

Service  
Service

# Service Manual

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## SPECIFICATIONS

### ■ General

Power supply:	12V DC(11V-16V) Test voltage 14.4V, negative ground
Maximum power output:	50Wx4 channels
Continuous power output:	25Wx4 channels (4Ω, 10% T.H.D.)
Suitable speaker impedance:	4-8 ohm
Pre-Amp output voltage:	4.0V ( CD play mode: 1KHz, 0 dB, 10 KΩ load )
Fuse:	15A
Dimensions(WxHxD)	178x50x1625mm
Weight:	1.7kg
Aux-in Level:	≥300mV
Sub-out:	4.0V

### ■ Components

Mounting collar	1
Machine screws M5x6mm	4
Mounting bolt (50mm)	1
Wire connector	1
Removable face plate case	1
Trim plate	1
L-key	2
Operating instructions	1
Rubber cushion	1
Remote controller	1

### ■ FM Stereo Radio

Frequency range:	87.5-108.0 MHz (EUROPE MODE) 87.5-107.9MHz (USA MODE) 65.0 - 74.0 MHz ( OIRT MODE )
Usable sensitivity:	8 dBμ
quieting sensitivity(S/N=50dB):	12 dBμ
Frequency response:	30Hz-15kHz
Stereo separation:	30dB(1kHz)
Image response ratio:	50dB
IF response ratio:	70dB
Signal/noise ratio	55dB

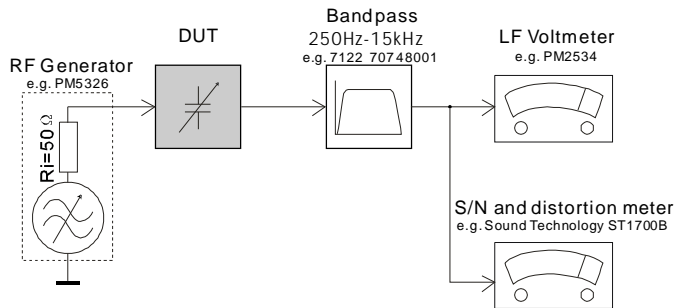
### ■ Disc Player

System:	Disc digital audio system
Frequency response:	20Hz - 20kHz
Signal/noise ratio:	> 86 dB
Total harmonic distortion:	Less than 0.20%(1 kHz)
Channel separation:	> 60 dB
Video signal format system:	PAL/NTSC
Video:	
video output:	1 ± 0.2V
horizontal nesowtiou:	≥500 lines

Note: Specifications and design are subject to change without notice for product improvements.

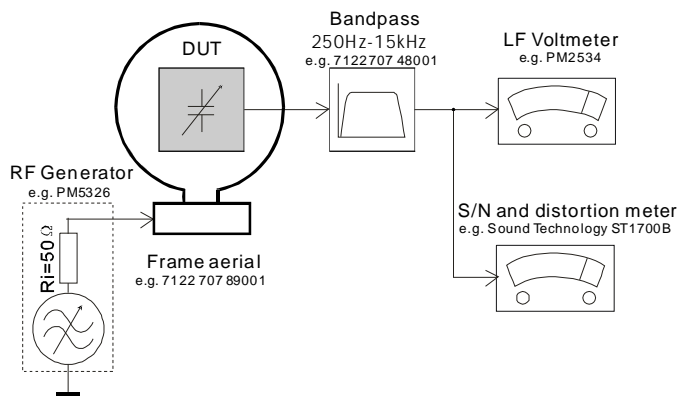
# MEASUREMENT SETUP

## Tuner FM



Use a bandpass filter to eliminate hum(50Hz,100Hz) and disturbance from the pilotone(19kHz,38kHz).

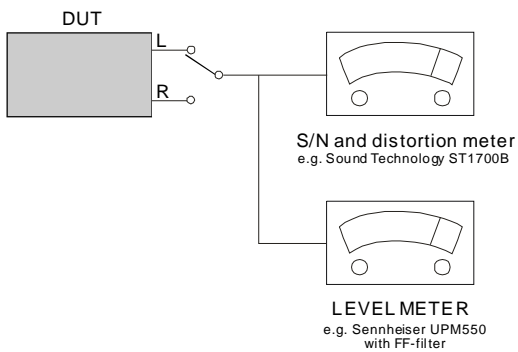
## Tuner AM (MW,LW)



