24)
2	DS	I	Data strobe terminal.	81	IOVDD	-	Power supply for Input/Output.
3	W/R	I	I/O read terminal.	82~84	VD13~15	O	Video data terminal(G57/Y57)
4	IRQ	O	Interact terminal.	85	CKTVSS	-	Connect to GND.
5	DTACK	O	Acknowledge data output.	86~89	VD16~19	O	Video data terminal(B0B3)
6	HD0	I/O	Host data terminal.	90	IOVSS	-	Ground terminal for Input/Output.
7	IO VDD	-	Power supply for input/output.	91~94	VD20~23	O	Video data terminal(B47)
8,9	HD1,2	I/O	Host data terminal.	95	VSYNC	I/O	Vertical comparator/Composite comparator output.
10	CKT VSS	-	Connected to GND.	96	HSYNC	I/O	Horizonatal synchronizing signal.
11~15	HD3~7	I/O	Date data terminal.	97	VOE	I	Video output enable signal.
16	IOVSS	-	Ground terminal for Input/Output.	98	VCOVDD	-	Power supply of VCO.
17	TEST	I	Test terminal.	99	VCLK	I/O	Video clock terminal.
18	XTLVSS	I	Oscillator ground terminal.	100	VCOVSS	-	Ground of VCO.
19	XTLIN	I	Oscillator input terminal.	101	RESET	I	Reset signal input.
20	XTLOUT	O	Oscillator output terminal.	102	IOVSS	-	Ground terminal for Input/Output.
21	XTLVDD	-	Power supply for oscillator.	103	C2PO	I	Data error flag input.
22	CKTVDD	-	Power supply.	104	CDLRCK	I	L/R word clock input.
23~28	MD0~5	I/O	DRAM data / ROM data terminal.	105	CDDATA	I	Bit serial data input.
29	IOVDD	-	Power supply for Input/Output.	106	CDBCK	I	Bit clock output.
30,31	MD6,7	I/O	DRAM data/ROM data terminal.	107	DALRCK	O	L/R clock output.
32,33	MCE01	O	Chip enable output for ROM bank.	108	DADATA	O	Bit serial PCM audio signal output.
34~37	MD8~11	I/O	DRAM data/ROM data terminal.	109	DABCK	O	Bit clock output.
38	IOVSS	-	Ground terminal for Input/Output.	110	IOVDD	-	Power supply for Input/Output.
39~42	MD12~15	I/O	DRAM data/ROM address terminal.	111	XCK	I	Bit clock input terminal.
43	5VVDD	-	Power supply(+5V).	112	CKTVDD	-	Power supply.
44	LCAS	O	DRAM LCAS/ROM address terminal.	113	PIO12	O	Interact 2 signal output.
45	LCASIN	I	DRAM LCAS input.	114	PIO11	O	Non connect.
46	CKTVSS	-	Connect to GND.	115	PIO10	I	Host enable signal input.
47	MWE	O	DRAM write enable signal output.	116	PIO9	I	Boot ROM enable signal input.
48	UCAS	O	DRAM UCAS/ROM address terminal.	117	PIO8	O	Non connect.
49	IOVDD	-	Power supply for Input/Output.	118	PIO7	O	DAC emphasis signal output.
50	UCASIN	I	DRAM UCAS input terminal.	119	PIO6	I	CD-DA emphasis signal output.
51,52	RAS0,1	O	DRAM RAS0,1 terminal.	120	PIO5	O	Non connect.
53~57	MA9~5	O	DRAM data/ROM address terminal.	121	PIO4	O	FMV detect signal output.
58	IOVSS	-	Ground terminal for Input/Output.	122	PIO3	O	CD-DA video CD select signal output Low:Video CD.
59~63	MA4~0	O	DRAM data/ROM address terminal.	123	5VVDD	-	Power supply (+5V).
64	PIO0	O	ROM address extension terminal.	124	PIO2	O	Non connect.
65	IOVDD	-	Power supply for Input/output.	125	IOVSS	-	Ground for Input/Output.
66~72	VD0~6	O	Video data terminal (R6/CrCb6/YCrCb066)	126	PIO1	O	Non connect.
73	IOVSS	-	Ground terminal for Input/Output.	127	HA0	-	Host address input.
74~76	VD7~9	O	Video data terminal (R7/CrCb7/YCrCb7)(G0,1/Y0,1)	128	HA1	-	Host address input.
77	CKTVDD	-	Power supply.				

■ UPD6461GS-635(IC06):OSD

1.Terminal layout



2.Block diagram



3.Pin function

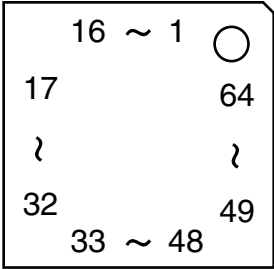
UPD6461GS-635

Pin No.	Symbol	Function	Description
1	CLK	Clock input	Input pin for the data read clock. The data input to the DATA pin is read at rising edges of the clock.
2	CS	Chip select input	Serial transfer is accepted when this pin is low.
3	DATA	Serial data input	Input pin for control data. Data is read in synchronization with the clock input to the CLK pin.
4	PCL	Power-on clear	Pin used for the power-on clear function. After power-on, set this pin from low to high to initialize the IC.
5	VDD	Power supply	Power supply pin.
6	CKOUT	Clock output	N-ch open-drain output pin used to check the oscillation frequency
7 8	OSCout OSCin	LC oscillator input/output (OSCin: External clock input)	Input and output pins for the oscillator for generating a dot clock. Connect the oscillation coil and capacitors to these pins (When an external clock input is selected by specifying a mask option, input an external clock (synchronized with Hsync) to the OSCin pin, Leave OSCout pin open.)
9	TEST	Test	Pin used for testing the IC. Usually, connect this pin to ground. The IC cannot enter test mode while this pin is connected to ground.
10	GND	Ground	Connect this pin to the system ground.
11	BLK1	Blanking signal output 1	Pin used to output the blanking signal for the video signal output from the VC1 pin. The blanking signal is high active. (When RGB separate blanking has been selected by specifying a mask option, This pin outputs the logical OR of RBLK, GBLK, and BBLK.)
12	VC1	Character signal output1	Pin used to output the blanking signal for the video signal output from the VC1 pin. The blanking signal is high active. (When RGB separate blanking has been selected by specifying a mask option, this pin outputs the logical OR of VR, VG and VB.)
13	BLK2 (RBLK)	Blanking signal output2 (Blanking R)	Pin used to output the blanking signal for the video signal output from the VC2 pin. The blanking signal is high active. (This pin outputs the blanking signal for the video signal output from the VR pin, The blanking signal is high active.)
14	VC2 (GBLK)	Character signal output2 (Blanking G)	Pin used to output a high-active character signal. (This pin outputs the blanking signal for the video signal output from the VG pin. The blanking signal is high active.)
15	VBLK (BBLK)	Blanking signal output2 (Blanking B)	Pin used to output the blanking signal for the video signals output from the VR, VG, and VB pins. The blanking signal is high active. (This pin outputs the blanking signal for the video signal output from the VB pin, The blanking signal is high active.)
16 17 18	VR VG VB	Character signal output	Pins used to output high-active character signals.
19	Vsync	Vertical synchronizing signal input	Input a low-active vertical synchronizing signal to this pin.
20	Hsync	Horizontal synchronizing signal input	Input a low-active horizontal synchronizing signal to this pin

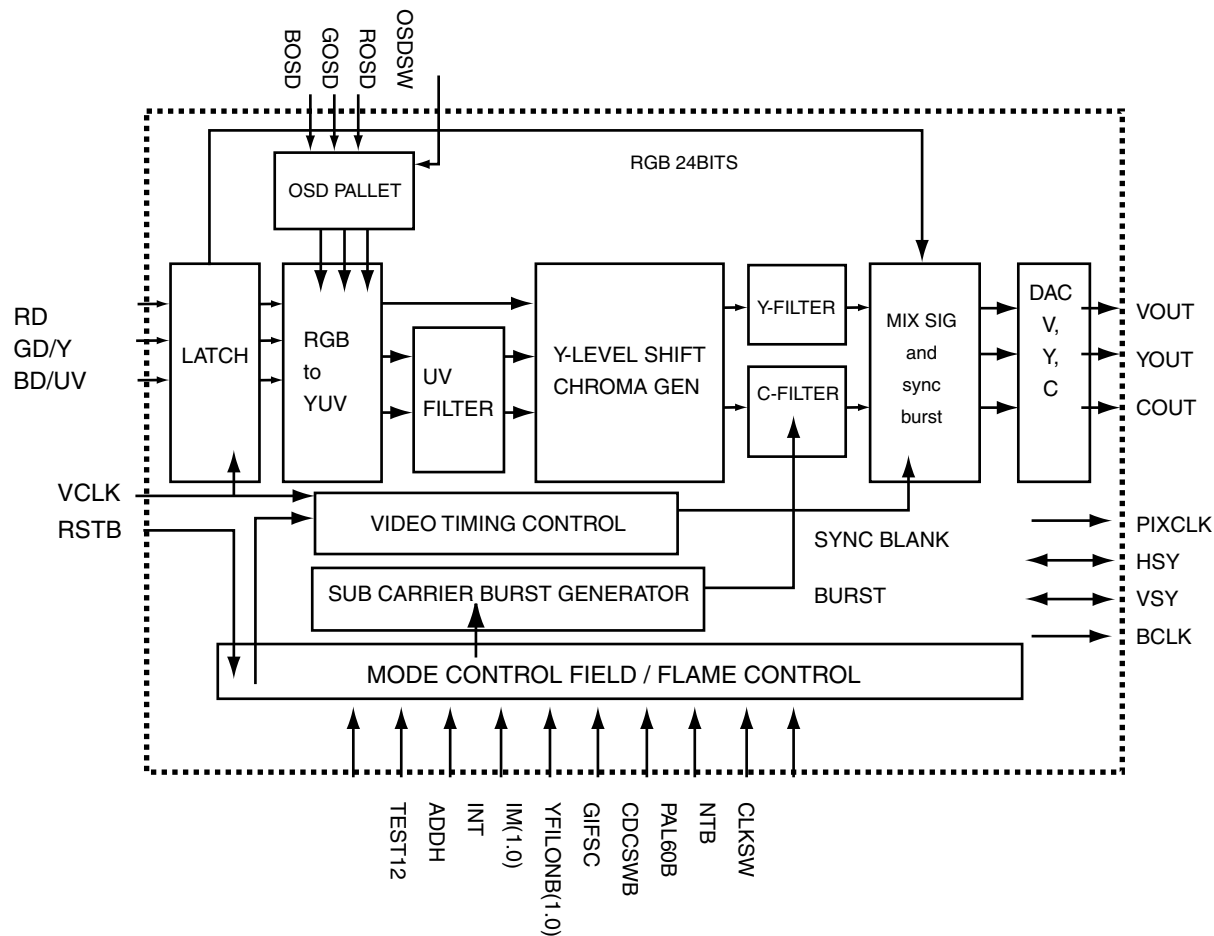
Symbols and functions indicated in parentheses for pins 13 to 15 apply when RGB separate blanking is selected with a mask option.

■ BU1424K(IC104):DIGITAL RGB ENCODER

1.Terminal layout



2.Block diagram



3.Pin function

BU1424K

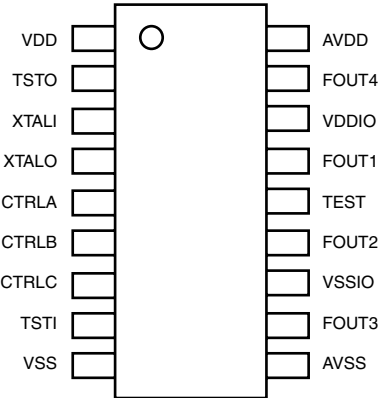
No.	NAME	FUNCTION		No.	NAME	FUNCTION	
1	BOSD	OSD BLUE DATA INPUT	*	33	SLABEB	SELECT MASTER/SLAVE	*
2	GD0/Y0	GREEN DATA Bit0(LSB)		34	ADDH	+0.5/-0.5LINE at NON-INTER	*
3	GD1/Y1	GREEN DATA Bit1		35	VREF-C	DAC BIAS	
4	GD2/Y2	GREEN DATA Bit2		36	CGND	CHROMA OUTPUTGROUND	
5	GD3/Y3	GREEN DATA Bit3		37	COUT	CHROMA OUTPUT	
6	GD4/Y4	GREEN DATA Bit4		38	VGND	Composite Output Ground	
7	GD5/Y5	GREEN DATA Bit5		39	VOUT	COMPOSITE OUTPUT	
8	GD6/Y6	GREEN DATA Bit6		40	AVSS	Analog Ground (DAC,VREF)	
9	GND	DIGITAL GROUND		41	AVDD	ANALOG(DAC) VDD	
10	GD7/Y7	GREEN DATA Bit7(MSB)		42	IR	REFERENCE RESISTOR	
11	BD0/UV0	BLUE DATA Bit0(LSB)		43	AVDD	ANALOG(VREF) VDD	
12	BD1/UV1	BLUE DATA Bit1		44	YGND	Luminance Output Ground	
13	BD2/UV2	BLUE DATA Bit2		45	YOUT	Luminance Output	
14	BD3/UV3	BLUE DATA Bit3		46	G4FSC	4FSC/32FSC at PALCD-G	*
15	OSDSW	OSD ENABLE/DISABLE	*	47	YFILON2B	Y-FILSEL THROU/FILON2	**
16	CDGSWB	SELECT Video-CD/CD-G		48	YCOFF	DAC(YOUT,COUT)OFF	*
17	BD4/UV4	BLUE DATA Bit4		49	YFILON1B	Y-FILSEL THROU/FILON1	**
18	BD5/UV5	BLUE DATA Bit5		50	PAL60B	NORMAL/PAL60 at PALMODE	**
19	BD6/UV6	BLUE DATA Bit6		51	VCLK	Video Clock Input	
20	BD7/UV7	BLUE DATA Bit7(MSB)		52	RSTB	NORMAL/RESET	**
21	GND	DIGITAL GROUND		53	CLKSW	SEL*1CLK/*2CLK	
22	NTB	SELECT NISC/PAL MODE		54	RD0	RED DATA Bit(LSB)	*
23	IM0	SELECT YUV/RGB	*	55	RD1	RED DATA Bit1	*
24	IM1	SELECT DAC/NORMAL	*	56	RD2	RED DATA Bit2	*
25	TEST1	normally pull down to GND	*	57	ROSD	OSD RED DATA INPUT	*
26	TEST2	SELECT U/V TIMING	*	58	RD3	RED DATA Bit3	*
27	VSY	V-SYNC INPUT or OUTPUT		59	RD4	RED DATA Bit4	*
28	HSY	H-SYNC INPUT or OUTPUT		60	RD5	RED DATA Bit5	*
29	PIXCLK	1/2freq of BCLK		61	VDD	DIGITAL VDD	
30	BCLK	INTERNAL CLOCK OUTPUT		62	RD6	RED DATA Bit6	*
31	VDD	DIGITAL VDD		63	RD7	RED DATA Bit7	*
32	INT	Interface /Non-interface		64	GOSD	OSD GREEN DATA INPUT	*

* The pin built-in pull-down resistor

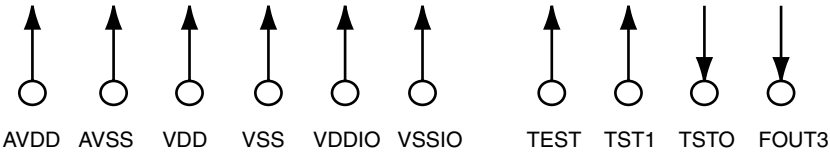
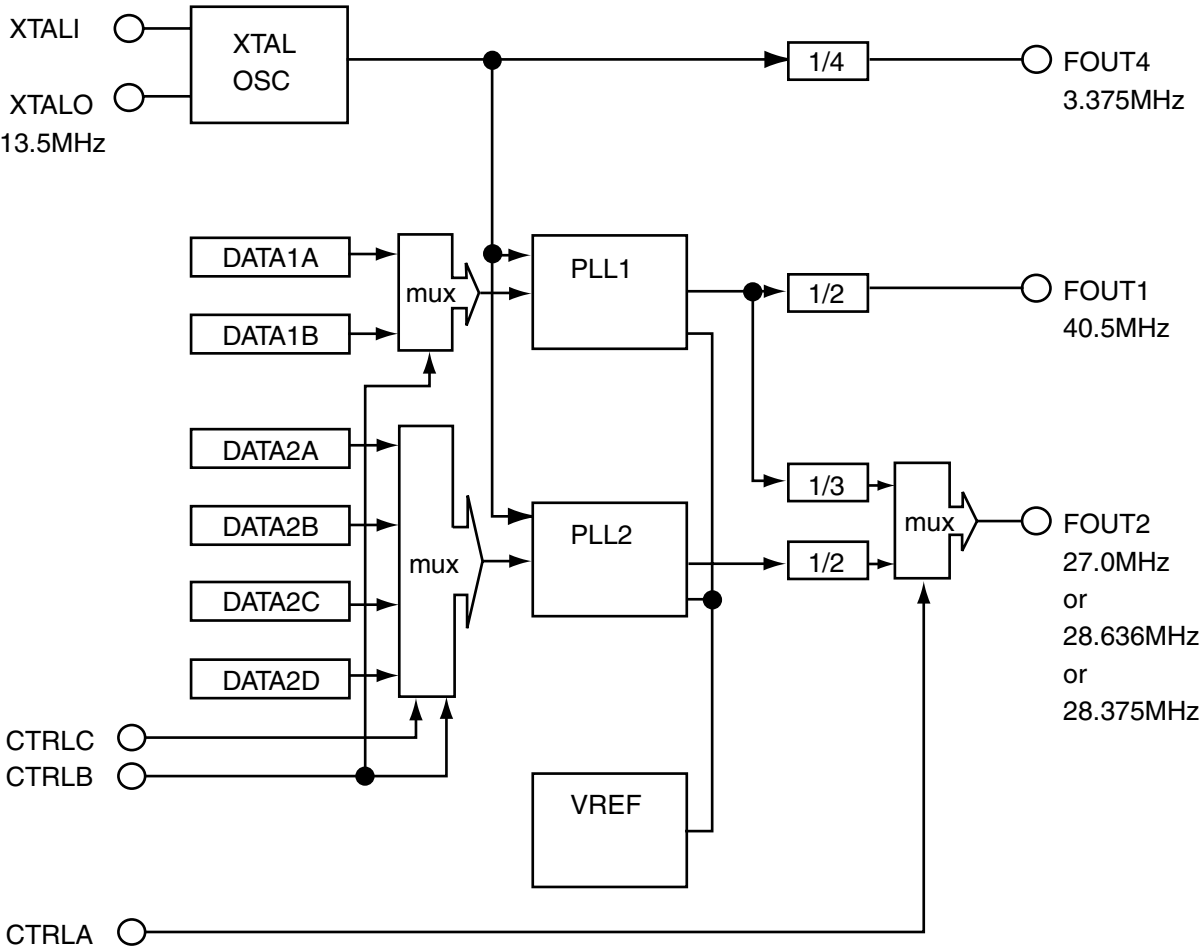
* * The pin built-in pull-up resistor

BU2173F(IC105):VCO

1.Terminal layout



2.Block diagram



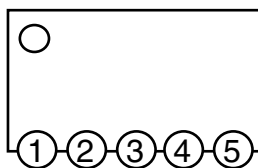
3.Function

BU2173F(IC105)

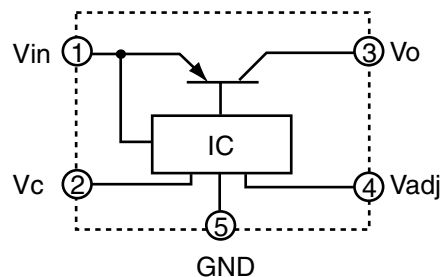
Pin No.	Symbol	Function
1	VDD	Digital VDD
2	TSTO	Use open this Pin for NORMAL OPERATION
3	XTALI	Reference oscillation input
4	XTALO	Reference oscillation output
5	CTRLA	Frequency select for V-CD / CD-G
6	CTRLB	Force H for NORMAL OPERATION
7	CTRLC	RAL / NTSC select for CD-G MODE
8	TSTI	Force L for NORMAL OPERATION
9	VSS	Digital GND
10	AVSS	Analog GND
11	FOUT3	Use open this Pin for NORMAL OPERATION
12	VSSIO	I / O GND
13	FOUT2	CLOCK OUTPUT (2)
14	TEST	Force L for NORMAL OPERATION
15	FOUT1	CLOCK OUTPUT (1)
16	VDDIO	I / O VDD
17	FOUT4	CLOCK OUTPUT (4)
18	AVDD	Analog VDD