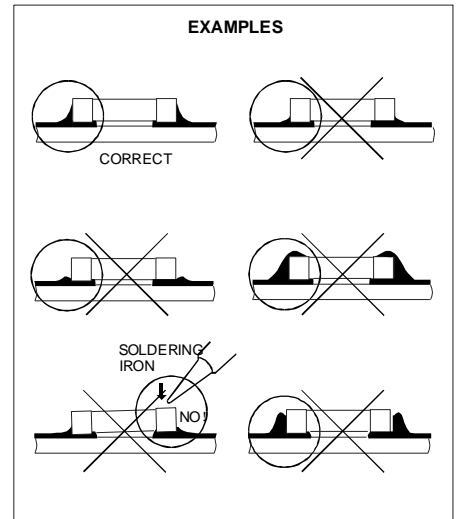
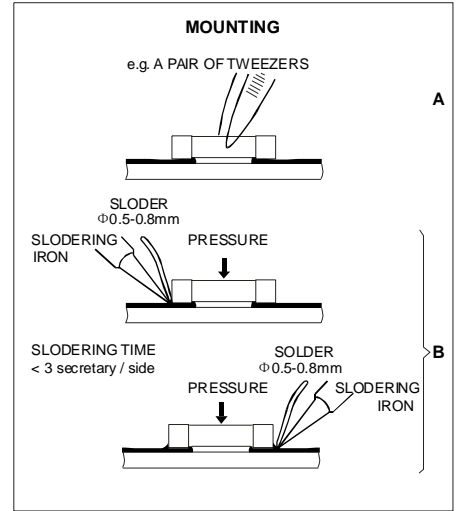
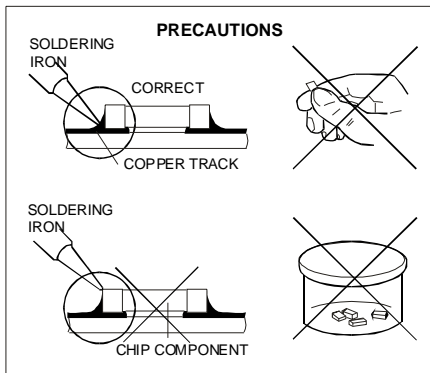
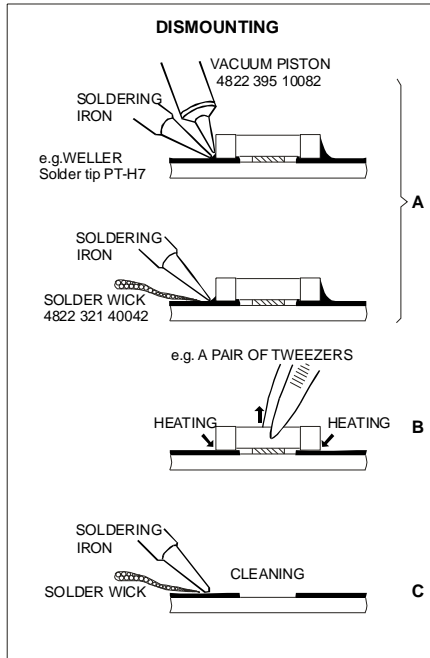
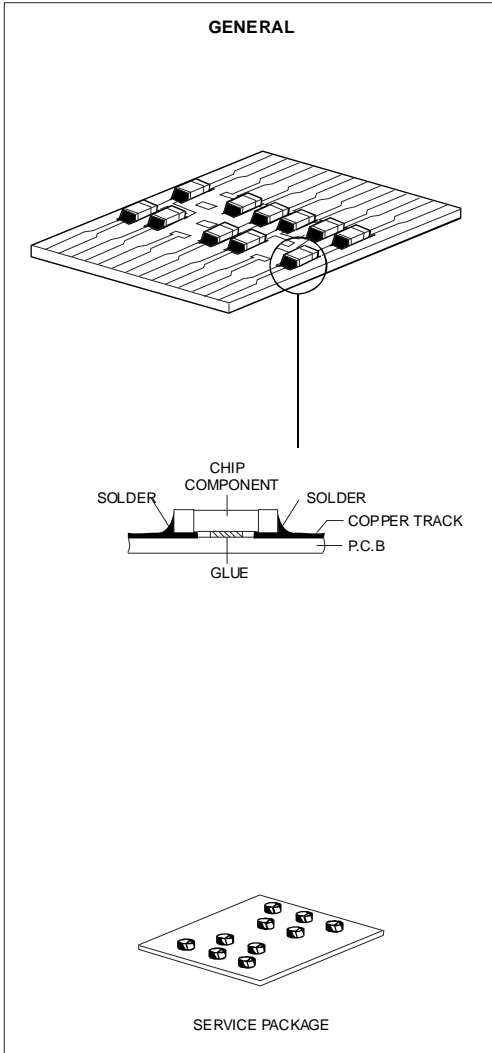
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.  
Use a bandpass filter ( or at least a high pass filter with 250Hz) to eliminate hum ( 50Hz,100Hz ).

## CD

Use Audio Signal Disc SBC429 4822 397 30184  
(replaces test disc 3)



# HANDLING CHIP COMPONENTS



**GB WARNING**

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

**ESD****NL WAARSCHUWING**

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).

Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

**F ATTENTION**

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques(ESD).

Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.

Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.

Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

**D WARNING**

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen(ESD).

Unvorsichtige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren.

Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.

Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

**I AVVERTIMENTO**

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche(ESD).

La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.

Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un bracciale a resistenza.

Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

**GB ATTENTION**

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne."

**NL**

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

**F**

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

**D**

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

**I**

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."

**GB Warning!**

Invisible laser radiation when open.  
Avoid direct exposure to beam.

**S Varning!**

Osynlig laserstrålning när apparaten är öppnad och spärrar är urkopplad. Betrakta ej strålen.

**SF Varoitus!**

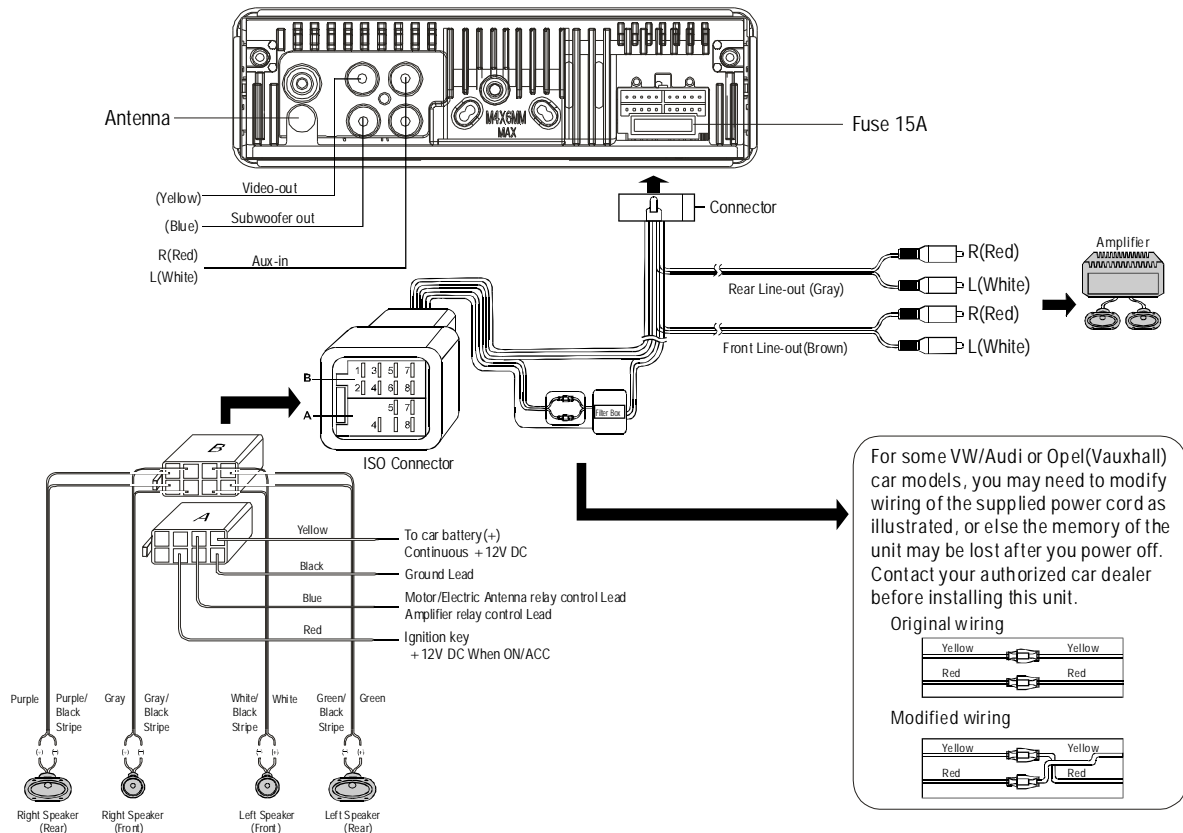
Avatussa laitteessa ja suojalukituksen ohitettaessa olet alltiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