■ PQ20VZ11(IC107):Reguratrpr

1.Terminal layout

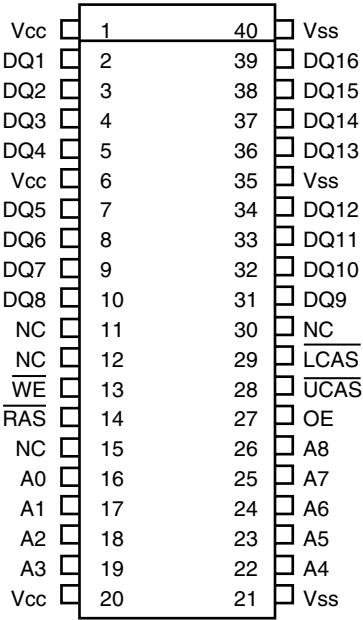


2.Block daigram



■ V53C16258HK40(IC103):4M DRAM

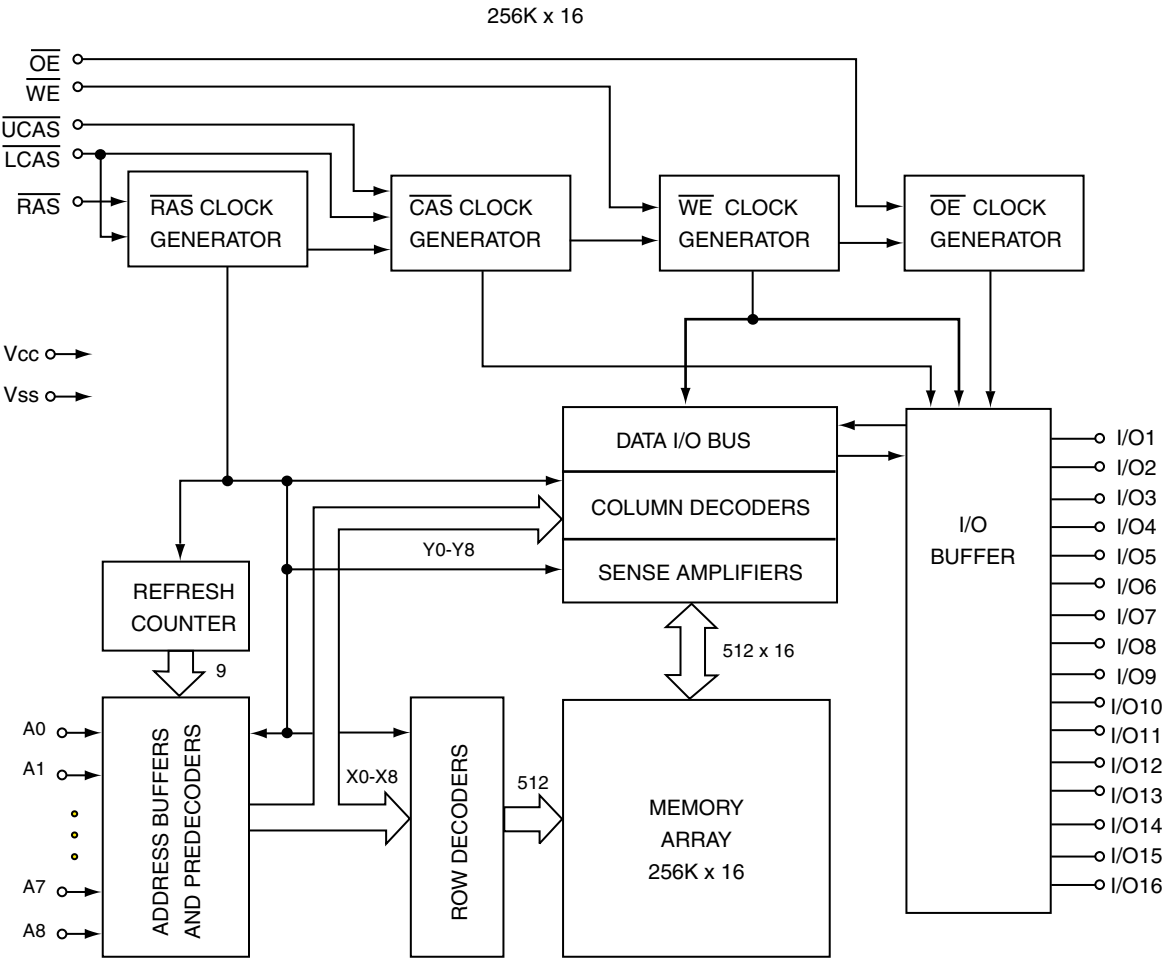
1.Terminal layout



2.Pin function

Symbol	Function
A0-A8	Adress Inputs
$\overline{\text{RAS}}$	Row Address Strobe
$\overline{\text{UCAS}}$	Column Address Strobe / Upper Byte Control
$\overline{\text{LCAS}}$	Column Address Streobe / Lower Byte Control
$\overline{\text{WE}}$	Write Enable
OE	Output Enable
DQ1-DQ16	Data Input, Output
Vcc	+5V Supply
Vss	0V Supply
NC	No Connect

3.Block diagram

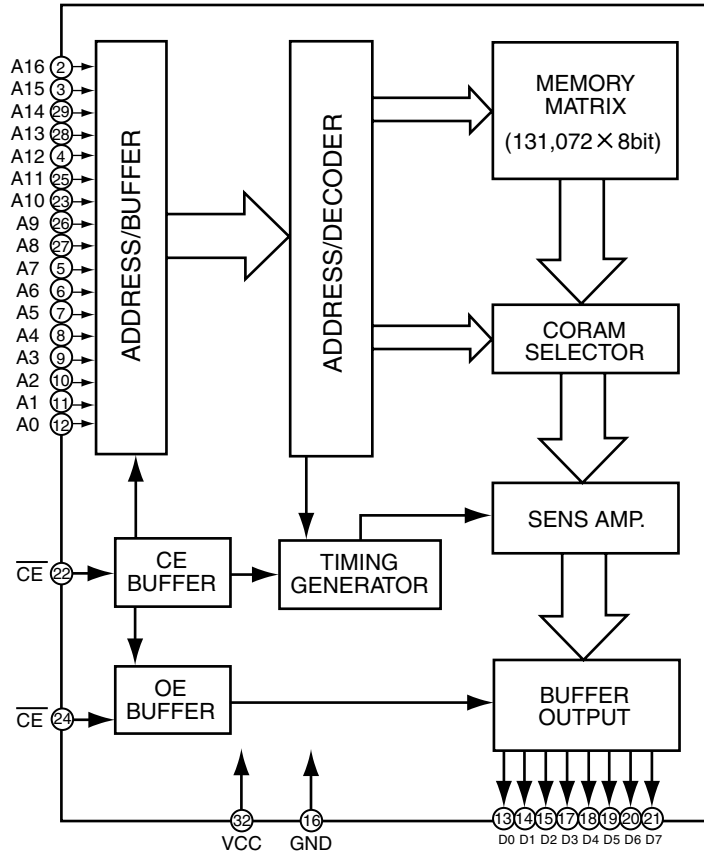


■ LH531HEG(IC102)

1.Terminal Layout

VPP	1	32	VCC
A16	2	31	A18
A15	3	30	A17
A12	4	29	A14
A7	5	28	A13
A6	6	27	A8
A5	7	26	A9
A4	8	25	A11
A3	9	24	CE
A2	10	23	A10
A1	11	22	CE
A0	12	21	D7
D0	13	20	D6
D1	14	19	D5
D2	15	18	D4
GND	16	17	D3

2.Block diagram

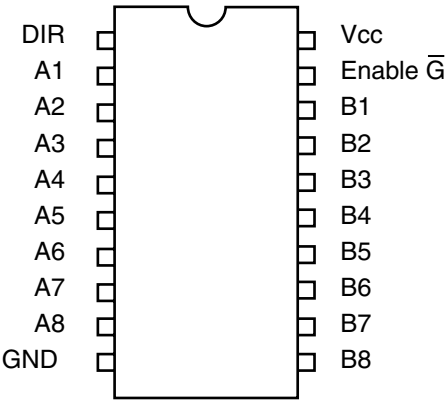


3.Pin Function

Pin No.	Symbol	I/O	Function
1	VPP	-	Power supply.
2	A16	I	Adress input.
3	A15	I	Adress input.
4	A12	I	Adress input.
5 ~12	A7A0	I	Adress input.
13~15	D0D2	O	Data output.
16	GND	-	Connect to GND
17~21	D3D7	O	Data output.
22	CE	I	Chip enable input.
23	A10	I	Adress input.
24	CE	I	Chip enable input.
25	A11	I	Adress input.
26,27	A9,A8	I	Adress input.
28,29	A13,A14	I	Adress input.
30,31	D17,D18	O	Data output.
32	VCC	-	Power supply.

■ HD74HCT245FP(IC114):EEP ROM

1.Terminal layout



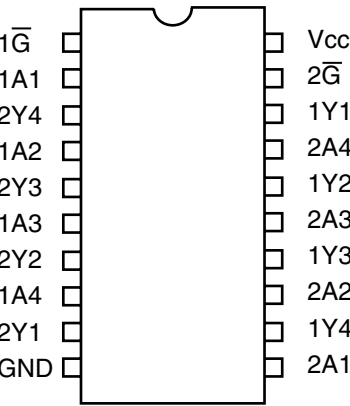
2.Pin function

ENABLE $\overline{G}$	DIRECTION CONTROL DIR	OPERATION
L	L	B data to A bus
L	H	A data to B bus
H	X	Isolation

H : High level
L : Low level
X : Irrelevant

■ HD74HCT244FP(IC113):EEP ROM

1.Terminal layout



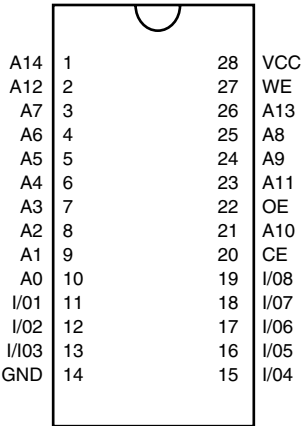
2.Pin function

INPUTS		OUTPUT
$1\overline{G}, 2\overline{G}$	A	Y
L	L	L
L	H	H
H	X	Z

H : High Level
L : Low Level
X : Irrelevant
Z : High Impedance

■ TC55257DFL85L(IC112):256 Bit Static RAM

1.Terminal layout



2.Pin function

Pin No.	Symbol	I/O	Function
1 ~10	A14,12,17~ 0	I	Address input terminal
11~ 13	I/O1 ~ I/O3	I/O	Data input / output terminal
14	GND	-	Connected to GND
15~ 19	I/O4 ~ I/O8	I/O	Data input / output terminal
20	CE	I	Chip enable terminal
21	A10	I	Address input terminal
22	OE	I	Output enable terminal
23~26	A11,9,8,13	I	Address input terminal
7	WE	I	Write enabale terminal
28	VCC	-	Power supply

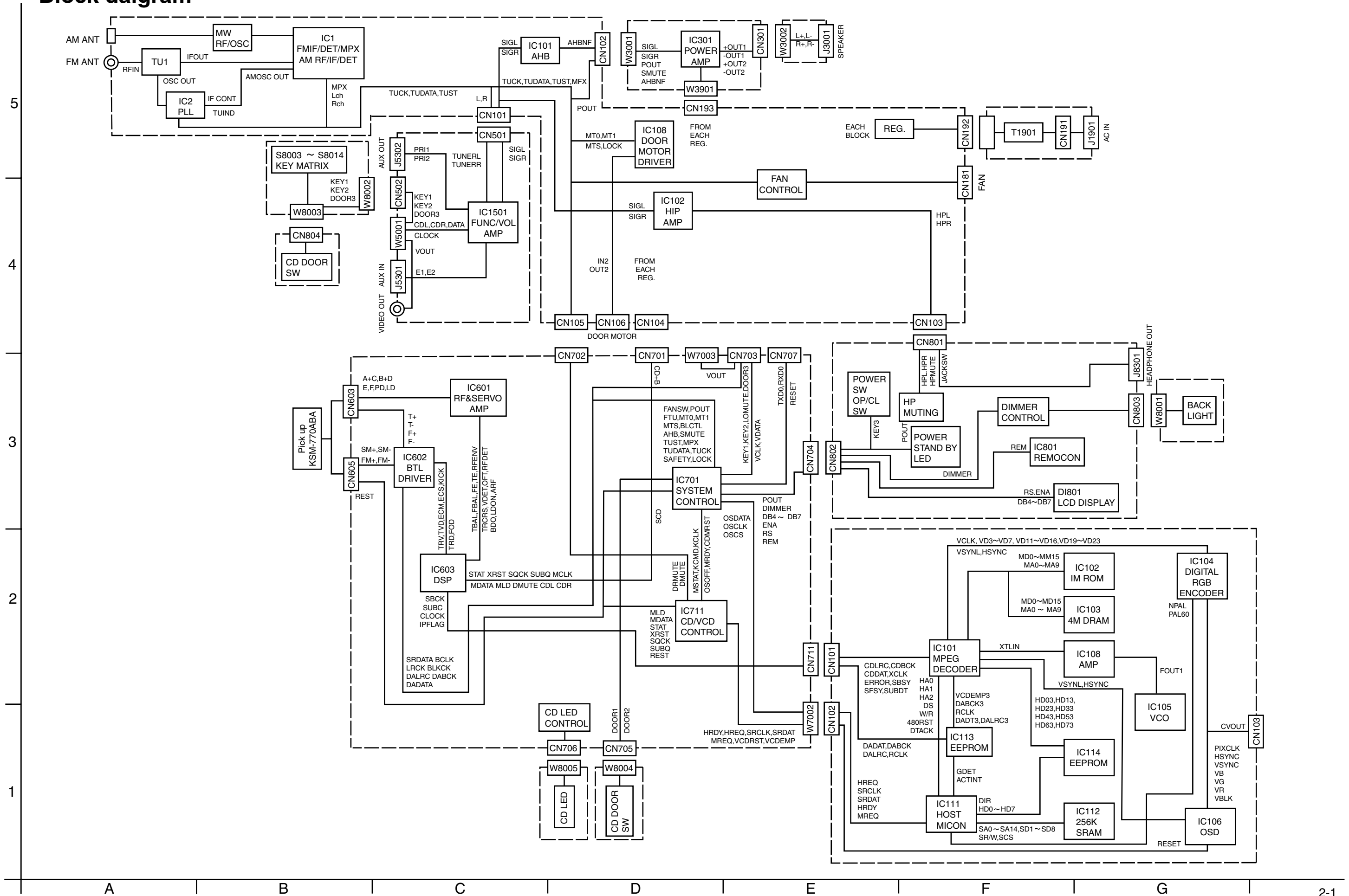


VICTOR COMPANY OF JAPAN, LIMITED

AUDIO & COMMUNICATION BUSINESS DIVISION

PERSONAL & MOBILE NETWORK BUSINESS UNIT. 10-1,1Chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

Block daigram



■ CD servo control section

FS-SD58V/FS-SD78V/FS-SD98V

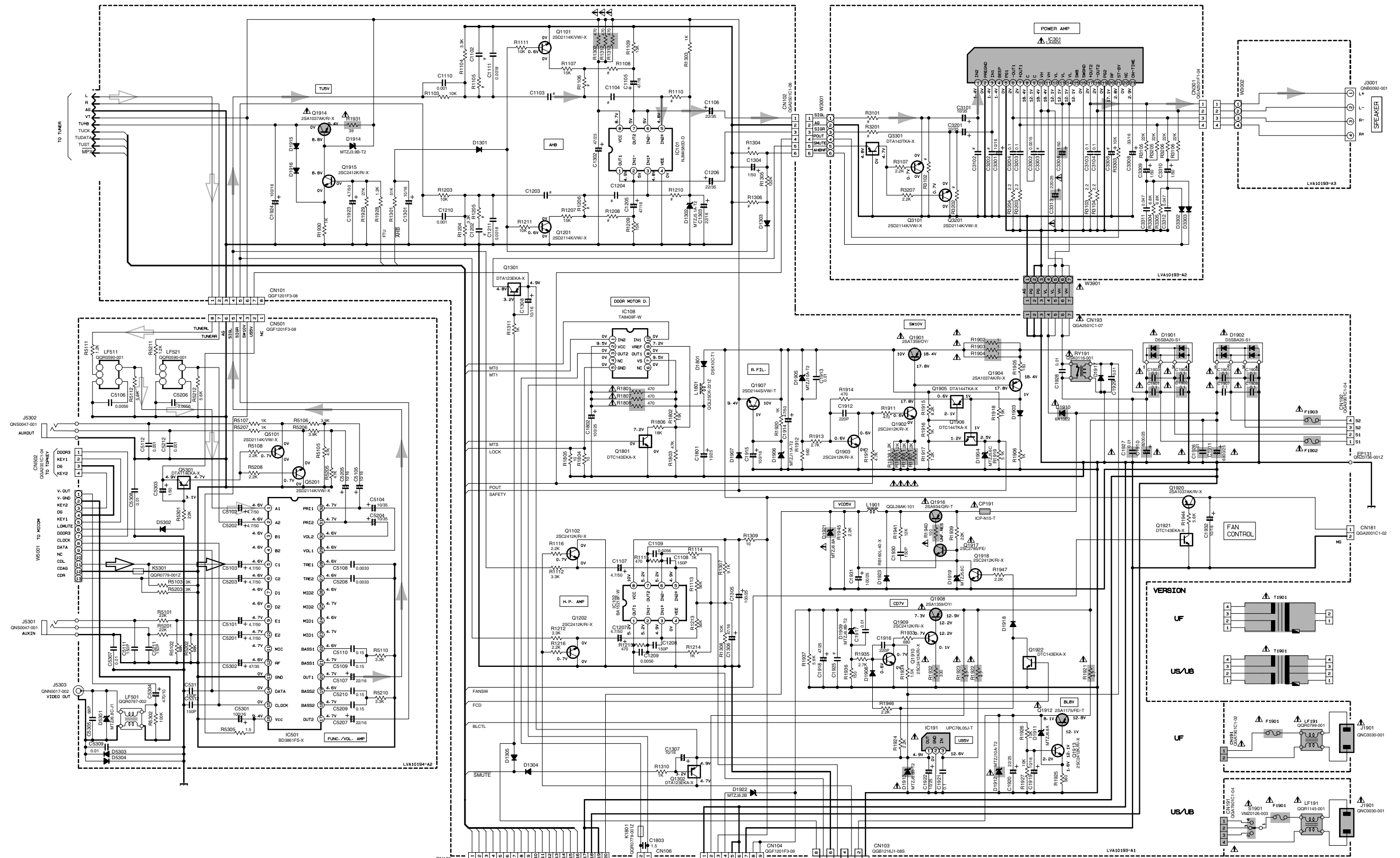


1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
CONDITION: MODE : STOP
2. UNLESS OTHERWISE SPECIFIED.

ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF (μF).
ALL INDUCTANCE VALUES ARE IN HENRY(H).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

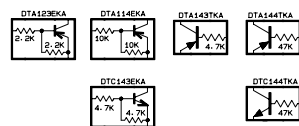
➔ CD Signal

■ Power supply & main circuit section



- NOTES**
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — CD STOP MODE
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$ CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN P(FPFD).
ALL INDUCTANCE VALUES ARE IN H(HENRY).
ALL CAPACITORS ARE SHOWN IN THE FORM
OF CAPACITANCE (μ F)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS133

TABLE1 DIGITAL TRANSISTOR

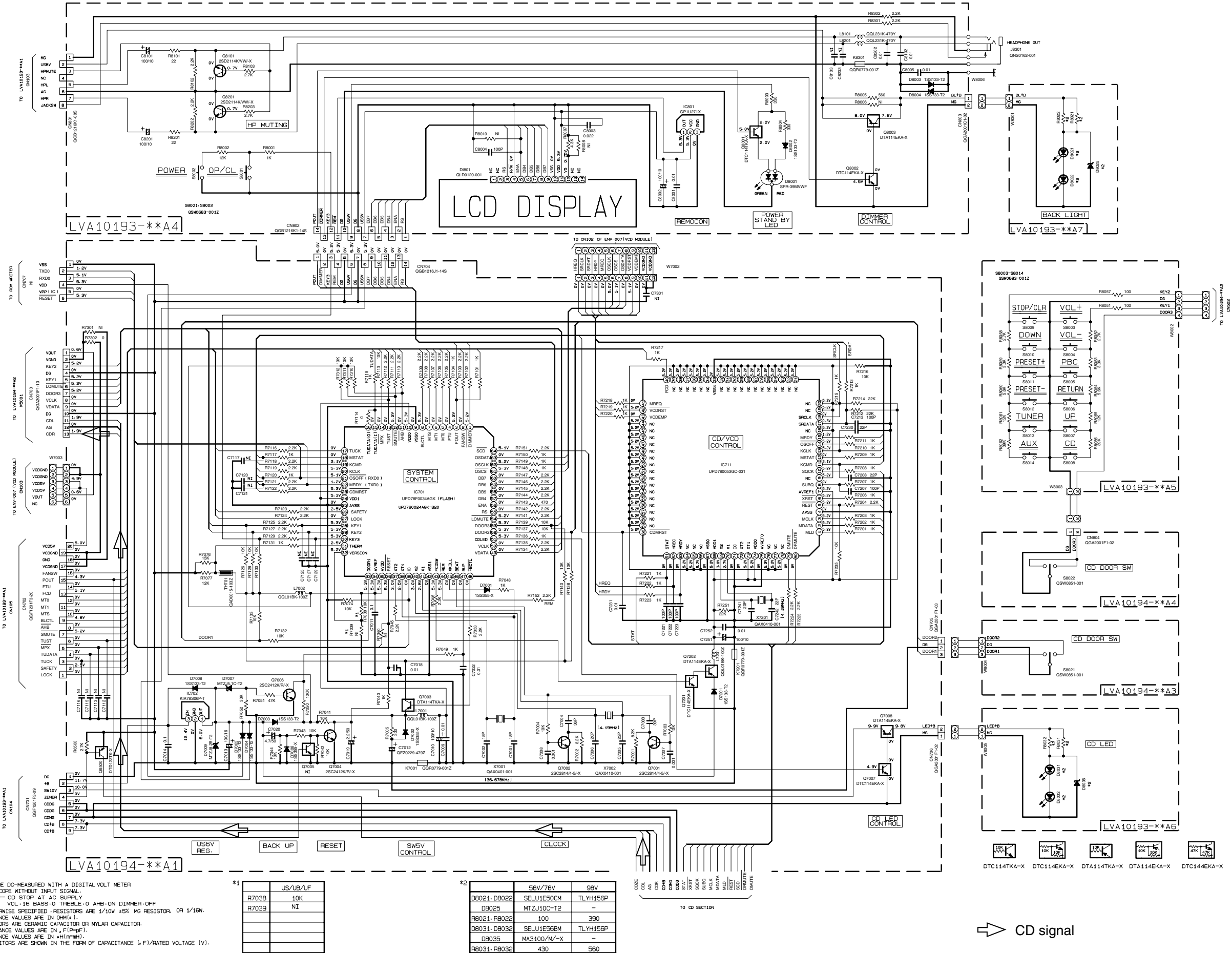
[illegible]

	T1901	F1901	F1902	F1903
US/UB	QGT086-004	QMF51E2-1R0-J1	QMF51E2-5R0-J1	QMF51E2-3R15
UF	QGT086-006	QMF51E2-R50-J1	QMF51E2-6R3-J1	QMF51E2-3R15

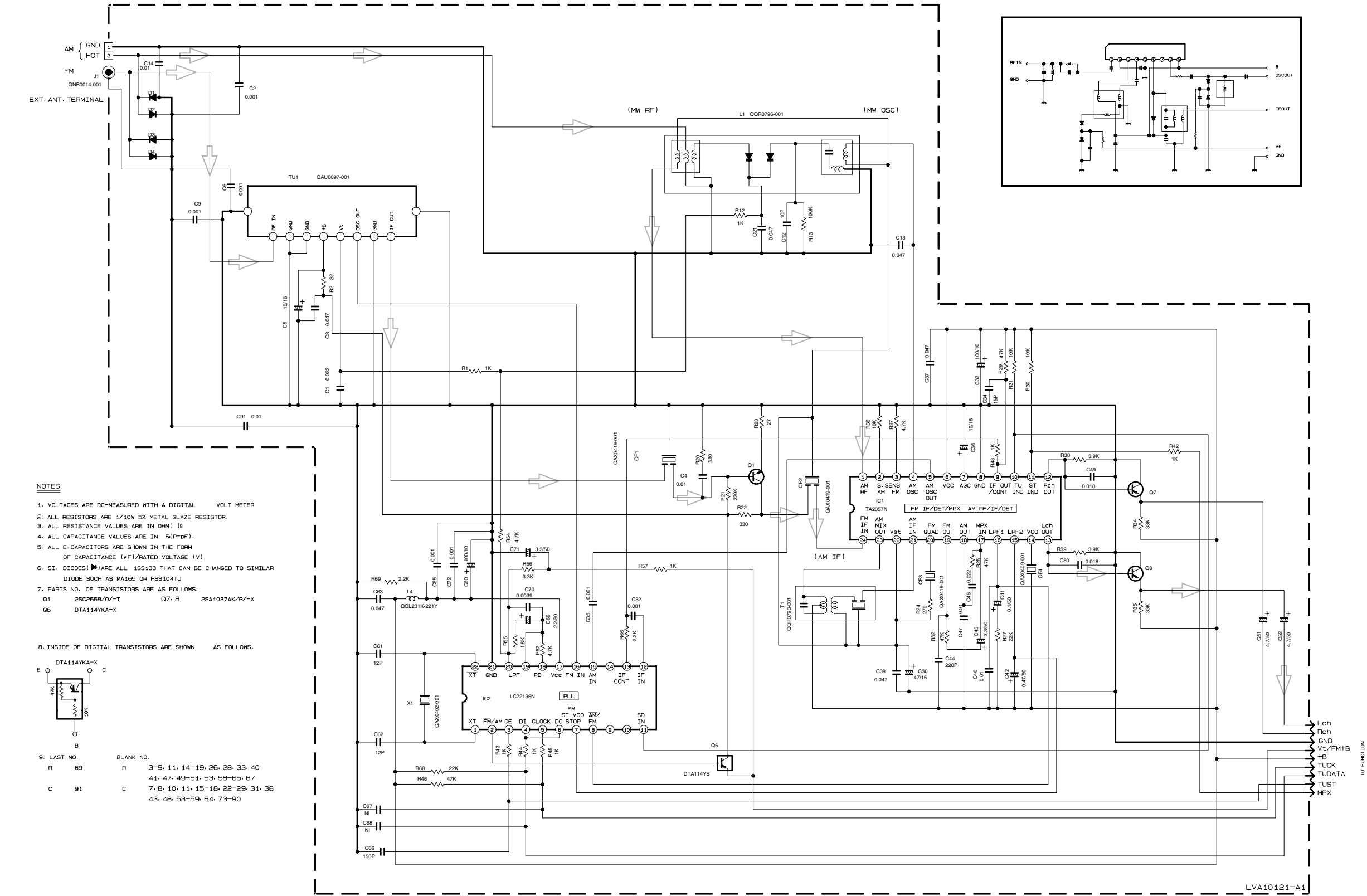
-  Tuner signal
-  CD signal
-  Main signal

 Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ System control section

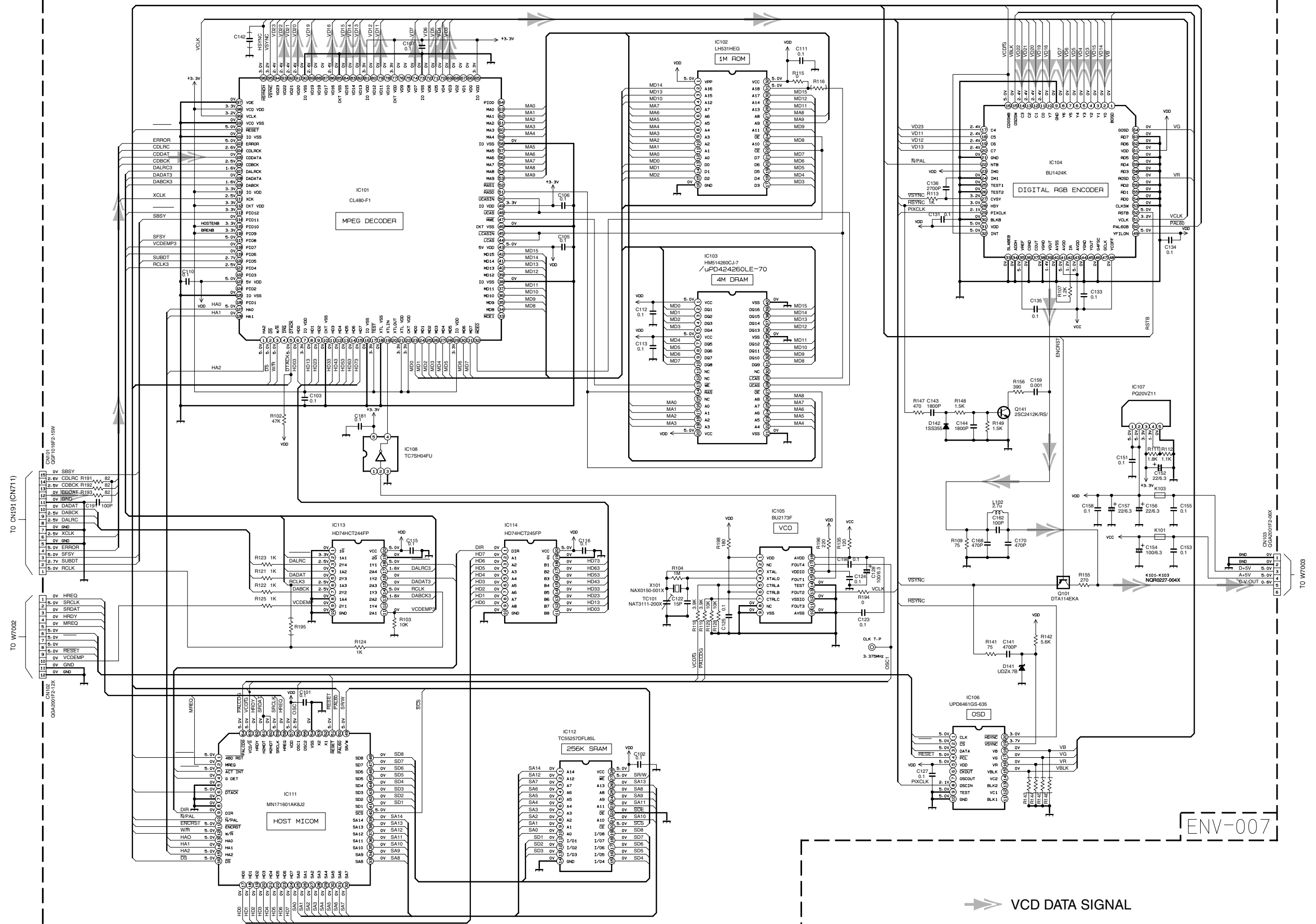


Tuner section



Tuner signal

VCD section



Printed circuit boards

5

4

3

2

1

■ Power IC board

■ Main board

■ LCD lamp board

■ Lamp board

■ Speaker jack board

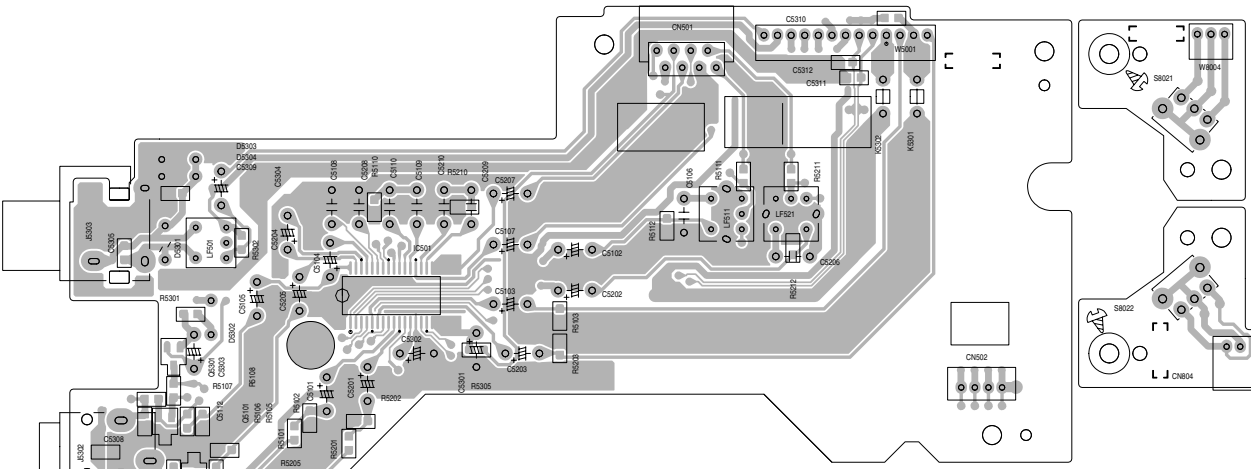
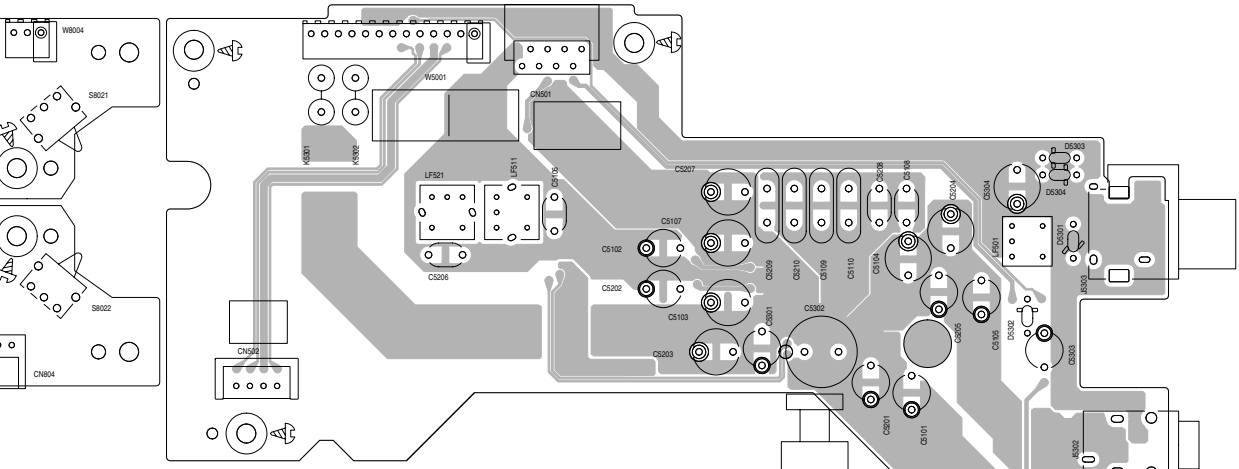
■ Switch board

■ LCD board

Note:10193.001a/ FS-SD58V/78V/98V

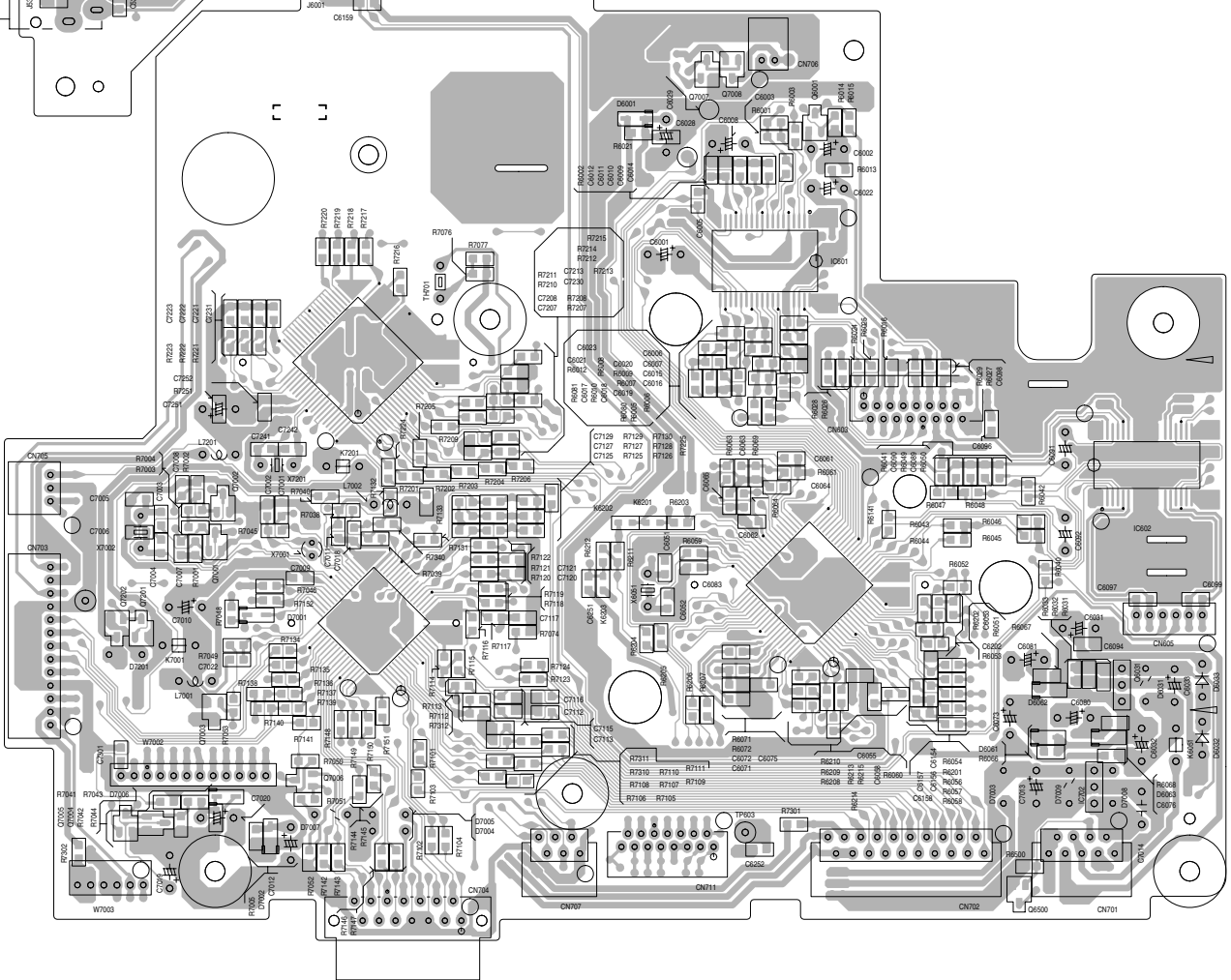
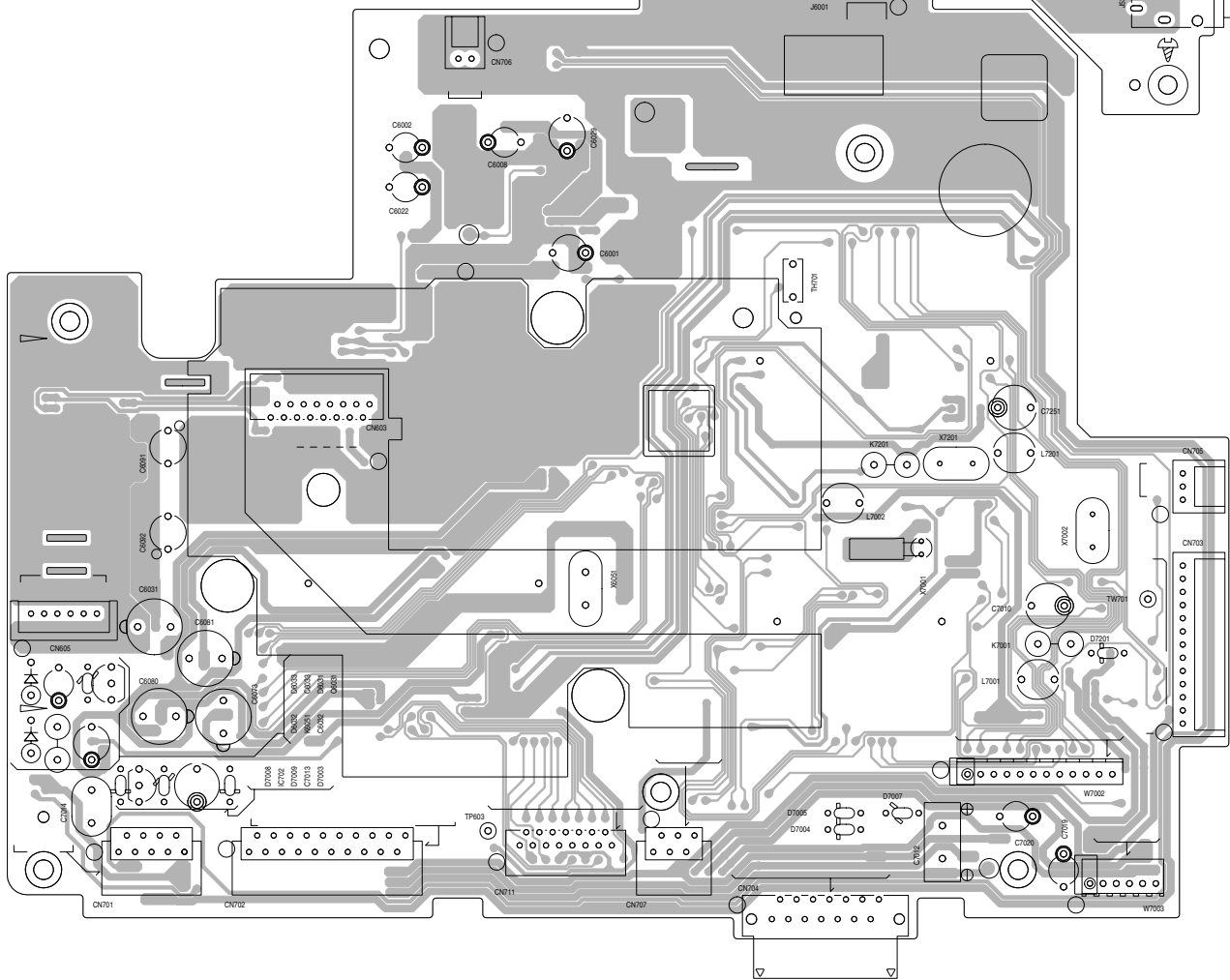
■Line board(foward side)