**DK Advarse!**

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

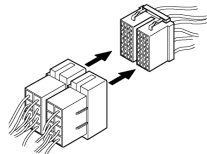
# PREPARATIONS

## ■ Wiring Diagram



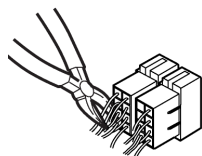
## ■ Using the ISO Connector

1.If your car is equipped with the ISO connector, then connect the ISO connectors as illustrated.



2. For connections without the ISO connectors, check the wiring in the vehicle carefully before connecting, incorrect connection may cause serious damage to this unit.

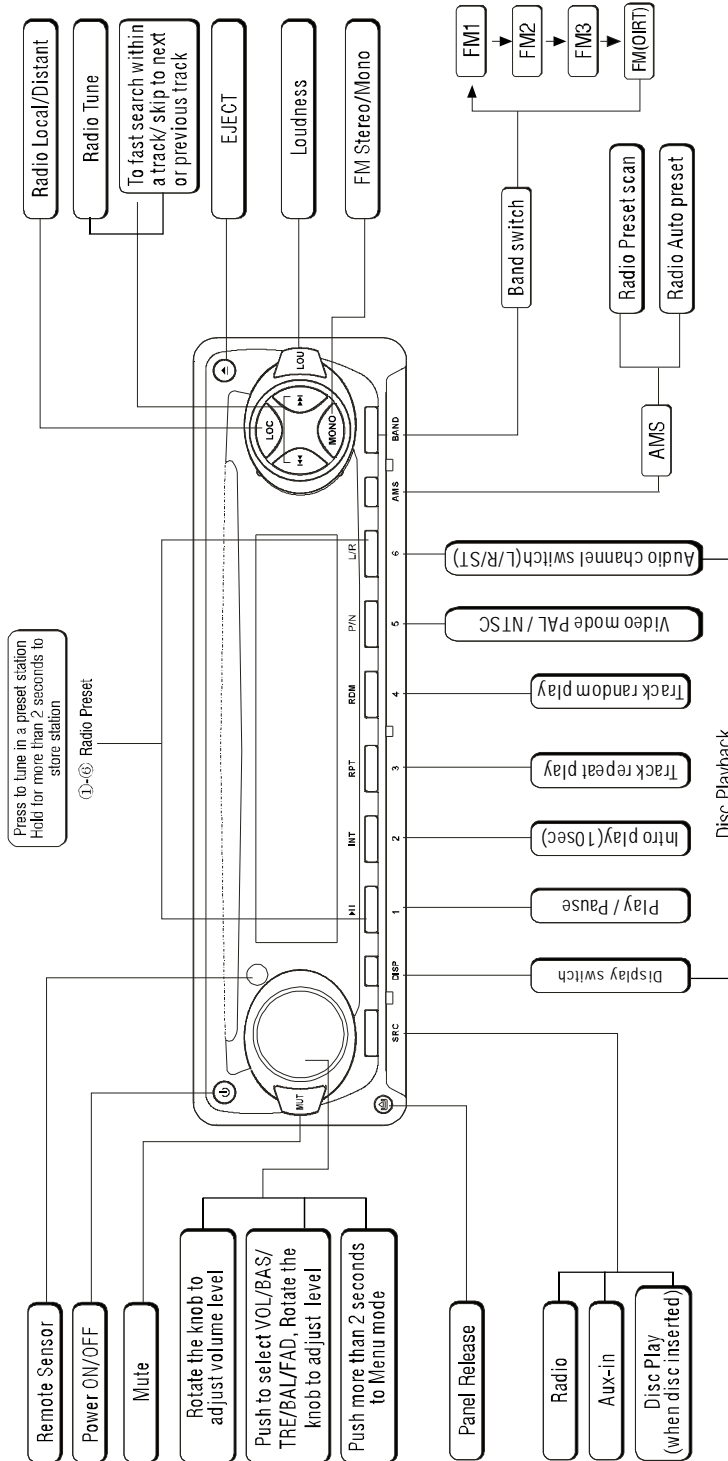
Cut the connector, connect the colored leads of the power cord to the car battery, as shown in the colour code table below for speaker and power cable connections