■Line board(reverse side)



■CD servo board(foward side)

■CD servo board(reverse side)

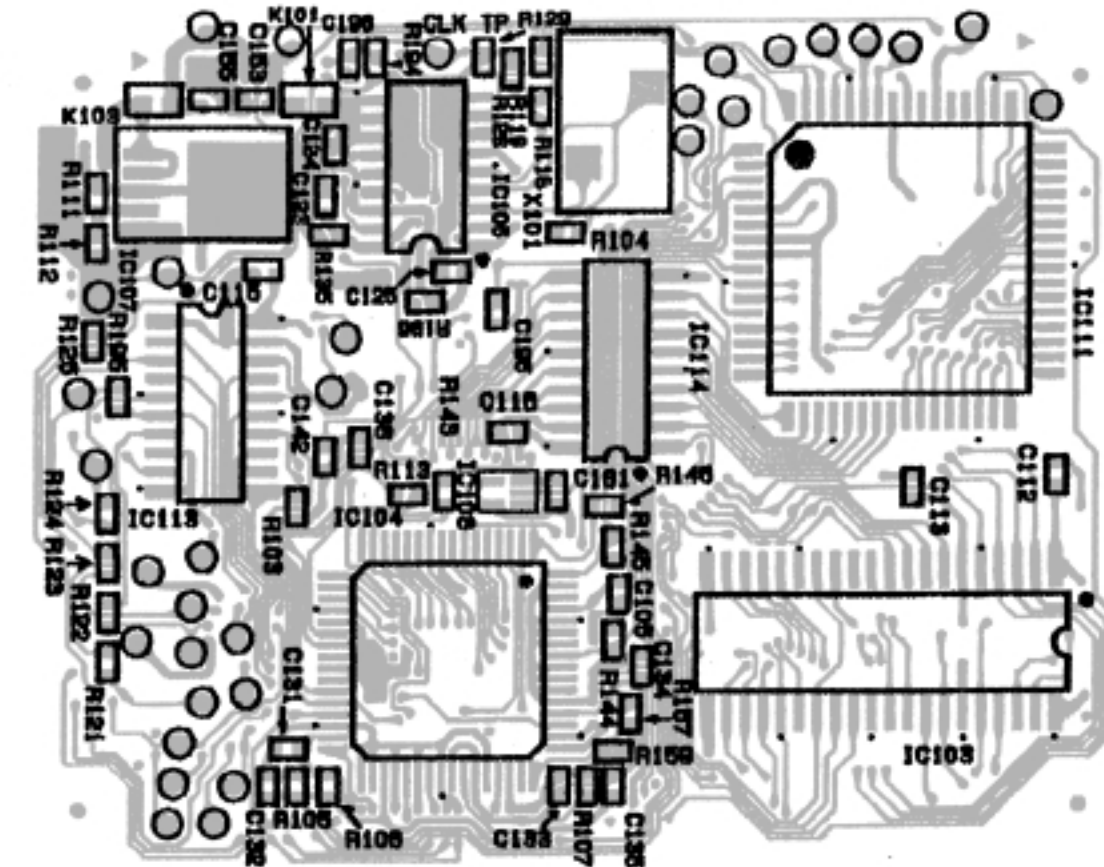


Note:lvb10194.001a/FS-SD58V/78V/98V

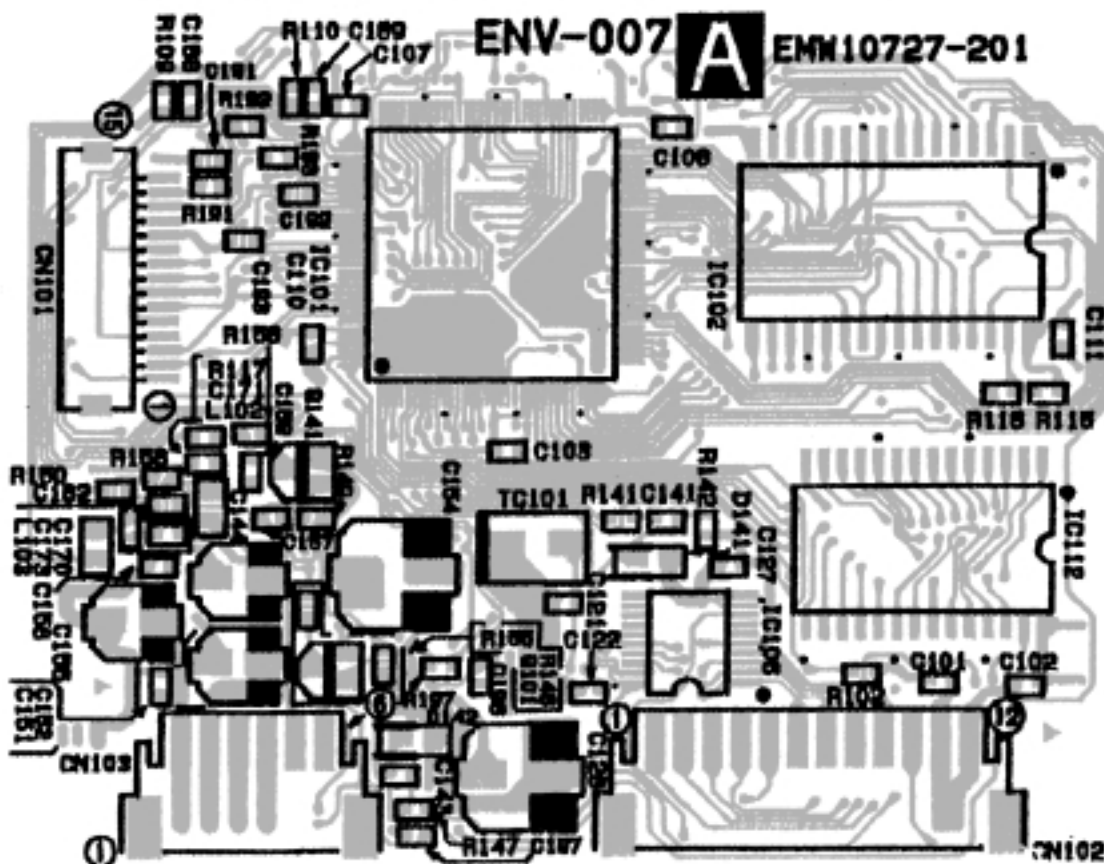
5
4
3
2
1

A B C 2-8 D E F G H

■ VCD board(reverse side)



■ VCD board(foward side)



< M E M O >

PARTS LIST

[FS-SD58V]
[FS-SD78V/FS-SD98V]

* All printed circuit boards and its assemblies are not available as service parts.

Area Suffix

FS-SD58V

UB ----- Hong Kong

UF ----- China

US ----- Singapore

Area Suffix

FS-SD78V / FS-SD98V

UF ----- China

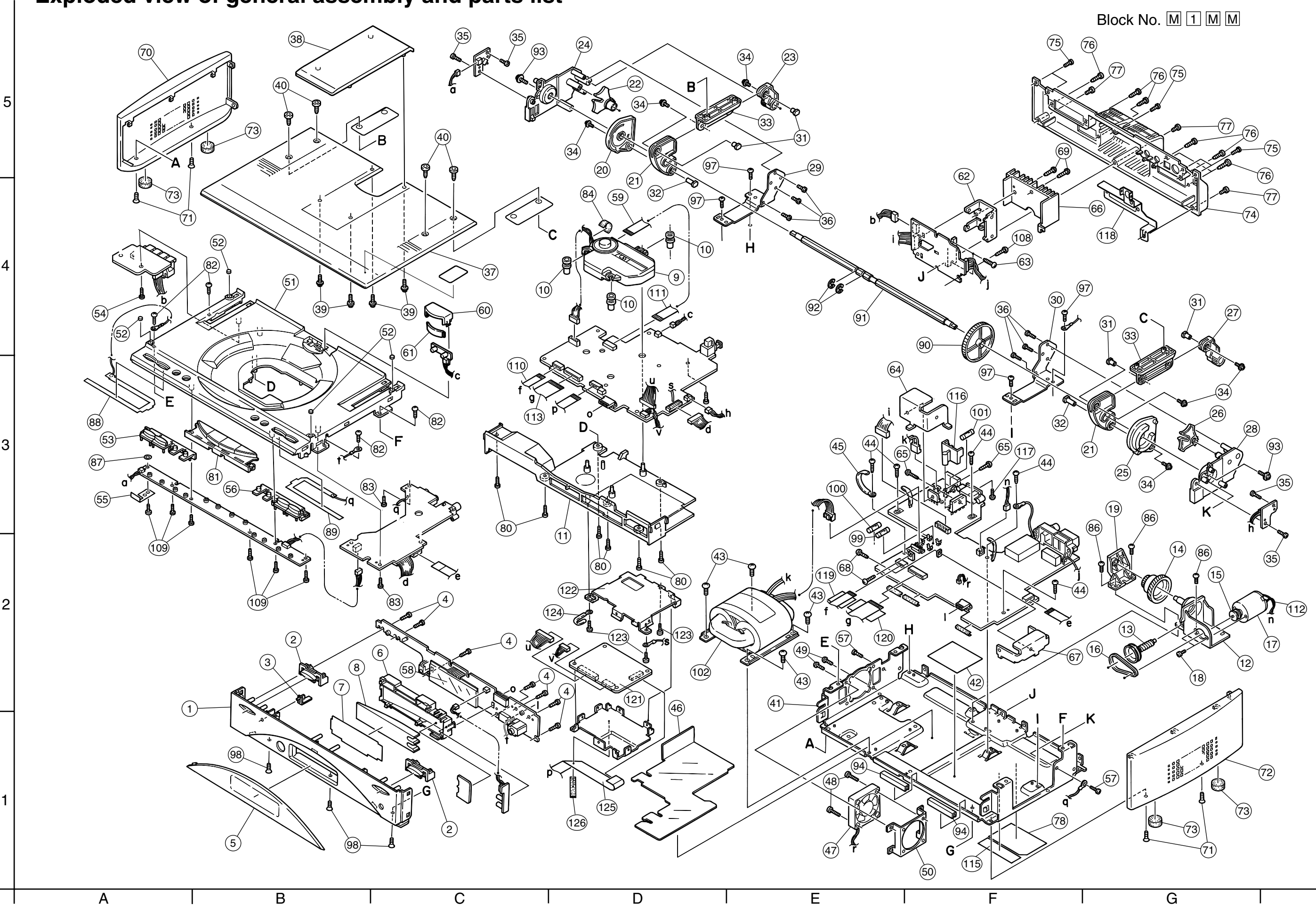
US ----- Singapore

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< M E M O >

Exploded view of general assembly and parts list



■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10325-003A	FRONT PANEL	1	FS-SD98V	UF,US
		LV10325-001A	FRONT PANEL	1	FS-SD58V/78V	UB,UF,US
	2	LV31677-001A	PUSH BUTTON 1	2	ABS/PLATING	
	3	LV41520-001A	INDICATOR	1	STANDBY LED	
	4	QYSDSF2608Z	SCREW	7	FRONT+SW PWB+BT	
	5	LV31678-006A	LENS	1	FS-SD98V	UF,US
		LV31678-005A	LENS	1	FS-SD58V/78V	UB,UF,US
	6	LV31679-001A	LCD CASE	1	ABS	
	7	LV41519-001A	SHEET	1	LCD FILTER	
	8	LV31680-001A	REFLECTOR	1	PMMA/MILKY	
	9	KSM-770ABA	CD MECHA	1	CD MECHA	
	10	LV40770-002A	INSULATOR	3		
	11	LV10425-001A	VCD CHASSIS	1	MIPS	
	12	LV31687-001A	MOTOR BASE	1	ABS	
	13	LV41522-001A	WORM GEAR	1	POM	
	14	LV41523-001A	WORM WHEEL	1	POM	
	15	LV41536-001A	PULLEY	1	POM	
	16	LV41598-001A	BELT	1		
	17	QAR0100-001	DC MOTOR	1		
	18	QYSPSP3004Z	SCREW	2	DC MOTOR+M.BASE	
	19	LV31688-001A	WHEEL STOPPER	1	ABS	
	20	LV31691-001A	G.WHEEL(L)	1	POM	
	21	LV31690-002A	ARM	2	FS-SD98V	UF,US
		LV31690-001A	ARM	2	FS-SD58V/78V	UB,UF,US
	22	LV31693-001A	G.GEAR(L)	1	PBT	
	23	LV31695-002A	ARM GEAR(L)	1	FS-SD98V	UF,US
		LV31695-001A	ARM GEAR(L)	1	FS-SD58V/78V	UB,UF,US
	24	LV31697-002A	GEAR BASE(L)	1	PBT	
	25	LV31692-001A	G.WHEEL(R)	1	POM	
	26	LV31694-001A	G.GEAR(R)	1	PBT	
	27	LV31696-002A	ARM GEAR(R)	1	FS-SD98V	UF,US
		LV31696-001A	ARM GEAR(R)	1	FS-SD58V/78V	UB,UF,US
	28	LV31698-002A	GEAR BASE(R)	1	PBT	
	29	LV32127-001A	GEAR BKT(L)	1	EGC T1	
	30	LV32128-001A	GEAR BKT(R)	1	EGC T1	
	31	LV41929-001A	SHAFT 4	4	FS-SD58V/78V	UB,UF,US
		LV41929-002A	SHAFT 4	4	FS-SD98V	UF,US
	32	LV41929-001A	SHAFT 5	2	FS-SD58V/78V	UB,UF,US
		LV41930-002A	SHAFT 5	2	FS-SD98V	UF,US
	33	LV31701-001A	DOOR BASE	2	FS-SD58V/78V	UB,UF,US
		LV31701-002A	DOOR BASE	2	FS-SD98V	UF,US
	34	QYSPSFG2605N	SCREW	6	DOOR BASE+ARM	
	35	QYSDSF2606Z	SCREW	4	SW.PWB+G.BASE	
	36	QYSDSF2606Z	SCREW	6	G.BKT+G.BASE	
	37	LV10328-003A	CD DOOR	1	FS-SD58V/78V	UB,UF,US
		LV10328-004A	CD DOOR	1	FS-SD98V	UF,US
	38	LV31702-008A	DOOR COVER	1	FS-SD58V	
		LV31702-009A	DOOR COVER	1	FS-SD78V	

■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	38	LV31702-010A	DOOR COVER	1	FS-SD98V	
	39	LV41758-001A	CUSTOM SCREW	4	D.C.BKT+D.COVER	
	40	LV41587-001A	SPECIAL SCREW	4	CD DOOR+D.BASE	
	41	LV10329-001A	BOTTOM CHASSIS	1	EGC T1.0	
	42	LV30064-068A	SPACER	1	BOTTOM	
	43	QYSBST4006Z	T.SCREW	4	BOTTOM.C+TRANS	
	44	QYSBST3006Z	T.SCREW	5	BOTTOM+MAIN PWB	
	45	VKZ4001-110	WIRE HOLDER	1		
	46	LV31901-002A	BARRIER	1	BETW.AC&BTM	
	47	QAR0148-001	FAN MOTOR	1		
	48	QYSPST3012Z	T.SCREW	2	FAN+F.BKT	
	49	QYSBST3006Z	T.SCREW	2	F.BKT+BOTTOM	
	50	LV41799-001A	FAN BRACKET	1		
	51	LV10327-006A	TOP PANEL	1	FS-SD98V	US,UF
		LV10327-005A	TOP PANEL	1	FS-SD58V/78V	UB,UF,US
	52	LV41821-002A	FELT	4	FS-SD98V	UF,US
		LV41821-001A	FELT	4	FS-SD58V/78V	UB,UF,US
	53	LV31681-002A	PUSH BUTTON 3	1	ABS/PLATING	
	54	QYSDSF2608Z	SCREW	1		
	55	LV41828-001A	PROTECTOR	1	FOR TOP	
	56	LV31682-002A	PUSH BUTTON 2	1	ABS/PLATINGR	
	57	QYSDSF2606Z	TAPPING SCREW	2		
	58	QLD0120-001	L.C.DISPL.PANEL	1		
	59	QUQ910-1607BJ	FFC WIRE	1		
	60	LV31686-001A	LED BOX	1	FS-SD58V/78V	
		LV31686-002A	LED BOX	1	FS-SD98V	
	61	LV41521-001A	LED COVER	1	ABS	
	62	LV31704-001A	IC HOLDER	1	AL T2	
	63	QYSBSF3010Z	SCREW	2	IC+IC HOLDER	
	64	LV31849-001A	HEAT SINK2	1	AL T2	
	65	QYSBSF3010Z	SCREW	2	DIODE+H.SINK2	
	66	LV31705-002A	HEAT SINK	1	AL	
	67	LV31850-001A	HEAT SINK3	1	AL T2	
	68	QYSBSF3010Z	SCREW	2	TR+H.SINK3	
	69	QYSBSF3008Z	SCREW	2	IC HOLDER+H.SIN	
	70	LV10330-003A	SIDE PANEL(L)	1	FS-SD98V	UF,US
		LV10330-001A	SIDE PANEL(L)	1	FS-SD58V/78V	UB,UF,US
	71	QYSSST3006Z	SCREW	4	S.PANEL+BOTTOM	
	72	LV10331-001A	SIDE PANEL(R)	1	FS-SD58V/78V	UB,UF,US
		LV10331-003A	SIDE PANEL(R)	1	FS-SD98V	UF,US
	73	LV41832-001A	FOOT	4	SIDE PANEL	
	74	LV10332-208A	REAR PANEL	1	FS-SD58V/78V	UF
		LV10332-210A	REAR PANEL	1	FS-SD98V	UF
		LV10332-207A	REAR PANEL	1	FS-SD58V/78V	UB,US
		LV10332-209A	REAR PANEL	1	FS-SD98V	US
	75	QYSDSF2608N	SCREW	5	REAR+TOP	
	76	QYSDSG3008N	T.SCREW	7	REAR+JACK	
	77	QYSDSG3008N	T.SCREW	3	REAR+BOTTOM	

■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
△	78	LV32261-001A	NAME PLATE	1	FS-SD58V	UB,US
△		LV32263-001A	NAME PLATE	1	FS-SD98V	US
△		LV32262-002A	NAME PLATE	1	FS-SD78V	UF
△		LV32261-002A	NAME PLATE	1	FS-SD58V	UF
△		LV32262-001A	NAME PLATE	1	FS-SD78V	US
△		LV32263-002A	NAME PLATE	1	FS-SD98V	UF
	80	QYSDSF2608Z	SCREW	7	CD CHASSIS+TOP	
	81	LV31683-005A	FUNC BTN ASSY	1	FS-SD98V	UF,US
		LV31683-003A	FUNC BTN ASSY	1	FS-SD58V/78V	UB,UF,US
	82	QYSBST3006Z	T.SCREW	4	GEAR.B+BOTTOM	
	83	QYSDSF2606Z	SCREW	2	JACK PWB+TOP	
	84	LV30064-008A	SPACER	1		
	86	QYSBST3006Z	T.SCREW	3	MOTER.B+BOTTOM.	
	87	LV30226-015A	SPACER	1		
	88	LV41826-001A	SHIELDID(A)	1		
	89	LV41827-001A	SHIELD(R)	1		
	90	LV41524-001A	MAIN GEAR	1	POM	
	91	LV31689-002A	SHAFT 1	1	COST DOWN	
	92	QYREE6000X	E RING	2		
	93	QYSPSPG3006Z	SCREW	2	SAFT 1+G.BASE	
	94	LV30064-075A	SPACER	2	BOTTOM	
	97	QYSBST3006Z	T.SCREW	4	BOTTOM.C+TOP	
	98	QYSSST3006Z	SCREW	3	BOTTOM+FRONT.P	
△	99	QMF51E2-5R0-J1	FUSE	1	F1902	UB,US
△		QMF51E2-6R3-J1	FUSE	1	F1902	UF
△	100	QMF51E2-3R15-J1	FUSE	1	F1903	
△	101	QMF51E2-1R0-J1	FUSE	1	F1901	UB,US
△		QMF51E2-R50-J1	FUSE	1	F1901	UF
△	102	QQT0286-006	POWER TRANS	1	T1901	UF
△		QQT0286-004	POWER TRANSF.	1	T1901	UB,US
	108	QYSBST3006Z	T.SCREW	1	BOTTOM.C+AMP PW	
	109	QYSDSF2606Z	SCREW	6	BOTTOM+G.BASE	
	110	QUQB12-0905BJ	FFC WIRE	1		
	111	QUQB12-0806AJ	FFC WIRE	1		
	112	WJM0133-001A	E-SI C WIRE C-F	1		
	113	QUQB12-2005BJ	FFC WIRE	1		
	115	LV41772-001A	CAUTION LABEL	1	REAR PANEL	
	116	LV31865-001A	HOLDER	1		UB,US
	117	QYSDSF3008Z	SCREW	1		UB,US
	118	LV32251-001A	EARTH PLATE	1	SPTE T0.2	
	119	LV30064-064A	SPACER	1		
	120	LV30064-080A	SPACER	1		
	121	LV32249-001A	VCD SHIELD(U)	1	SPTE T0.5	
	122	LV32250-001A	VCD SHIELD(L)	1	SPTE T0.5	
	123	QYSDSF2608Z	SCREW	3	VCD+SHASSIS	
	124	VKZ4001-110	WIRE HOLDER	1		
	125	WJT0041-001A	E-CARD WIRE	1		
	126	LV30064-065A	SPACER	1		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB31HK-223X	C CAPACITOR		
	C 2	NCB31HK-102X	C CAPACITOR		
	C 3	NCB31CK-473X	C CAPACITOR		
	C 4	NCB31HK-103X	C CAPACITOR		
	C 5	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 6	NCB31HK-102X	C CAPACITOR		
	C 9	NCB31HK-102X	C CAPACITOR		
	C 12	NDC31HJ-100X	C CAPACITOR		
	C 13	NCB31CK-473X	C CAPACITOR		
	C 14	NCB31HK-103X	C CAPACITOR		
	C 21	NCB31CK-473X	C CAPACITOR		
	C 30	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 32	NCB31HK-102X	C CAPACITOR		
	C 33	QEK41AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C 34	NDC31HJ-150X	C CAPACITOR		
	C 35	NCB31HK-102X	C CAPACITOR		
	C 36	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 37	NCB31CK-473X	C CAPACITOR		
	C 39	NCB31CK-473X	C CAPACITOR		
	C 40	NCB31HK-103X	C CAPACITOR		
	C 41	QEK41HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 42	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
	C 44	NDC31HJ-221X	C CAPACITOR		
	C 45	QEK41HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 46	NCB31HK-223X	C CAPACITOR		
	C 47	NCB31HK-103X	C CAPACITOR		
	C 49	NCB31EK-183X	C CAPACITOR		
	C 50	NCB31EK-183X	C CAPACITOR		
	C 51	QEK41HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 52	QEK41HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 60	QEK41AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C 61	NDC31HJ-120X	C CAPACITOR		
	C 62	NDC31HJ-120X	C CAPACITOR		
	C 63	NCB31CK-473X	C CAPACITOR		
	C 65	NCB31HK-102X	C CAPACITOR		
	C 66	NDC31HJ-151X	C CAPACITOR		
	C 67	NDC31HJ-101X	C.CAPACITOR		
	C 68	NDC31HJ-101X	C.CAPACITOR		
	C 69	QEK41HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 70	NCB31HK-392X	C CAPACITOR		
	C 71	QEK41HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 72	NCB31HK-102X	C CAPACITOR		
	C 91	NCB31HK-103X	C CAPACITOR		
	CF 1	QAX0419-001Z	C FILTER	FM IF	
	CF 2	QAX0419-001Z	C FILTER	FM IF	
	CF 3	QAX0418-001Z	C FILTER		
	CF 4	QAX0409-001	CERA LOCK		
	CN101	QGF1201F3-08	CONNECTOR	TO.FUNC.	
	CN102	QGA2501C1-06	6P CONNECTOR	TO.PO.	
	CN103	QGB1216J1-08S	CONNECTOR	TO.FRONT	
	CN104	QGF1201F3-09	CONNECTOR	TO.MICOM	
	CN105	QGF1201F3-20	FFC/FPC CONNE	TO.MICOM	
	CN106	QGA2501C1-02	2P CONNECTOR	TO.MOTOR	
	CN181	QGA2001C1-02	PLUG ASSY		
△	CN191	QGA7901C1-02	CONNECTOR	PRI.	UF
△	CN191	QGA7901C1-04	CONNECTOR		UB,US
	CN192	QGA3901C1-04	4P CONNECTOR	SEC.	
△	CN193	QGA2501C1-07	7P CONNECTOR	TO.PO.	
	CN301	QGA2501F1-04	CONNECTOR	FROM SP.JACK	
	CN801	QGB1216K1-08S	CONNECTOR	TO AMP/TUNER	
	CN802	QGB1216K1-14S	CONNECTOR	TO MICON/CD	
	CN803	QGA2001C1-02	PLUG ASSY	TO BACK LIGHT	
△	CP191	ICP-N15-T	ICP I/M	VCD5V	

△	Item	Parts number	Parts name	Remarks	Area
	C1102	QFVJ1HJ-224Z	MF CAPACITOR	FS-SD98V/78V	
	C1102	QFVJ1HJ-154Z	MF CAPACITOR	FS-SD58V	
	C1103	QFN31HJ-823Z	MYLAR CAPACITOR	FS-SD58V/78V	
	C1103	QFVJ1HJ-563Z	MF CAPACITOR	FS-SD98V	
	C1104	QFVJ1HJ-563Z	MF CAPACITOR	FS-SD98V	
	C1104	QFN31HJ-823Z	MYLAR CAPACITOR	FS-SD58V/78V	
	C1105	QTE1C06-476Z	E CAPACITOR	AHB	
	C1106	QTE1C06-226Z	E CAPACITOR	AHB	
	C1107	QETN1HM-475Z	E CAPACITOR	HP	
	C1108	NDC31HJ-151X	C CAPACITOR	HP	
	C1109	NCB31HK-562X	C CAPACITOR	HP	
	C1110	NCB31HK-102X	C CAPACITOR		
	C1111	NCB31HK-182X	C CAPACITOR	AHB/*	
	C1202	QFVJ1HJ-224Z	MF CAPACITOR	FS-SD98V/78V	
	C1202	QFVJ1HJ-154Z	MF CAPACITOR	FS-SD58V	
	C1203	QFN31HJ-823Z	MYLAR CAPACITOR	FS-SD58V/78V	
	C1203	QFVJ1HJ-563Z	MF CAPACITOR	FS-SD98V	
	C1204	QFVJ1HJ-563Z	MF CAPACITOR	FS-SD98V	
	C1204	QFN31HJ-823Z	MYLAR CAPACITOR	FS-SD58V/78V	
	C1205	QTE1C06-476Z	E CAPACITOR	AHB	
	C1206	QTE1C06-226Z	E CAPACITOR	AHB	
	C1207	QETN1HM-475Z	E CAPACITOR	HP	
	C1208	NDC31HJ-151X	C CAPACITOR	HP	
	C1209	NCB31HK-562X	C CAPACITOR	HP	
	C1210	NCB31HK-102X	C CAPACITOR		
	C1211	NCB31HK-182X	C CAPACITOR	AHB/*	
	C1301	QETN1CM-106Z	E CAPACITOR	AHB	
	C1302	QEK41CM-476	E.CAPACITOR	AHB	
	C1303	QTE1C06-226Z	E CAPACITOR	AHB	
	C1304	QEK41HM-105Z	E.CAPACITOR	AHB	
	C1305	QETN1EM-107Z	E CAPACITOR	HP	
	C1306	QETN1CM-476Z	E CAPACITOR	HP	
	C1307	QETN1CM-106Z	E CAPACITOR	HP.MUTE.D	
	C1308	QETN1CM-106Z	E CAPACITOR	S.MUTE.D	
	C1801	QETN1EM-106Z	E CAPACITOR	M.DRIVE	
	C1802	QETN1EM-107Z	E CAPACITOR	M.DRIVE	
	C1803	NCB31HK-102X	C CAPACITOR	M.DRIVE	
△	C1901	QFVF1HJ-104Z	MF CAPACITOR	HV	
△	C1902	QFVF1HJ-104Z	MF CAPACITOR	HV	
△	C1903	QFVF1HJ-104Z	MF CAPACITOR	HV	
△	C1904	QFVF1HJ-104Z	MF CAPACITOR	HV	
△	C1905	QFVF1HJ-104Z	MF CAPACITOR	LV	
△	C1906	QFVF1HJ-104Z	MF CAPACITOR	LV	
△	C1907	QFVF1HJ-104Z	MF CAPACITOR	LV	
△	C1908	QFVF1HJ-104Z	MF CAPACITOR	LV	
△	C1910	QETM1EM-828	E CAPACITOR	HV	
△	C1911	QETM1EM-688	E CAPACITOR	LV	
	C1912	NDC31HJ-221X	C CAPACITOR	SW10	
	C1913	NCB31HK-103X	C CAPACITOR	SW10	
	C1914	QETN1EM-476Z	E CAPACITOR	SW10	
	C1915	QEK41CM-107Z	E.CAPACITOR	L.FIL	
	C1916	NDC31HJ-221X	C CAPACITOR	CD6.5	
	C1917	NCB31HK-103X	C CAPACITOR	CD6.5	
	C1918	QTE1C03-476Z	E CAPACITOR	CD6.5	
	C1919	QETN1CM-106Z	E CAPACITOR	BL7	
	C1920	QETN1EM-226Z	E CAPACITOR	BL7	
	C1921	QFVJ1HJ-104Z	MF CAPACITOR	US5	
	C1922	QETN1EM-106Z	E CAPACITOR	US5	
	C1923	QEK41HM-475Z	E.CAPACITOR	TU5	
	C1924	QEK41CM-107Z	E.CAPACITOR	TU5	
	C1925	QFZ0160-223Z	PP CAPA IM	FS-SD98V	
	C1925	QFN31HJ-103Z	M.M.CAPACITOR	FS-SD58V/78V	
△	C1926	QCB1HK-103Y	C CAPACITOR	LV	

■ Electrical parts list (Main board)

Block No. 01

Item	Parts number	Parts name	Remarks	Area	Item	Parts number	Parts name	Remarks	Area
△ C1927	QCB1HK-103Y	C CAPACITOR	HV		△ D1913	MTZJ6.8B-T2	NER DIODE	US5V	
C1928	QCB1HK-103Y	C CAPACITOR	RY		D1914	MTZJ3.9B-T2	Z DIODE IM	TU5	
C1929	NCB31HK-103X	C CAPACITOR	RY		D1915	1SS133-T2	SI DIODE	TU5	
C1930	NDC31HJ-151X	C CAPACITOR	VCD5V		D1916	1SS133-T2	SI DIODE	TU5	
C1931	QETN1EM-107Z	E CAPACITOR	VCD5V		D1917	1SS133-T2	SI DIODE	RY	
C1932	QEK41CM-106	E CAPACITOR	FAN CONTROL		D1918	1SS133-T2	SI DIODE	VCD5V	
C3101	QTE1V06-106Z	E CAPACITOR	IN		D1919	MTZJ5.6C-T2	ZENER DIODE	VCD5V	
C3102	QDGB1HK-681Y	C CAPACITOR	FS-SD78V/98V		△ D1921	MTZJ6.8A-T2	ZENER DIODE	VCD5V	
C3102	QDGB1HK-821Y	C CAPACITOR	FS-SD58V		D1922	MTZJ8.2B-T2	DIODE	VCD5V/*	
C3103	QCB1HK-104Y	TF CAPACITOR	OUT		D1923	RB160L-40-X	SB DIODE	VCD5V	
C3104	QCB1HK-104Y	TF CAPACITOR	OUT		D3302	1SS133-T2	SI DIODE	AHB NF	
C3105	QFN31HJ-332Z	M CAPACITOR	E.ONLY		D3303	1SS133-T2	SI DIODE	AHB NF	
C3201	QTE1V06-106Z	E CAPACITOR	IN		D8001	SPR-39MVWF	LED	POWER/STANDBY	
C3202	QDGB1HK-681Y	C CAPACITOR	FS-SD78V/98V		D8002	1SS133-T2	SI DIODE		
C3202	QDGB1HK-821Y	C CAPACITOR	FS-SD58V		D8003	1SS133-T2	SI DIODE		
C3203	QCB1HK-104Y	TF CAPACITOR	OUT		D8004	1SS133-T2	SI DIODE		
C3204	QCB1HK-104Y	TF CAPACITOR	OUT		D8021	TLYH156P/ST/	LED	FS-SD98V	
C3205	QFN31HJ-332Z	M CAPACITOR	E.ONLY		D8021	SELU1E50CM	LED	FS-SD58V/78V	
C3301	QETN1CM-106Z	E CAPACITOR	BEEP		D8022	SELU1E50CM	LED	FS-SD58V/78V	
C3302	NCS21HJ-152X	C CAPACITOR			D8022	TLYH156P/ST/	LED	FS-SD98V	
C3303	QCB1HK-104Y	TF CAPACITOR	FS-SD98V		D8025	MTZJ10C-T2	ZENER DIODE	FS-SD58V/78V	
C3303	QCB1HK-103Y	CER.CAPACITOR-S	FS-SD58V/78V		D8031	TLYH156P/ST/	LED	FS-SD98V	
△ C3304	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V		D8031	SELU1E56BM	LED	FS-SD58V/78V	
C3306	QTE1E06-476Z	E CAPACITOR	FS-SD98V		D8032	SELU1E56BM	LED	FS-SD58V/78V	
C3306	QCB1HK-103Y	CER.CAPACITOR-S	FS-SD58V/78V		D8032	TLYH156P/ST/	LED	FS-SD98V	
C3308	QETN1CM-336Z	E CAPACITOR	ON.TIME		D8035	MA3100/M/-X	ZENER DIODE	FS-SD58V/78V	
C3309	QETN1HM-105Z	E CAPACITOR	AHB NF		EP131	QNZ0136-001Z	EARTH PLATE		
C3310	QETN1HM-105Z	E CAPACITOR	AHB NF		IC 1	TA2057N	IC		
C3311	QCB1HK-473Y	C CAPACITOR	AHB NF		IC 2	LC72136N	IC		
C3312	QCB1HK-473Y	C CAPACITOR	AHB NF		IC101	NJM4580D-D	IC	AHB	
△ C3313	QETN1EM-227Z	E CAPACITOR	FOR VH		IC102	BA15218F-XE	IC	HP	
C8001	NCB31HK-103X	C CAPACITOR			IC108	TA8409F-W	IC	M.DRIVE	
C8002	QER41AM-107	E CAPACITOR	100MF 20% 10V		IC191	UPC78L05J-T	I C	US5	
C8003	NCB31HK-223X	C CAPACITOR			△ IC301	LA4905	IC		
C8004	NDC31HJ-101X	C.CAPACITOR			IC801	GP1U271X	RM RECIVER		
C8005	NCB31HK-103X	C CAPACITOR			J 1	QNB0014-001	ANT TERMINAL	AM/FM ANT COAX	
C8101	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V		△ J1901	QNC0030-001	AC INLET		
C8102	NCB31HK-103X	C CAPACITOR			J3001	QNB0092-001	SPK TERMINAL		
C8201	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V		J8301	QNS0162-001	JACK	HP.JACK	
C8202	NCB31HK-103X	C CAPACITOR			K1801	QQR0779-001Z	INDUCTOR		
D 1	1SS133-T2	SI DIODE			K8301	QQR0601-001Z	FERRITE BEADS		
D 2	1SS133-T2	SI DIODE			L 1	QQR0796-001	COIL BLOCK	MW RF/OSC	
D 3	1SS133-T2	SI DIODE			L 4	QQL231K-221Y	INDUCTOR		
D 4	1SS133-T2	SI DIODE			△ LF191	QQR1145-001	LINE FILTER	EXCEPT J	
DI801	QLD0120-001	LCD			LF311	QQR0797-002	INDUCTOR	E.ONLY	
D1301	1SS133-T2	SI DIODE	AHB		LF321	QQR0797-002	INDUCTOR	E.ONLY	
D1302	MTZJ5.1A-T2	ZENER DIODE	AHB		L1801	QQL25CK-221Z	INDUCTOR	M.DRIVER	
D1303	1SS133-T2	SI DIODE	AHB		L1901	QQL28AK-101	CHOKE COIL	VCD5V	
D1304	1SS133-T2	SI DIODE	HP.MUTE		L8101	QQL231K-470Y	INDUCTOR		
D1305	1SS133-T2	SI DIODE	S.MUTE		L8201	QQL231K-470Y	INDUCTOR		
D1801	DSK10C-T1	DIODE	M.DRIV		PP101	QZW0038-001	WIRE CLAMP		
△ D1901	D5SBA20-S1	SI DIODE	HV		PP102	QZW0038-001	WIRE CLAMP		
△ D1902	D3SBA20-S1	DIODE	LV		Q 1	2SC2668/O/-T	TRANSISTOR		
D1903	1SS133-T2	SI DIODE	SW10		Q 6	DTA114YKA-X	TRANSISTOR		
D1904	MTZJ5.6C-T2	ZENER DIODE	SW10		Q 7	2SA1037AK/R/-X	TRANSISTOR		
D1905	MTZJ10A-T2	ZENER DIODE	SW10		Q 8	2SA1037AK/R/-X	TRANSISTOR		
D1906	MTZJ11A-T2	Z.DIODE I.M	L.FIL		Q1101	2SD2114K/VW/-X	CHIP TR.C.M	AHB	
D1907	1SS133-T2	SI DIODE	L.FIL		Q1102	2SC2412K/R/-X	TRANSISTOR	HP.MUTE	
D1908	1SS133-T2	SI DIODE	CD6.5		Q1201	2SD2114K/VW/-X	CHIP TR.C.M	AHB	
D1909	MTZJ6.8B-T2	NER DIODE	CD6.5		Q1202	2SC2412K/R/-X	TRANSISTOR	HP.MUTE	
△ D1910	6A10E2	SI DIODE	LV		Q1301	DTA123EKA-X	DIGITAL.TR	S.MUTE.D	
D1911	MTZJ6.8A-T2	ZENER DIODE	BL8		Q1302	DTA123EKA-X	DIGITAL.TR	HP.MUTE.D	
△ D1912	MTZJ10A-T2	ZENER DIODE	BL8		Q1801	DTC143EKA-X	DIGI TRANSISTOR	M.DRIV	

■ Electrical parts list (Main board)