LOCATION	FUNCTION	
	Connector A	Connector B
1		Rear Right (+) - Purple
2		Rear Right (-) - Purple / Black Stripe
3		Front Right (+) - Gray
4	ACC+/red	Front Right (-) - Gray / Black Stripe
5	Auto Antenna/blue	Front Left (+) - White
6		Front Left (-) - White / Black Stripe
7	Battery 12V(+)/yellow	Rear Left (+) - Green
8	Ground/black	Rear Left (-) - Green / Black Stripe

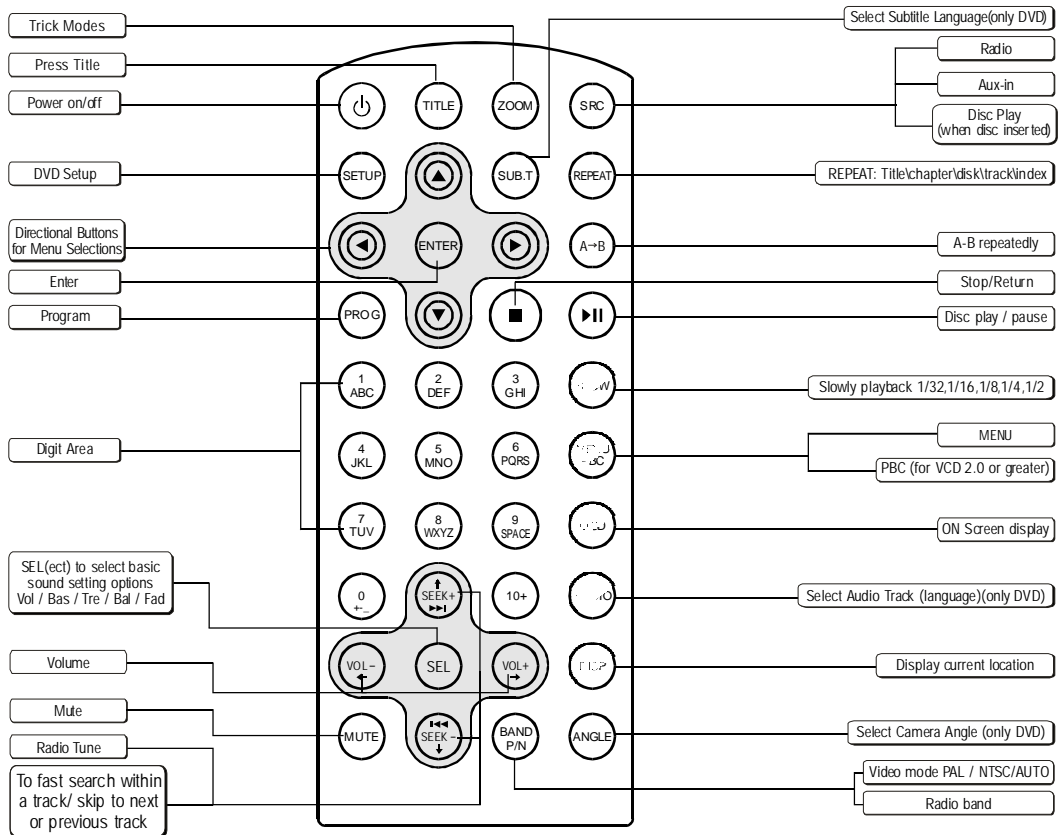
# CONTROLS

Power on : press any button on the panel except  to turn on the unit.



## REMOTE CONTROLS

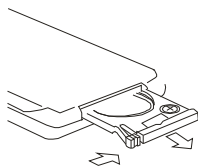
**Power On :** Press any button on the remote control to turn on the unit.



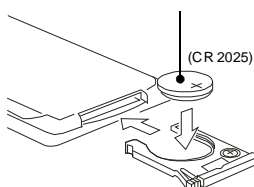
### Replacing the lithium battery of remote control unit.

\* When the operation range of the card remote control becomes short or no Properly, replace the lithium battery with a new one. Make sure the battery polarity replacement is correct.

1. Pull out the battery holder while pressing the stopper.



2. Insert the button-type lithium battery with the (+) mark facing upward. Insert the battery holder into the remote control.