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△	Item	Parts number	Parts name	Remarks	Area
△	Q1901	2SA1359/OY/	TRANSISTOR	SW10	
	Q1902	2SC2412K/R/-X	TRANSISTOR	SW10	
	Q1903	2SC2412K/R/-X	TRANSISTOR	SW10	
	Q1904	2SA1037AK/R/-X	TRANSISTOR	SW10	
	Q1905	DTA144TKA-X	TRANSISTOR	SW10	
	Q1906	DTC144TKA-X	TRANSISTOR	SW10	
	Q1907	2SD2144S/VW/-T	TRANSISTOR	L.FIL	
△	Q1908	2SA1359/OY/	TRANSISTOR	CD6.5	
	Q1909	2SC2412K/R/-X	TRANSISTOR	CD6.5	
△	Q1910	2SC2412K/R/-X	TRANSISTOR	CD6.5	
△	Q1912	2SA1175/FE/-T	TRANSISTOR	BL7	
	Q1913	2SC2412K/R/-X	TRANSISTOR	BL7	
△	Q1914	2SA1037AK/R/-X	TRANSISTOR	TU5	
	Q1915	2SC2412K/R/-X	TRANSISTOR	TU5	
△	Q1916	2SA934/QR/-T	TRANSISTOR	VCD5V	
△	Q1917	2SC2785/FE/-T	TRANSISTOR	VCD5V	
	Q1918	2SC2412K/R/-X	TRANSISTOR	VCD5V	
	Q1920	2SA1037AK/R/-X	TRANSISTOR	FAN CONTROL	
	Q1921	DTC143EKA-X	DIGI TRANSISTOR	FAN CONTROL	
	Q1922	DTC143EKA-X	DIGI TRANSISTOR	FCD CONTROL	
	Q3101	2SD2114K/VW/-X	CHIP TR.C.M	S.MUTE	
	Q3201	2SD2114K/VW/-X	CHIP TR.C.M	S.MUTE	
	Q3301	DTA143TKA-X	TRANSISTOR	S.MUTE BUFF	
	Q8001	DTC114TKA-X	TRANSISTOR		
	Q8002	DTC114EKA-X	TR		
	Q8003	DTA114EKA-X	DIGITAL.TRANSIS		
	Q8101	2SD2114K/VW/-X	CHIP TR.C.M		
	Q8201	2SD2114K/VW/-X	CHIP TR.C.M		
	R 1	NRSA63J-102X	MG RESISTOR		
	R 2	NRSA63J-820X	MG RESISTOR		
	R 12	NRSA63J-102X	MG RESISTOR		
	R 13	NRSA63J-104X	MG RESISTOR		
	R 20	NRSA63J-331X	MG RESISTOR		
	R 21	NRSA63J-224X	MG RESISTOR		
	R 22	NRSA63J-331X	MG RESISTOR		
	R 23	NRSA63J-270X	MG RESISTOR		
	R 24	NRSA63J-271X	MG RESISTOR		
	R 25	NRSA63J-473X	MG RESISTOR		
	R 27	NRSA63J-223X	MG RESISTOR		
	R 29	NRSA63J-473X	MG RESISTOR		
	R 30	NRSA63J-103X	MG RESISTOR		
	R 31	NRSA63J-103X	MG RESISTOR		
	R 32	NRSA63J-473X	MG RESISTOR		
	R 34	NRSA63J-333X	MG RESISTOR		
	R 35	NRSA63J-333X	MG RESISTOR		
	R 36	NRSA63J-103X	MG RESISTOR		
	R 37	NRSA63J-472X	MG RESISTOR		
	R 38	NRSA63J-392X	MG RESISTOR		
	R 39	NRSA63J-392X	MG RESISTOR		
	R 42	NRSA63J-102X	MG RESISTOR		
	R 43	NRSA63J-102X	MG RESISTOR		
	R 44	NRSA63J-102X	MG RESISTOR		
	R 45	NRSA63J-102X	MG RESISTOR		
	R 46	NRSA63J-473X	MG RESISTOR		
	R 48	NRSA63J-102X	MG RESISTOR		
	R 52	NRSA63J-472X	MG RESISTOR		
	R 54	NRSA63J-472X	MG RESISTOR		
	R 55	NRSA63J-182X	MG RESISTOR		
	R 56	NRSA63J-332X	MG RESISTOR		
	R 57	NRSA63J-102X	MG RESISTOR		
	R 66	NRSA63J-222X	MG RESISTOR		
	R 68	NRSA63J-223X	MG RESISTOR		
	R 69	NRSA63J-222X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
△	RY191	QSK0116-001	RELAY	VH	
	R1103	NRSA63J-103X	MG RESISTOR	AHB	
	R1104	NRSA63J-332X	MG RESISTOR	LPF	
	R1105	NRSA63J-272X	MG RESISTOR	FS-SD98V/78V	
	R1105	NRSA63J-392X	MG RESISTOR	FS-SD58V	
	R1106	NRSA63J-152X	MG RESISTOR	FS-SD58V	
	R1106	NRSA63J-392X	MG RESISTOR	FS-SD98V/78V	
	R1107	NRSA63J-153X	MG RESISTOR	AHB	
	R1108	NRSA63J-302X	MG RESISTOR	FS-SD58V	
	R1108	NRSA63J-432X	MG RESISTOR	FS-SD98V/78V	
	R1109	NRSA63J-153X	MG RESISTOR	AHB	
	R1110	NRSA63J-184X	MG RESISTOR	FS-SD58V	
	R1110	NRSA63J-224X	MG RESISTOR	FS-SD98V/78V	
	R1111	NRSA63J-103X	MG RESISTOR	AHB	
	R1112	NRSA63J-332X	MG RESISTOR	HP	
	R1113	NRSA63J-563X	MG RESISTOR	HP	
	R1114	NRSA63J-102X	MG RESISTOR	HP	
	R1115	NRSA63J-471X	MG RESISTOR	HP	
	R1116	NRSA63J-222X	MG RESISTOR	HP.MUTE	
	R1203	NRSA63J-103X	MG RESISTOR	AHB	
	R1204	NRSA63J-332X	MG RESISTOR	LPF	
	R1205	NRSA63J-272X	MG RESISTOR	FS-SD98V/78V	
	R1205	NRSA63J-392X	MG RESISTOR	FS-SD58V	
	R1206	NRSA63J-152X	MG RESISTOR	FS-SD58V	
	R1206	NRSA63J-392X	MG RESISTOR	FS-SD98V/78V	
	R1207	NRSA63J-153X	MG RESISTOR	AHB	
	R1208	NRSA63J-302X	MG RESISTOR	FS-SD58V	
	R1208	NRSA63J-432X	MG RESISTOR	FS-SD98V/78V	
	R1209	NRSA63J-153X	MG RESISTOR	AHB	
	R1210	NRSA63J-184X	MG RESISTOR	FS-SD58V	
	R1210	NRSA63J-224X	MG RESISTOR	FS-SD98V/78V	
	R1211	NRSA63J-103X	MG RESISTOR	AHB	
	R1212	NRSA63J-332X	MG RESISTOR	HP	
	R1213	NRSA63J-563X	MG RESISTOR	HP	
	R1214	NRSA63J-102X	MG RESISTOR	HP	
	R1215	NRSA63J-471X	MG RESISTOR	HP	
	R1216	NRSA63J-222X	MG RESISTOR	HP.MUTE	
	R1301	NRSA63J-513X	MG RESISTOR	AHB	
△	R1302	NRSA02J-471X	MG RESISTOR	AHB	
	R1303	NRSA63J-102X	MG RESISTOR	AHB	
	R1304	NRSA63J-154X	MG RESISTOR	FS-SD58V	
	R1304	NRSA63J-224X	MG RESISTOR	FS-SD98V/78V	
	R1305	NRSA63J-124X	MG RESISTOR	AHB	
	R1306	NRSA63J-513X	M.G.RESISTOR	FS-SD58V	
	R1306	NRSA63J-563X	MG RESISTOR	FS-SD98V/78V	
	R1307	NRSA63J-912X	MG RESISTOR	HP	
	R1308	NRSA63J-103X	MG RESISTOR	HP	
	R1309	NRSA02J-100X	MG RESISTOR	HP	
	R1310	NRSA63J-102X	MG RESISTOR	HP.MUTE.D	
	R1311	NRSA63J-102X	MG RESISTOR	S.MUTE.D	
△	R1312	NRSA02J-471X	MG RESISTOR		
△	R1313	NRSA02J-471X	MG RESISTOR		
	R1801	NRSA63J-471X	MG RESISTOR	M.DRIVER	
	R1802	NRSA63J-153X	MG RESISTOR	M.DRIVER	
	R1803	NRSA63J-473X	MG RESISTOR	M.DRIVER	
	R1804	NRSA63J-100X	MG RESISTOR	M.DRIVER	
	R1805	NRSA63J-100X	MG RESISTOR	M.DRIVER	
	R1806	NRSA63J-183X	MG RESISTOR	M.DRIVER	
△	R1807	NRSA63J-471X	MG RESISTOR		
△	R1808	NRSA63J-471X	MG RESISTOR		
△	R1902	NRSA02J-1R0X	MG RESISTOR	SW10	
△	R1903	NRSA02J-1R0X	MG RESISTOR	SW10	
△	R1904	NRSA02J-1R0X	MG RESISTOR	SW10	

■ Electrical parts list(Main board)

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△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	R1905	NRSA63J-151X	MG RESISTOR	SW10			R8004	NRSA63J-331X	MG RESISTOR		
	R1906	NRSA63J-102X	MG RESISTOR	SW10			R8005	NRSA02J-561X	MG RESISTOR		
	R1907	NRSA02J-122X	MG RESISTOR	SW10			R8007	NRSA63J-432X	MG RESISTOR		
△	R1908	NRSA02J-122X	MG RESISTOR	SW10			R8021	NRSA02J-391X	MG RESISTOR	FS-SD98V	
	R1909	NRSA02J-122X	MG RESISTOR	SW10			R8021	NRSA02J-101X	MG RESISTOR	FS-SD58V/78V	
	R1910	NRSA63J-472X	MG RESISTOR	SW10			R8022	NRSA02J-101X	MG RESISTOR	FS-SD58V/78V	
	R1911	NRSA63J-471X	MG RESISTOR	SW10			R8022	NRSA02J-391X	MG RESISTOR	FS-SD98V	
	R1912	NRSA63J-561X	MG RESISTOR	SW10			R8031	NRSA02J-561X	MG RESISTOR	FS-SD98V	
	R1913	NRSA63J-272X	MG RESISTOR	SW10			R8031	NRSA02J-431X	MG RESISTOR	FS-SD58V/78V	
	R1914	NRSA63J-471X	MG RESISTOR	SW10			R8032	NRSA02J-431X	MG RESISTOR	FS-SD58V/78V	
	R1915	NRSA63J-822X	MG RESISTOR	SW10			R8032	NRSA02J-561X	MG RESISTOR	FS-SD98V	
	R1916	NRSA63J-102X	MG RESISTOR	SW10			R8051	NRSA63J-101X	MG RESISTOR		
	R1917	NRSA63J-122X	MG RESISTOR	SW10			R8052	NRSA63J-272X	MG RESISTOR		
	R1918	NRSA63J-153X	MG RESISTOR	SW10			R8053	NRSA63J-332X	MG RESISTOR		
	R1919	NRSA63J-512X	MG RESISTOR	SW10			R8054	NRSA63J-562X	MG RESISTOR		
	R1920	NRSA63J-102X	MG RESISTOR	R.FIL			R8055	NRSA63J-123X	MG RESISTOR		
△	R1921	QRZ9006-4R7X	F RESISTOR	BL7			R8056	NRSA63J-393X	MG RESISTOR		
△	R1922	QRZ9006-4R7X	F RESISTOR	US5V			R8057	NRSA63J-101X	MG RESISTOR		
△	R1923	QRZ9006-4R7X	F RESISTOR	TO.MICOM+B			R8058	NRSA63J-272X	MG RESISTOR		
	R1924	NRSA63J-222X	MG RESISTOR	CD6.5			R8059	NRSA63J-332X	MG RESISTOR		
	R1925	NRSA02J-561X	MG RESISTOR	BL7			R8060	NRSA63J-562X	MG RESISTOR		
	R1926	NRSA63J-123X	MG RESISTOR	BL7			R8061	NRSA63J-123X	MG RESISTOR		
	R1927	NRSA63J-103X	MG RESISTOR	BL7			R8062	NRSA63J-393X	MG RESISTOR		
	R1928	NRSA63J-122X	MG RESISTOR	TU5			R8101	NRSA63J-220X	MG RESISTOR		
	R1929	NRSA63J-273X	MG RESISTOR	TU5			R8102	NRSA63J-222X	MG RESISTOR		
	R1930	NRSA63J-102X	MG RESISTOR	TU5			R8103	NRSA63J-272X	MG RESISTOR		
△	R1931	NRSA02J-390X	MG RESISTOR	TU5			R8201	NRSA63J-220X	MG RESISTOR		
	R1932	NRSA02J-331X	MG RESISTOR	CD6.5			R8202	NRSA63J-222X	MG RESISTOR		
	R1933	NRSA63J-681X	MG RESISTOR	CD6.5			R8203	NRSA63J-272X	MG RESISTOR		
	R1934	NRSA63J-152X	MG RESISTOR	CD6.5			R8301	NRSA63J-222X	MG RESISTOR		
	R1935	NRSA63J-272X	MG RESISTOR	CD6.5			R8302	NRSA63J-222X	MG RESISTOR		
	R1936	NRSA63J-151X	MG RESISTOR	CD6.5		△	S1901	VMZ0126-003	SELECT SWITCH		
	R1937	NRSA63J-562X	MG RESISTOR	CD REG			S8001	QSW0683-001Z	PUSH SW I.M	OP/CL	
△	R1938	NRSA02J-122X	MG RESISTOR	SW10			S8002	QSW0683-001Z	PUSH SW I.M	POWER	
	R1939	NRSA63J-223X	MG RESISTOR	VCD5V			S8003	QSW0683-001Z	PUSH SW I.M	VOL+	
△	R1940	QRZ9015-101X	F.RES I/M	VCD5V			S8004	QSW0683-001Z	PUSH SW I.M	VOL-	
	R1941	NRSA63J-123X	MG RESISTOR	VCD5V			S8005	QSW0683-001Z	PUSH SW I.M	TIMER	
	R1944	NRSA63J-562X	MG RESISTOR	VCD5V/*			S8006	QSW0683-001Z	PUSH SW I.M	CLOCK	
	R1945	NRSA63J-222X	MG RESISTOR				S8007	QSW0683-001Z	PUSH SW I.M	UP	
	R1946	NRSA63J-222X	MG RESISTOR				S8008	QSW0683-001Z	PUSH SW I.M	CD	
	R1947	NRSA63J-222X	MG RESISTOR				S8009	QSW0683-001Z	PUSH SW I.M	STOP	
	R3101	QRE141J-562Y	C RESISTOR	IN			S8010	QSW0683-001Z	PUSH SW I.M	DOWN	
	R3102	QRE141J-103Y	C RESISTOR	FS-SD78V/98V			S8011	QSW0683-001Z	PUSH SW I.M	AHB	
	R3102	QRE141J-682Y	C RESISTOR	FS-SD58V			S8012	QSW0683-001Z	PUSH SW I.M	PRESET TU	
	R3103	QRE141J-2R2Y	C RESISTOR	OUT			S8013	QSW0683-001Z	PUSH SW I.M	TUNER	
	R3104	QRE141J-2R2Y	C RESISTOR	OUT			S8014	QSW0683-001Z	PUSH SW I.M	AUX	
	R3105	NRSA63J-223X	MG RESISTOR	AHB NF			T 1	QQR0793-001	IFT		
	R3106	NRSA63J-223X	MG RESISTOR	AHB NF			TU 1	QAU0097-001	FRONT END	FM TU	
	R3107	QRE141J-222Y	C RESISTOR	S.MUTE			X 1	QAX0402-001	CRYSTAL		
	R3201	QRE141J-562Y	C RESISTOR	IN		△	Z1901	QNG0003-001Z	FUSE CLIP	FOR F1901	
	R3202	QRE141J-103Y	C RESISTOR	FS-SD78V/98V		△	Z1902	QNG0003-001Z	FUSE CLIP	FOR F1901	
	R3202	QRE141J-682Y	C RESISTOR	FS-SD58V		△	Z1903	QNG0003-001Z	FUSE CLIP	FOR F1902	
	R3203	QRE141J-2R2Y	C RESISTOR	OUT		△	Z1904	QNG0003-001Z	FUSE CLIP	FOR F1902	
	R3204	QRE141J-2R2Y	C RESISTOR	OUT		△	Z1905	QNG0003-001Z	FUSE CLIP	FOR F1903	
	R3205	NRSA63J-223X	MG RESISTOR	AHB NF		△	Z1906	QNG0003-001Z	FUSE CLIP	FOR F1903	
	R3206	NRSA63J-223X	MG RESISTOR	AHB NF							
	R3207	QRE141J-222Y	C RESISTOR	S.MUTE							
	R3303	QRE141J-103Y	C RESISTOR	ST.BY							
	R3304	NRSA63J-682X	MG RESISTOR	AHB NF							
	R3305	NRSA63J-682X	MG RESISTOR	AHB NF							
	R8001	NRSA63J-102X	MG RESISTOR								
	R8002	NRSA63J-123X	MG RESISTOR								
	R8003	NRSA02J-331X	MG RESISTOR								

■ Electrical parts list (CD board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	CN501	QGF1201F3-08	CONNECTOR	TO MAIN	
	CN502	QGA2001C1-04	4P PLUG ASSY	TO TOPKEY	
	CN603	QGF1008F1-16	16PIN CONNECTOR	TO PICK	
	CN605	QGA2001C1-06	6P PLUG ASSY	TO PICK	
	CN701	QGF1201F3-09	CONNECTOR	TO AMP/TUNER	
	CN702	QGF1201F3-20	FFC/FPC CONNE	TO AMP/TUNER	
	CN703	QGA2001F1-13	CONNECTOR	TO FUNCTION	
	CN704	QGB1216J1-14S	CONNECTOR	TO LCD	
	CN705	QGA2001F1-03	CONNECTOR	TO CD DOOR DT1	
	CN706	QGA2001F1-02	2P CONNECTOR	TO DISC LED	
	CN711	QGF1008F1-15	21-41 CONNECTOR	TO VCD-BOARD	
	CN804	QGA2001F1-02	2P CONNECTOR		
	C5101	QETN1HM-475Z	E CAPACITOR	LINE IN	
	C5102	QETN1HM-475Z	E CAPACITOR	TU IN	
	C5103	QTE1V06-106Z	E CAPACITOR	CD IN	
	C5104	QTE1V06-106Z	E CAPACITOR	FUC.OUT	
	C5105	QETN1CM-106Z	E CAPACITOR	LINE OUT	
	C5106	QFN31HJ-562Z	M CAPACITOR	MPX.F	
	C5107	QTE1C06-226Z	E CAPACITOR	VOL OUT	
	C5108	QFN31HJ-332Z	M CAPACITOR	TRE.	
	C5109	QFVJ1HJ-154Z	MF CAPACITOR	BASS	
	C5110	QFVJ1HJ-154Z	MF CAPACITOR	BASS	
	C5111	NDC31HJ-151X	C CAPACITOR	LINE IN	
	C5112	NCB31HK-102X	C CAPACITOR	LINE OUT	
	C5201	QETN1HM-475Z	E CAPACITOR	LINE IN	
	C5202	QETN1HM-475Z	E CAPACITOR	TU IN	
	C5203	QTE1V06-106Z	E CAPACITOR	CD IN	
	C5204	QTE1V06-106Z	E CAPACITOR	FUC.OUT	
	C5205	QETN1CM-106Z	E CAPACITOR	LINE OUT	
	C5206	QFN31HJ-562Z	M CAPACITOR	MPX.F	
	C5207	QTE1C06-226Z	E CAPACITOR	VOL OUT	
	C5208	QFN31HJ-332Z	M CAPACITOR	TRE.	
	C5209	QFVJ1HJ-154Z	MF CAPACITOR	BASS	
	C5210	QFVJ1HJ-154Z	MF CAPACITOR	BASS	
	C5211	NDC31HJ-151X	C CAPACITOR	LINE IN	
	C5212	NCB31HK-102X	C CAPACITOR	LINE OUT	
	C5301	QETN1CM-107Z	E CAPACITOR	VCC	
	C5302	QTE1V06-476Z	E CAPACITOR	1/2VCC	
	C5303	QETN1HM-105Z	E CAPACITOR	L/O MUTE.D	
	C5304	QETN1AM-477Z	E CAPACITOR	V.OUT	
	C5305	NDC31HJ-680X	C CAPACITOR	V.OUT	
	C5307	NCB31HK-103X	C CAPACITOR	AUX IN-G	
	C5308	NCB31HK-103X	C CAPACITOR	AUX OUT-G	
	C5309	NCB31HK-103X	C CAPACITOR	V.OUT-G	
	C5311	NDC31HJ-151X	C CAPACITOR	DATA-G	
	C5312	NDC31HJ-151X	C CAPACITOR	CLOCK-G	
	C6001	QEKCOJM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C6002	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C6003	NDC21HJ-3R5X	C CAPACITOR	x-f-.TDK	
	C6005	NDC31HJ-331X	C CAPACITOR		
	C6007	NCB31HK-222X	C CAPACITOR		
	C6008	QEK1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C6009	NDC31HJ-101X	C.CAPACITOR		
	C6010	NCB31CK-273X	C CAPACITOR		
	C6011	NCB31HK-222X	C CAPACITOR		
	C6012	NCB31HK-103X	C CAPACITOR		
	C6014	NCB31CK-104X	C CAPACITOR		
	C6015	NCB31HK-223X	C CAPACITOR		
	C6016	NCB31HK-223X	C CAPACITOR		
	C6017	NCB31HK-223X	C CAPACITOR		
	C6018	NCB31HK-222X	C CAPACITOR		
	C6019	NDC31HJ-271X	C CAPACITOR		
	C6020	NDC31HJ-181X	C CAPACITOR		

△	Item	Parts number	Parts name	Remarks	Area
	C6021	NDC31HJ-821X	C CAPACITOR		
	C6022	QEKCOJM-476Z	E.CAPACITOR	47MF 20% 6.3V	
	C6023	NCB31CK-104X	C CAPACITOR		
	C6028	NCB31CK-473X	C CAPACITOR		
	C6029	QEKCOJM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C6031	QEK1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C6032	QEKCOJM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C6033	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C6051	NDC31HJ-120X	C CAPACITOR		
	C6052	NDC31HJ-150X	C CAPACITOR		
	C6053	NCB31HK-223X	C CAPACITOR		
	C6055	NCB31CK-473X	C CAPACITOR		
	C6058	NDC31HJ-6R0X	C CAPACITOR		
	C6061	NDC31HJ-471X	C CAPACITOR		
	C6062	NCB31HK-223X	C CAPACITOR		
	C6063	NCB31HK-223X	C CAPACITOR		
	C6064	NCB31HK-223X	C CAPACITOR		
	C6065	NCB21CK-334X	C CAPACITOR		
	C6071	NCB31HK-222X	C CAPACITOR		
	C6072	NCB31HK-222X	C CAPACITOR		
	C6073	QEK1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C6075	NCB31HK-102X	C CAPACITOR		
	C6076	NCB31HK-102X	C CAPACITOR		
	C6080	QEK1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C6081	QEK1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C6083	NCB31HK-223X	C CAPACITOR		
	C6089	NCB31HK-472X	C CAPACITOR		
	C6090	NCB31HK-153X	C CAPACITOR		
	C6091	QENC1HM-105Z	NP E.CAPA I.M	1.0MF 20% 50V	
	C6092	QENC1HM-225Z	NP E.CAPA I.M	2.2MF 20% 50V	
	C6094	NCB31CK-104X	C CAPACITOR		
	C6096	NDC31HJ-391X	C CAPACITOR		
	C6097	NDC31HJ-391X	C CAPACITOR		
	C6098	NDC31HJ-391X	C CAPACITOR		
	C6099	NDC31HJ-391X	C CAPACITOR		
	C6154	NDC31HJ-101X	C.CAPACITOR		
	C6156	NDC31HJ-151X	C CAPACITOR		
	C6157	NDC31HJ-151X	C CAPACITOR		
	C6158	NDC31HJ-151X	C CAPACITOR		
	C6159	NCB31CK-104X	C CAPACITOR		
	C6251	NCB31HK-223X	C CAPACITOR		
	C7001	NDC31HJ-180X	C.CAPACITOR		
	C7002	NDC31HJ-180X	C.CAPACITOR		
	C7003	NDC31HJ-390X	C CAPACITOR		
	C7004	NCS21HJ-360X	C CAPACITOR		
	C7005	NDC31HJ-220X	C CAPACITOR		
	C7006	NCS21HJ-200X	C CAPACITOR		
	C7007	NCB31HK-102X	C CAPACITOR		
	C7008	NCB31HK-102X	C CAPACITOR		
	C7009	NCB31HK-103X	C CAPACITOR		
	C7010	QEK1AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C7011	NCB31CK-104X	C CAPACITOR		
	C7012	QEZ0229-479Z	EDL.CAPACITOR	47000MF	
	C7013	QEK1CM-107Z	E.CAPACITOR	100MF 20% 16V	
	C7014	QFN31HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C7018	NCB31HK-103X	C CAPACITOR		
	C7019	QEK1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C7020	QEK1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C7022	NCB31HK-103X	C CAPACITOR		
	C7207	NDC31HJ-101X	C.CAPACITOR		
	C7208	NDC31HJ-220X	C CAPACITOR		
	C7213	NDC31HJ-101X	C.CAPACITOR		
	C7221	NDC31HJ-101X	C.CAPACITOR		

■ Electrical parts list(CD board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C7222	NDC31HJ-101X	C.CAPACITOR				Q7003	DTA114TKA-X	DIGITAL.TR		
	C7223	NDC31HJ-101X	C.CAPACITOR				Q7004	2SC2412K/R/-X	TRANSISTOR		
	C7230	NDC31HJ-220X	C CAPACITOR				Q7006	2SC2412K/R/-X	TRANSISTOR		
	C7231	NCB31HK-103X	C CAPACITOR				Q7007	DTC114EKA-X	TR		
	C7241	NCS21HJ-200X	C CAPACITOR				Q7008	DTA114EKA-X	DIGITAL.TRANSIS		
	C7242	NDC31HJ-220X	C CAPACITOR				Q7201	DTC114EKA-X	TR		
	C7251	QEK1AM-107Z	E.CAPACITOR	100MF 20% 10V			Q7202	DTA114EKA-X	DIGITAL.TRANSIS		
	C7252	NCB31HK-103X	C CAPACITOR				R5101	NRSA63J-223X	MG RESISTOR	LINE IN	
	D5301	MTZJ6.8C-T2	Z DIODE I/M	V.OUT			R5102	NRSA63J-683X	MG RESISTOR	LINE IN	
	D5302	1SS133-T2	SI DIODE	L/O MUTE.D			R5103	NRSA63J-392X	MG RESISTOR	CD IN	
	D5303	1SS133-T2	SI DIODE	SEIDENKI			R5105	NRSA63J-473X	MG RESISTOR	LINE OUT	
	D5304	1SS133-T2	SI DIODE	SEIDENKI			R5106	NRSA63J-392X	MG RESISTOR	LINE OUT	
	D6001	1SS355-X	DIODE				R5107	NRSA63J-102X	MG RESISTOR	LINE OUT	
	D6031	MTZJ5.6C-T2	ZENER DIODE				R5108	NRSA63J-222X	MG RESISTOR	L/O MUTE	
	D6032	1SR35-100A-T5	SI DIODE				R5110	NRSA63J-332X	MG RESISTOR	BASS	
	D6033	1SR35-100A-T5	SI DIODE				R5111	NRSA63J-122X	MG RESISTOR	MPX.F	
	D6061	1SS355-X	DIODE				R5112	NRSA63J-562X	MG RESISTOR	MPX.F	
	D6062	1SS355-X	DIODE				R5201	NRSA63J-223X	MG RESISTOR	LINE IN	
	D6063	1SS355-X	DIODE				R5202	NRSA63J-683X	MG RESISTOR	LINE IN	
	D7001	1SS355-X	DIODE				R5203	NRSA63J-392X	MG RESISTOR	CD IN	
	D7002	1SS355-X	DIODE				R5205	NRSA63J-473X	MG RESISTOR	LINE OUT	
	D7003	1SS133-T2	SI DIODE				R5206	NRSA63J-392X	MG RESISTOR	LINE OUT	
	D7004	1SS133-T2	SI DIODE				R5207	NRSA63J-102X	MG RESISTOR	LINE OUT	
	D7005	1SS133-T2	SI DIODE				R5208	NRSA63J-222X	MG RESISTOR	L/O MUTE	
	D7006	1SS355-X	DIODE				R5210	NRSA63J-332X	MG RESISTOR	BASS	
	D7007	MTZJ5.1C-T2	ZENER DIODE				R5211	NRSA63J-122X	MG RESISTOR	MPX.F	
	D7008	1SS133-T2	SI DIODE				R5212	NRSA63J-562X	MG RESISTOR	MPX.F	
	D7009	MTZJ8.2B-T2	DIODE				R5301	NRSA63J-223X	MG RESISTOR	L/O MUTE D	
	D7201	1SS133-T2	SI DIODE				R5302	NRSA63J-104X	MG RESISTOR	V.OUT	
	IC501	BD3861FS-X	IC	FUNC/VOL			R5305	NRSA63J-1R5X	MG RESISTOR	VCC	
	IC601	AN8806SB-W	IC				R6001	NRSA63J-123X	MG RESISTOR		
	IC602	LA6541-X	IC				R6002	NRSA63J-225X	MG RESISTOR		
	IC603	MN35510	IC				R6003	NRSA63J-102X	MG RESISTOR		
	IC701	UPD780024AGKB20	IC(MASK)	MASK-MICON			R6005	NRSA63J-274X	MG RESISTOR		
	IC702	KIA78S06P-T	IC				R6006	NRSA63J-473X	MG RESISTOR		
	IC711	UPD780053GC-031	IC	CD-MICOM			R6007	NRSA63J-273X	MG RESISTOR		
	J5301	QNS0047-001	JACK	LINE IN			R6008	NRSA63J-564X	MG RESISTOR		
	J5302	QNS0047-001	JACK	LINE OUT			R6009	NRSA63J-563X	MG RESISTOR		
	J5303	QNN0017-002	PIN JACK	VIDEOOUT			R6010	NRSA63J-104X	MG RESISTOR		
	J6001	GP1FA550TZ	OPT TRANSMITTER	OPT OUT			R6012	NRSA63J-103X	MG RESISTOR		
	K5301	QQR0779-001Z	INDUCTOR	CDAG			R6013	NRSA63J-121X	MG RESISTOR		
	K5303	QQR0779-001Z	INDUCTOR	V.GND			R6014	NRSA63J-100X	MG RESISTOR		
	K5304	QQR0779-001Z	INDUCTOR	V.OUT			R6015	NRSA63J-120X	MG RESISTOR		
	K6051	QQR0779-001Z	INDUCTOR				R6016	NRSA63J-910X	MG RESISTOR		
	K6201	NQR0155-005X	INDUCTOR I.M				R6021	NRSA63J-270X	MG RESISTOR		
	K6202	NQR0155-005X	INDUCTOR I.M				R6024	NRSA63J-154X	MG RESISTOR		
	K6203	NQR0155-005X	INDUCTOR I.M				R6025	NRSA63J-154X	MG RESISTOR		
	K7001	QQR0779-001Z	INDUCTOR				R6026	NRSA63J-393X	MG RESISTOR		
	K7201	QQR0779-001Z	INDUCTOR				R6027	NRSA63J-393X	MG RESISTOR		
	LF501	QQR0797-002	INDUCTOR	V.OUT			R6028	NRSA63J-393X	MG RESISTOR		
	LF511	QQR0590-001	FILTER	MPX.F			R6029	NRSA63J-393X	MG RESISTOR		
	LF521	QQR0590-001	FILTER	MPX.F			R6031	NRSA63J-102X	MG RESISTOR		
	L7001	QQL01BK-100Z	INDUCTOR				R6032	NRSA63J-102X	MG RESISTOR		
	L7002	QQL01BK-100Z	INDUCTOR				R6033	NRSA63J-102X	MG RESISTOR		
	L7201	QQL01BK-100Z	INDUCTOR				R6040	NRSA63J-102X	MG RESISTOR		
	Q5101	2SD2114K/VW/-X	CHIP TR.C.M	L/O MUTE			R6041	NRSA63J-104X	MG RESISTOR		
	Q5201	2SD2114K/VW/-X	CHIP TR.C.M	L/O MUTE			R6042	NRSA63J-472X	MG RESISTOR		
	Q5301	DTA114EKA-X	DIGITAL.TRANSIS	L/O MUTE.D			R6043	NRSA63J-123X	MG RESISTOR		
	Q6001	2SA1037AK/R/-X	TRANSISTOR				R6044	NRSA63J-683X	MG RESISTOR		
	Q6031	2SC2060/QR/-T	TRANSISTOR				R6045	NRSA63J-433X	MG RESISTOR		
	Q6500	DTD123TK-X	CHIP D.TR.C.M				R6046	NRSA63J-392X	MG RESISTOR		
	Q7001	2SC2814/4-5/-X	TRANSISTOR				R6047	NRSA63J-332X	MG RESISTOR		
	Q7002	2SC2814/4-5/-X	TRANSISTOR				R6048	NRSA63J-222X	MG RESISTOR		

■ Electrical parts list(CD board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	R6049	NRSA63J-152X	MG RESISTOR		
	R6050	NRSA63J-332X	MG RESISTOR		
	R6051	NRSA63J-102X	MG RESISTOR		
	R6052	NRSA63J-102X	MG RESISTOR		
	R6053	NRSA63J-102X	MG RESISTOR		
	R6054	NRSA63J-102X	MG RESISTOR		
	R6056	NRSA63J-0R0X	MG RESISTOR		
	R6057	NRSA63J-0R0X	MG RESISTOR		
	R6058	NRSA63J-0R0X	MG RESISTOR		
	R6059	NRSA63J-471X	MG RESISTOR		
	R6060	NRSA63J-471X	MG RESISTOR		
	R6061	NRSA63J-104X	MG RESISTOR		
	R6063	NRSA63J-124X	MG RESISTOR		
	R6064	NRSA63J-681X	MG RESISTOR		
	R6066	NRSA63J-470X	MG RESISTOR		
	R6067	NRSA63J-220X	MG RESISTOR		
	R6068	NRSA63J-220X	MG RESISTOR		
	R6069	NRSA63J-155X	MG RESISTOR		
	R6071	NRSA63J-102X	MG RESISTOR		
	R6072	NRSA63J-102X	MG RESISTOR		
	R6080	NRSA63J-0R0X	MG RESISTOR		
	R6081	NRSA63J-0R0X	MG RESISTOR		
	R6141	NRSA63J-0R0X	MG RESISTOR		
	R6201	NRSA63J-102X	MG RESISTOR		
	R6202	NRSA63J-102X	MG RESISTOR		
	R6203	NRSA63J-221X	MG RESISTOR		
	R6204	NRSA63J-102X	MG RESISTOR		
	R6205	NRSA63J-0R0X	MG RESISTOR		
	R6206	NRSA63J-271X	MG RESISTOR		
	R6207	NRSA63J-271X	MG RESISTOR		
	R6208	NRSA63J-0R0X	MG RESISTOR		
	R6209	NRSA63J-0R0X	MG RESISTOR		
	R6210	NRSA63J-0R0X	MG RESISTOR		
	R6211	NRSA63J-221X	MG RESISTOR		
	R6212	NRSA63J-102X	MG RESISTOR		
	R6213	NRSA63J-101X	MG RESISTOR		
	R6214	NRSA63J-101X	MG RESISTOR		
	R6215	NRSA63J-101X	MG RESISTOR		
	R6220	NRSA63J-0R0X	MG RESISTOR		
	R6500	NRSA63J-272X	MG RESISTOR		
	R7001	NRSA63J-822X	MG RESISTOR		
	R7002	NRSA63J-822X	MG RESISTOR		
	R7003	NRSA63J-103X	MG RESISTOR		
	R7004	NRSA63J-103X	MG RESISTOR		
	R7005	NRSA63J-331X	MG RESISTOR		
	R7038	NRSA63J-103X	MG RESISTOR	VERSION	
	R7040	NRSA63J-102X	MG RESISTOR		
	R7041	NRSA63J-103X	MG RESISTOR		
	R7042	NRSA63J-103X	MG RESISTOR		
	R7043	NRSA63J-103X	MG RESISTOR		
	R7044	NRSA63J-103X	MG RESISTOR		
	R7045	NRSA63J-222X	MG RESISTOR		
	R7046	NRSA63J-222X	MG RESISTOR		
	R7048	NRSA63J-102X	MG RESISTOR		
	R7049	NRSA63J-102X	MG RESISTOR		
	R7050	NRSA63J-104X	MG RESISTOR		
	R7051	NRSA63J-473X	MG RESISTOR		
	R7052	NRSA63J-333X	MG RESISTOR		
	R7053	NRSA63J-222X	MG RESISTOR		
	R7074	NRSA63J-103X	MG RESISTOR		
	R7076	NRSA63J-153X	MG RESISTOR	THERM	
	R7077	NRSA63J-123X	MG RESISTOR	THERM	
	R7101	NRSA63J-102X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R7102	NRSA63J-222X	MG RESISTOR		
	R7103	NRSA63J-222X	MG RESISTOR		
	R7104	NRSA63J-102X	MG RESISTOR		
	R7105	NRSA63J-222X	MG RESISTOR		
	R7106	NRSA63J-222X	MG RESISTOR		
	R7107	NRSA63J-222X	MG RESISTOR		
	R7108	NRSA63J-222X	MG RESISTOR		
	R7109	NRSA63J-222X	MG RESISTOR		
	R7110	NRSA63J-222X	MG RESISTOR		
	R7111	NRSA63J-222X	MG RESISTOR		
	R7112	NRSA63J-222X	MG RESISTOR		
	R7113	NRSA63J-103X	MG RESISTOR		
	R7114	NRSA63J-0R0X	MG RESISTOR		
	R7115	NRSA63J-102X	MG RESISTOR		
	R7116	NRSA63J-222X	MG RESISTOR		
	R7117	NRSA63J-102X	MG RESISTOR		
	R7118	NRSA63J-222X	MG RESISTOR		
	R7119	NRSA63J-222X	MG RESISTOR		
	R7120	NRSA63J-102X	MG RESISTOR		
	R7121	NRSA63J-222X	MG RESISTOR		
	R7122	NRSA63J-222X	MG RESISTOR		
	R7123	NRSA63J-222X	MG RESISTOR		
	R7124	NRSA63J-222X	MG RESISTOR		
	R7125	NRSA63J-222X	MG RESISTOR		
	R7126	NRSA63J-103X	MG RESISTOR		
	R7127	NRSA63J-222X	MG RESISTOR		
	R7128	NRSA63J-103X	MG RESISTOR		
	R7129	NRSA63J-222X	MG RESISTOR		
	R7130	NRSA63J-103X	MG RESISTOR		
	R7131	NRSA63J-102X	MG RESISTOR		
	R7132	NRSA63J-103X	MG RESISTOR		
	R7133	NRSA63J-103X	MG RESISTOR		
	R7134	NRSA63J-222X	MG RESISTOR		
	R7135	NRSA63J-222X	MG RESISTOR		
	R7136	NRSA63J-102X	MG RESISTOR		
	R7137	NRSA63J-103X	MG RESISTOR		
	R7138	NRSA63J-103X	MG RESISTOR		
	R7139	NRSA63J-103X	MG RESISTOR		
	R7140	NRSA63J-103X	MG RESISTOR		
	R7141	NRSA63J-222X	MG RESISTOR		
	R7142	NRSA63J-222X	MG RESISTOR		
	R7143	NRSA63J-471X	MG RESISTOR		
	R7144	NRSA63J-222X	MG RESISTOR		
	R7145	NRSA63J-222X	MG RESISTOR		
	R7146	NRSA63J-222X	MG RESISTOR		
	R7147	NRSA63J-222X	MG RESISTOR		
	R7148	NRSA63J-102X	MG RESISTOR		
	R7149	NRSA63J-102X	MG RESISTOR		
	R7150	NRSA63J-102X	MG RESISTOR		
	R7151	NRSA63J-222X	MG RESISTOR		
	R7152	NRSA63J-222X	MG RESISTOR		
	R7201	NRSA63J-102X	MG RESISTOR		
	R7202	NRSA63J-102X	MG RESISTOR		
	R7203	NRSA63J-102X	MG RESISTOR		
	R7204	NRSA63J-222X	MG RESISTOR		
	R7205	NRSA63J-103X	MG RESISTOR		
	R7206	NRSA63J-102X	MG RESISTOR		
	R7207	NRSA63J-102X	MG RESISTOR		
	R7208	NRSA63J-102X	MG RESISTOR		
	R7209	NRSA63J-102X	MG RESISTOR		
	R7210	NRSA63J-102X	MG RESISTOR		
	R7211	NRSA63J-102X	MG RESISTOR		
	R7212	NRSA63J-223X	MG RESISTOR		