### WARNINGS:

- Store the battery in place where children cannot reach. If a child accidentally swallows the battery, consult a doctor immediately.
- Do not recharge, short, disassemble or heat the battery or dispose it in a fire.
- Doing any of these things may cause the battery to give off heat, crack or start a fire.
- Do not leave the battery with other metallic materials. Doing this may cause the battery to give off heat, crack or start a fire.
- When throwing away or saving the battery, wrap it in tape and insulate; otherwise, the battery may start to give off heat, crack or start a fire.
- Do not poke the battery with tweezers or similar tools. Doing this may cause the battery to give off heat, crack or start a fire.



## MAINTENANCE AND TROUBLESHOOTING

### Maintenance

#### Clearing disc

When a disc becomes dirty clean it with a cleaning cloth.  
Wipe the disc from the center out.

#### Cleaning the disc lens

After prolonged use, dirt or dust may accumulate at the lens. To ensure good playback quality, clean the disc with Philips CD lens Cleaner or any commercially available cleaner. Follow the instructions supplied with cleaner.

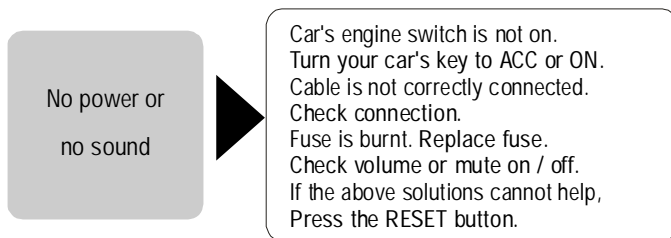
#### Cleaning the heads and the Tape Parts

To ensure good playback quality, clean the heads (A), the capstan (B), and pressure roller (C) after every 50 hours of tape operation. Use a cotton swab slightly moistened with cleaning fluid or alcohol. You can also clean the heads by playing a cleaning tape once.

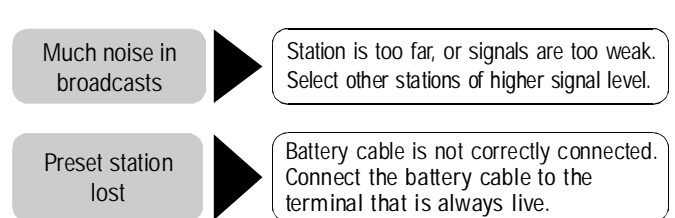
### Troubleshooting

If you suspect something is wrong, immediately switch power off. Immediately stop using it and call the store where you purchased it. Never try to repair the unit yourself because it is dangerous to do so.

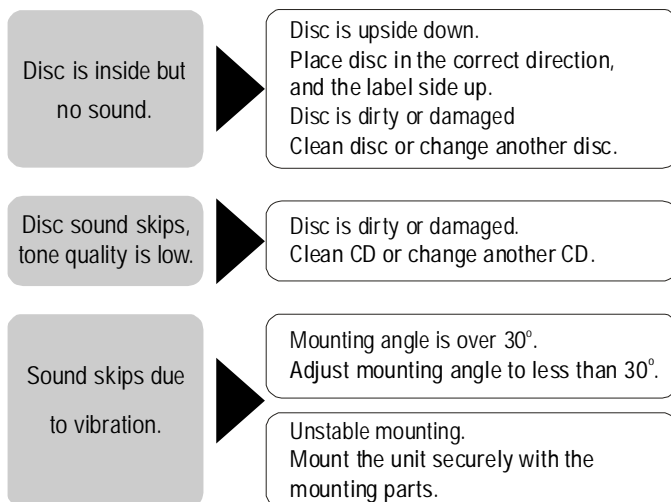
#### ■ General



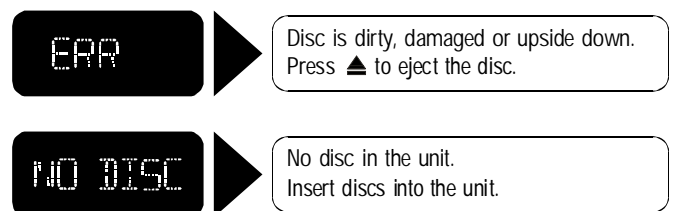
#### ■ Radio



#### ■ Disc



#### ■ Error Display Messages

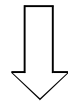
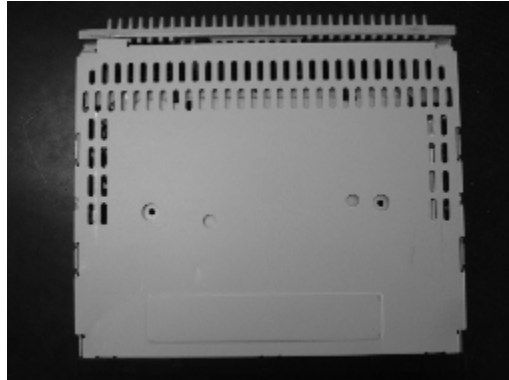