■ Electrical parts list (CD board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	R7213	NRSA63J-102X	MG RESISTOR		
	R7214	NRSA63J-223X	MG RESISTOR		
	R7215	NRSA63J-102X	MG RESISTOR		
	R7216	NRSA63J-103X	MG RESISTOR		
	R7217	NRSA63J-102X	MG RESISTOR		
	R7218	NRSA63J-102X	MG RESISTOR		
	R7219	NRSA63J-102X	MG RESISTOR		
	R7220	NRSA63J-102X	MG RESISTOR		
	R7221	NRSA63J-102X	MG RESISTOR		
	R7222	NRSA63J-102X	MG RESISTOR		
	R7223	NRSA63J-102X	MG RESISTOR		
	R7224	NRSA63J-222X	MG RESISTOR		
	R7225	NRSA63J-222X	MG RESISTOR		
	R7251	NRSA63J-223X	MG RESISTOR		
	R7302	NRSA63J-0R0X	MG RESISTOR		
	R7310	NRSA63J-103X	MG RESISTOR		
	R7311	NRSA63J-103X	MG RESISTOR		
	R7312	NRSA63J-103X	MG RESISTOR		
	SP603	VYH7653-001	IC HOLDER	IC603 IC-HOLDER	
	SP701	VYH7653-002	IC HOLDER		
	SP711	VYH7653-001	IC HOLDER		
	S8021	QSW0851-001	DETECT SWITCH		
	S8022	QSW0851-001	DETECT SWITCH		
	TH701	QAD0015-103Z	THERMISTOR		
	TW701	QUB220-08HPDM	SIN TWIST WIRE		
	WR 1	QUB220-07HPDM	SIN TWIST WIRE	ANT GND - BOTTO	
	W3001	QJK002-061901	SIN CR C-B WIRE	POWER - MAIN	
	W3002	QJK019-040704	SIN CR C-B WIRE	SPK - POWER	
	W3901	QJK019-072002	SIN CR C-B WIRE	POWER - MAIN	
	W5001	QJK018-130503	SIN CR C-B WIRE	FUNCTION - MICO	
	W7002	QJK021-121700	SIN CR C-B WIRE	MICOM - VCD	
	W7003	QJK018-060901	SIN CR C-B WIRE	MICOM - VCD	
	W8001	QJK018-020502	SIN CR C-B WIRE	LCD BACKLIGHT -	
	W8002	QJK018-040504	SIN CR C-B WIRE	TOPKEY - FUNCTI	
	W8003	QJK018-021202	SIN CR C-B WIRE	TOPKEY - DOOR D	
	W8004	QJK018-030503	SIN CR C-B WIRE	DOOR DT1 - MICO	
	W8005	QJK018-020502	SIN CR C-B WIRE	DISC LED - MICO	
	X6051	QAX0413-001Z	CRYSTAL		
	X7001	QAX0401-001	CRYSTAL		
	X7002	QAX0410-001	CERA LOCK		
	X7201	QAX0410-001	CERA LOCK		

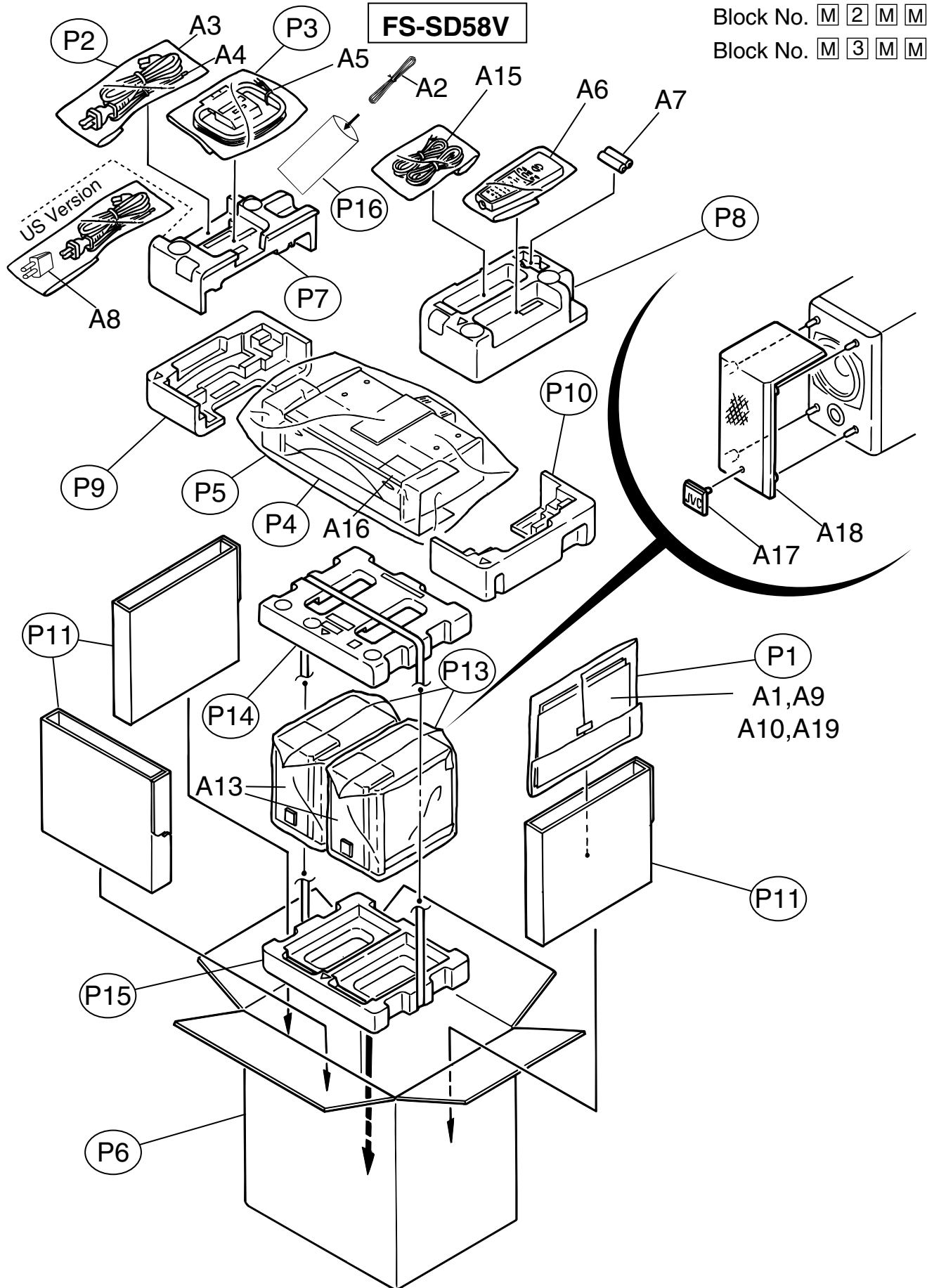
■ Electrical parts list (VCD board)

Block No. 03

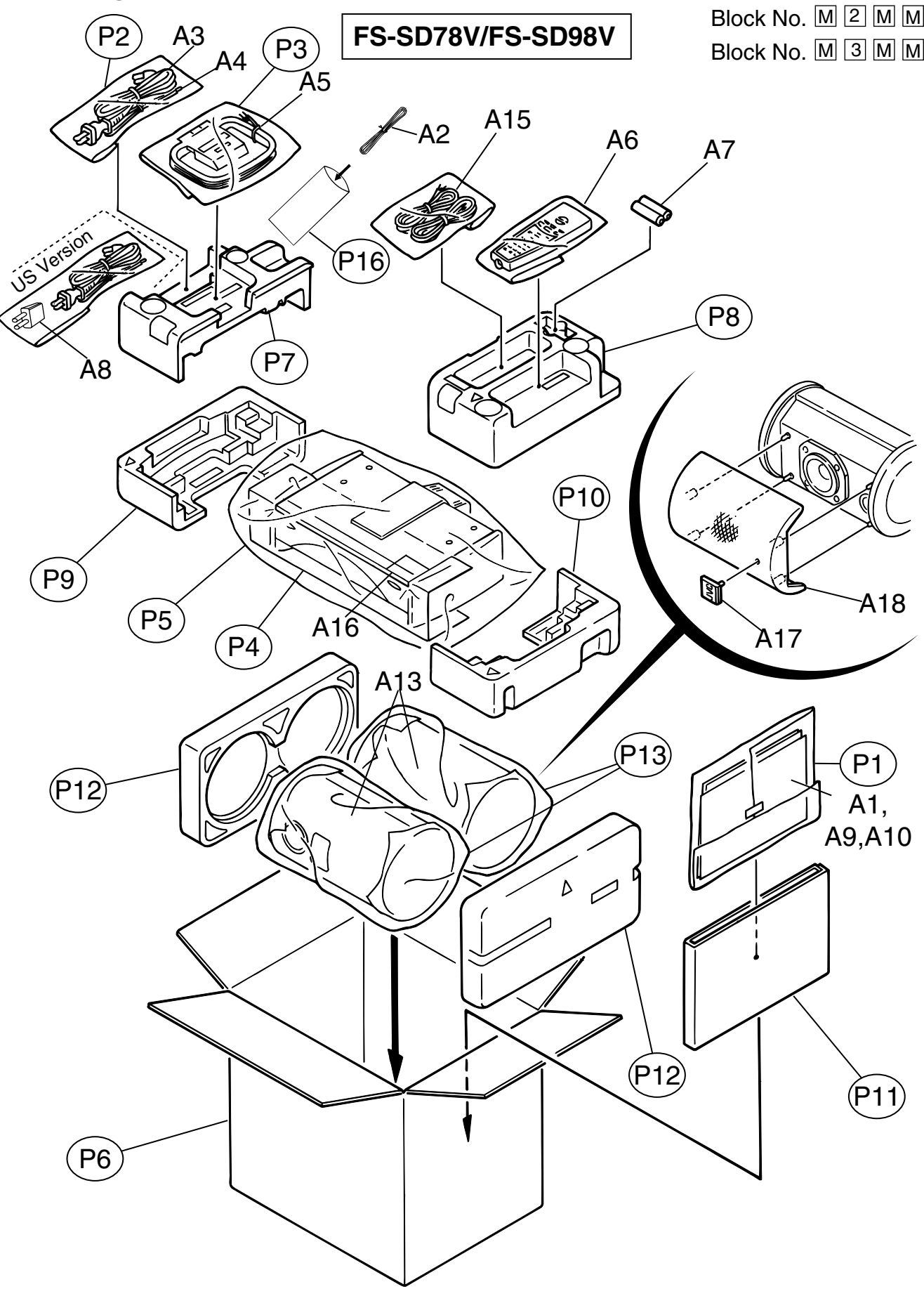
△	Item	Parts number	Parts name	Remarks	Area
	C 101	NCF31EZ-104X	C CAPACITOR		
	C 102	NCF31EZ-104X	C CAPACITOR		
	C 103	NCF31EZ-104X	C CAPACITOR		
	C 105	NCF31EZ-104X	C CAPACITOR		
	C 106	NCF31EZ-104X	C CAPACITOR		
	C 107	NCF31EZ-104X	C CAPACITOR		
	C 110	NCF31EZ-104X	C CAPACITOR		
	C 111	NCF31EZ-104X	C CAPACITOR		
	C 112	NCF31EZ-104X	C CAPACITOR		
	C 113	NCF31EZ-104X	C CAPACITOR		
	C 115	NCF31EZ-104X	C CAPACITOR		
	C 116	NCF31EZ-104X	C CAPACITOR		
	C 122	NCS31HJ-150X	C CAPACITOR		
	C 123	NCF31EZ-104X	C CAPACITOR		
	C 124	NCF31EZ-104X	C CAPACITOR		
	C 125	NCF31EZ-104X	C CAPACITOR		
	C 127	NCF31EZ-104X	C CAPACITOR		
	C 128	NEA70JM-107X	E.CAPACITOR		
	C 131	NCF31EZ-104X	C CAPACITOR		
	C 133	NCF31EZ-104X	C CAPACITOR		
	C 134	NCF31EZ-104X	C CAPACITOR		
	C 135	NCF31EZ-104X	C CAPACITOR		
	C 136	NCB31HK-272X	C CAPACITOR		
	C 141	NCB31HK-472X	C CAPACITOR		
	C 143	NCB31HK-182X	C CAPACITOR		
	C 144	NCB31HK-182X	C CAPACITOR		
	C 151	NCF31EZ-104X	C CAPACITOR		
	C 152	NEA70JM-226X	E CAPACITOR		
	C 153	NCF31EZ-104X	C CAPACITOR		
	C 154	NEA70JM-107X	E.CAPACITOR		
	C 155	NCF31EZ-104X	C CAPACITOR		
	C 156	NEA70JM-226X	E CAPACITOR		
	C 157	NEA70JM-226X	E CAPACITOR		
	C 158	NCF31EZ-104X	C CAPACITOR		
	C 159	NCB31HK-102X	C CAPACITOR		
	C 162	NCS31HJ-101X	C.CAPACITOR		
	C 168	NCS31HJ-471X	C CAPACITOR		
	C 170	NCS31HJ-471X	C CAPACITOR		
	C 181	NCF31EZ-104X	C CAPACITOR		
	C 191	NCS31HJ-101X	C.CAPACITOR		
	C 198	NCF31EZ-104X	C CAPACITOR		
	CN101	QGF1016F2-15W	CONNECTOR C.M		
	CN102	QGA2001F2-12X	CONNECTOR C.M		
	CN103	QGA2001F2-06X	CONNECTOR C.M		
	D 141	UDZ4.7B-X	ZENER DIODE		
	D 142	1SS355-X	DIODE		
	IC101	CL480-F1	IC		
	IC102	MX23C10M12-586X	IC C.M		
	IC103	V53C16258HK40-X	IC C.M.		
	IC104	BU1424K	IC		
	IC105	BU2173F-X	IC		
	IC106	UPD6461GS-635-X	IC		
	IC107	PQ20VZ11-X	IC		
	IC108	TC7SH04FU-X	IC C.M		
	IC111	MN171601AK8J2	IC		
	IC112	A625308M-70S-X	IC C.M		
	IC113	HD74HCT244FP-XE	IC C.M		
	IC114	HD74HCT245FP-XE	IC		
	K 101	NQR0227-004X	FERRITE BEADS		
	K 103	NQR0227-004X	FERRITE BEADS		
	L 102	NQL012K-2R7X	INDUCTOR		
	Q 101	DTA114EKA-X	DIGITAL.TRANSIS		
	Q 141	2SC2412K/RS/-X	CHIP TRANSISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R 102	NRSA63J-473X	MG RESISTOR		
	R 103	NRSA63J-103X	MG RESISTOR		
	R 104	NRSA63J-105X	MG RESISTOR		
	R 107	NRSA63J-122X	MG RESISTOR		
	R 109	NRSA63J-750X	MG RESISTOR		
	R 111	NRSA63J-182X	MG RESISTOR		
	R 112	NRSA63J-112X	MG RESISTOR		
	R 113	NRSA63J-102X	MG RESISTOR		
	R 115	NRSA63J-0R0X	MG RESISTOR		
	R 118	NRSA63J-392X	MG RESISTOR		
	R 119	NRSA63J-392X	MG RESISTOR		
	R 121	NRSA63J-102X	MG RESISTOR		
	R 122	NRSA63J-102X	MG RESISTOR		
	R 123	NRSA63J-102X	MG RESISTOR		
	R 124	NRSA63J-102X	MG RESISTOR		
	R 125	NRSA63J-102X	MG RESISTOR		
	R 128	NRSA63J-103X	MG RESISTOR		
	R 129	NRSA63J-103X	MG RESISTOR		
	R 135	NRSA63J-121X	MG RESISTOR		
	R 141	NRSA63J-750X	MG RESISTOR		
	R 142	NRSA63J-562X	MG RESISTOR		
	R 147	NRSA63J-471X	MG RESISTOR		
	R 148	NRSA63J-152X	MG RESISTOR		
	R 149	NRSA63J-152X	MG RESISTOR		
	R 150	NRSA63J-0R0X	MG RESISTOR		
	R 155	NRSA63J-271X	MG RESISTOR		
	R 156	NRSA63J-391X	MG RESISTOR		
	R 157	NRSA63J-0R0X	MG RESISTOR		
	R 191	NRSA63J-820X	MG RESISTOR		
	R 192	NRSA63J-820X	MG RESISTOR		
	R 193	NRSA63J-820X	MG RESISTOR		
	R 194	NRSA63J-0R0X	MG RESISTOR		
	R 196	NRSA63J-221X	MG RESISTOR		
	R 197	NRSA63J-0R0X	MG RESISTOR		
	R 198	NRSA63J-181X	MG RESISTOR		
	TC101	NAT3111-200X	TRIM.CAPA.I.M		
	X 101	NAX0150-001X	CRYSTAL		

Packing materials and accessories parts list



Packing materials and accessories parts list



■ Parts list (Packing)

Block No. M2MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPA02503503P	POLY BAG	1	FOR INST	
	P 2	QPA01503503	POLY BAG	1	FOR P.CORD	
	P 3	QPA01702503P	POLY BAG	1	FOR AM ANT.	
	P 4	QPF26044015	PACKING SHEET	1		
	P 5	QPC04504515P	POLY BAG	1		
	P 6	LV32008-009A	PACKING CASE	1	FS-SD78V	US
		LV32008-010A	PACKING CASE	1	FS-SD78V	UF
		LV31707-006A	PACKING CASE	1	FS-SD58V	UF
		LV32008-011A	PACKING CASE	1	FS-SD98V	US
		LV31707-005A	PACKING CASE	1	FS-SD58V	UB,US
		LV32008-012A	PACKING CASE	1	FS-SD98V	UF
	P 7	LV20760-001A	CUSHION TOP(L)	1	TOP (L)	
	P 8	LV20760-002A	CUSHION TOP(R)	1		
	P 9	LV20761-001A	CUSHION BTM (L)	1	BOTTOM (L)	
	P 10	LV20761-002A	CUSHION BTM (R)	1		
	P 11	LV32009-002A	CARTON SPACER	1	FS-SD78V/98V	
		LV31789-002A	CARTON SPACER	3	FS-SD58V	
	P 12	SD7KF0001	PACKING CUSHION	2	FS-SD78V/98V	
	P 13	SD7KO0001	POLY PACK	2	FS-SD78V/98V	
		SD5KO0001	POLY PACK	2	FS-SD58V	
	P 14	SD5KF0101	CUSHION(TOP)	1	FS-SD58V	
	P 15	SD5KF0201	CUSHION(BOTTOM)	1	FS-SD58V	
	P 16	QPA01202505	POLY BAG	1	FOR SIGNAL CORD	

■ Parts list (Accessories)

Block No. M3MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	LVT0548-001A	INST.BOOK	1	ENG CHI	UB,US
		LVT0548-002A	INST BOOK	1	CHI	UF
	A 2	EWP304-014W	SIGNAL CORD	1	FOR VIDEO OUT	
△	A 3	QMPS020-183-JC	POWER CORD	1		UF
△		QMPP060-183-JD	POWER CORD	1		UB
△		QMPL080-183-JC	POWER CORD	1		US
	A 4	EWP503-001C	ANT.WIRE	1	FM ANT	
	A 5	QAL0014-001	AM LOOP ANT	1	AM ANT	
	A 6	RM-SFSSD78V	REMOCON UNIT	1	FS-SD58V	
		RM-SFSSD98V	REMOCON UNIT	1	FS-SD78V/98V	
	A 7	-----	BATTERY	2	FOR REMOCON	
△	A 8	QAM0112-001	AC PLUG ADAPTER	1		US
	A 9	BT-59007-2	WARRANTY CARD	1		UF
	A 10	BT-59009-1	SVC CENTER LIST	1		UF
	A 13	FSSD78V-SPBOX	SPEAKER BOX	2	FS-SD78V	
		FSSD98V-SPBOX	SPEAKER BOX	2	FS-SD98V	
		FSSD58V-SPBOX	SPEAKER BOX	2	FS-SD58V	
	A 15	QAM0293-001	SPK.CORD(2PCS)	1	SPEAKER CORD OF	
	A 16	LV41819-002A	CD CAUTION	1		UF
		LV41819-001A	CD CAUTION	1		UB,US
	A 17	SD7SJ0001	JVC MARK	1	FS-SD98V	
		SD5SJ0101	JVC MARK	1	FS-SD58V78V	
	A 18	D9VBK0001	SARAN BOARD	1	FS-SD98V	
		D7VBK0001	SARAN BOARD	1	FS-SD78V	
		D5VBK0001	SARAN BOARD	1	FS-SD58V	
	A 19	LV30258-074A	UB SHEET	1	FS-SD58V	UB