# DISMANTLING INSTRUCTIONS

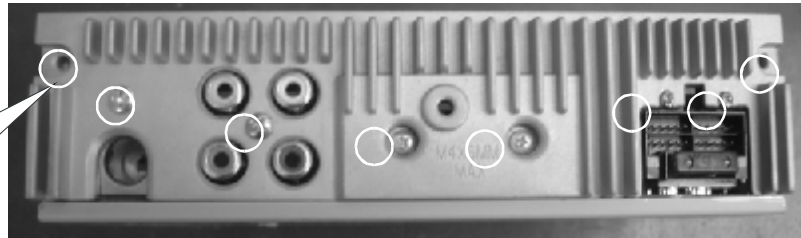
1 Pull out the short sheet from main set.



2 Remove top and bottom covers.



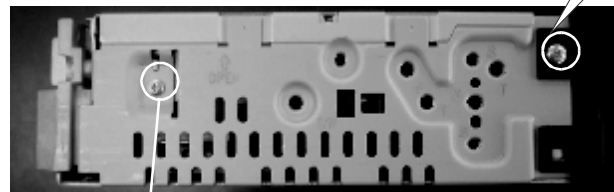
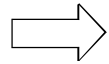
Loosen 8 pcs screw to remove heatsink & Top Cover & Bottom Cover.



3 Loosen 4 pcs screw to remove Front Cabinet.

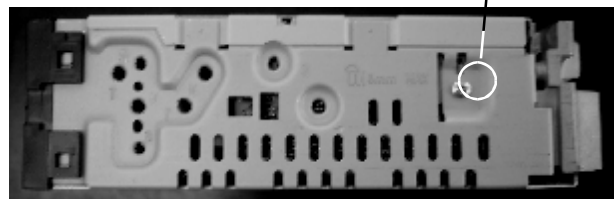


Remove 1 pcs screw from Front Cabinet.



Remove 1 pcs screw on the left side of Front Cabinet.

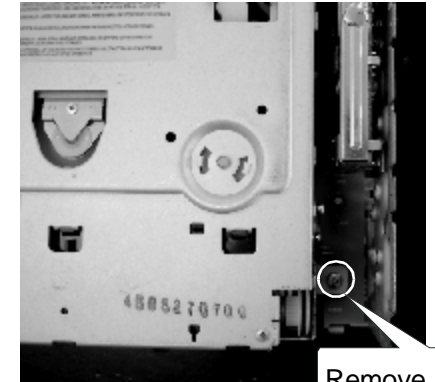
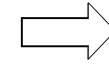
Remove 2 pcs screw to dismantle the deck.



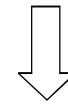
4 Remove CD loader



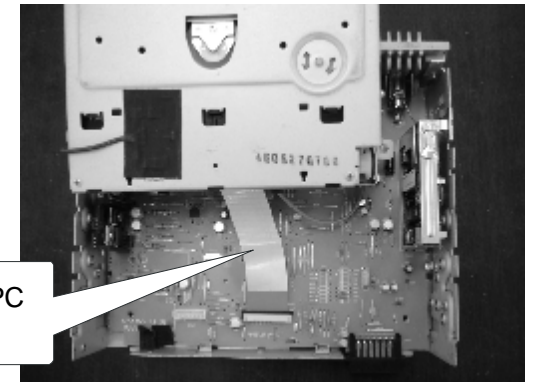
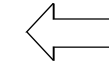
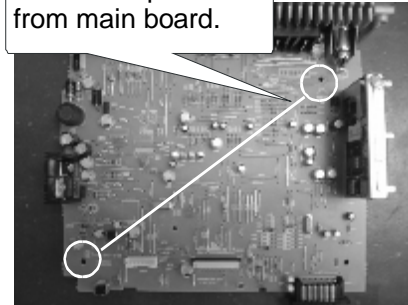
Remove 2 pcs screw from metal side.



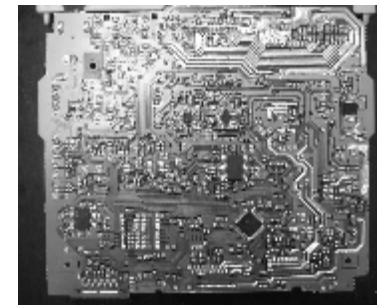
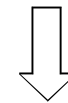
Remove 1 pcs screw from metal side.



Remove 2 pcs screw from main board.



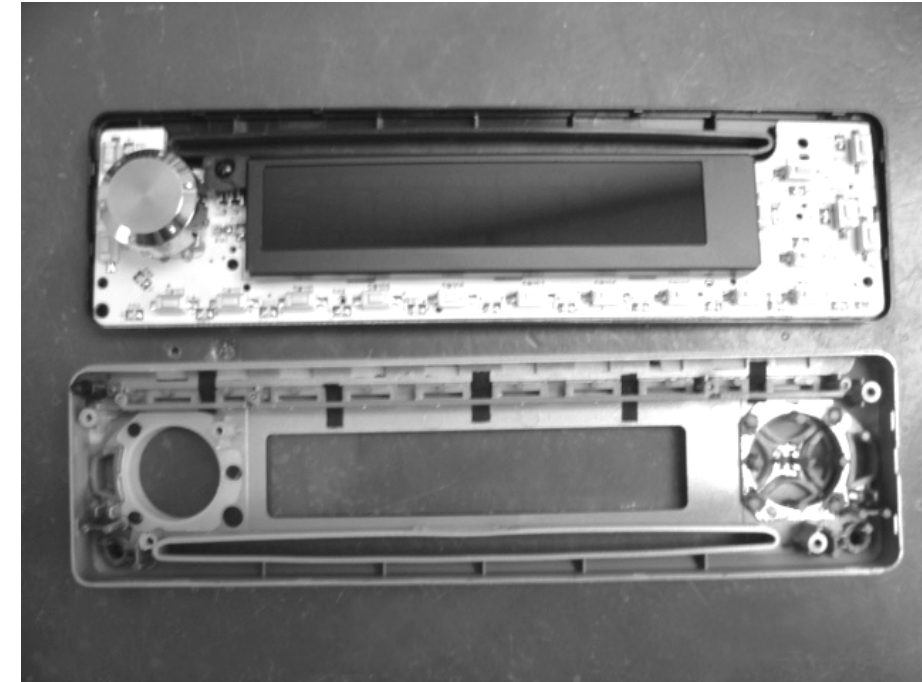
Pull out FPC wire.



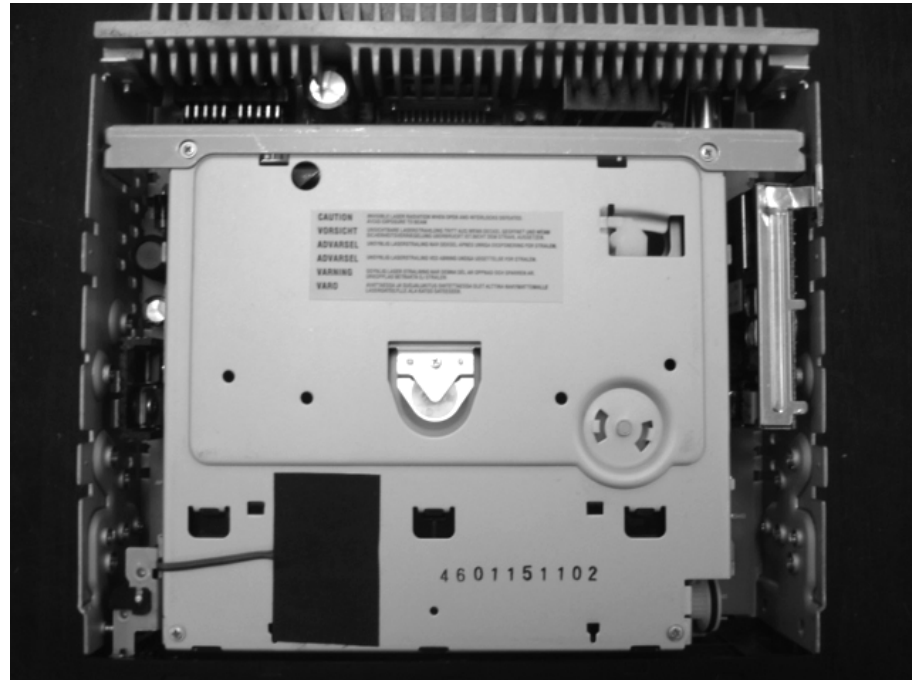
# DISMANTLING INSTRUCTIONS



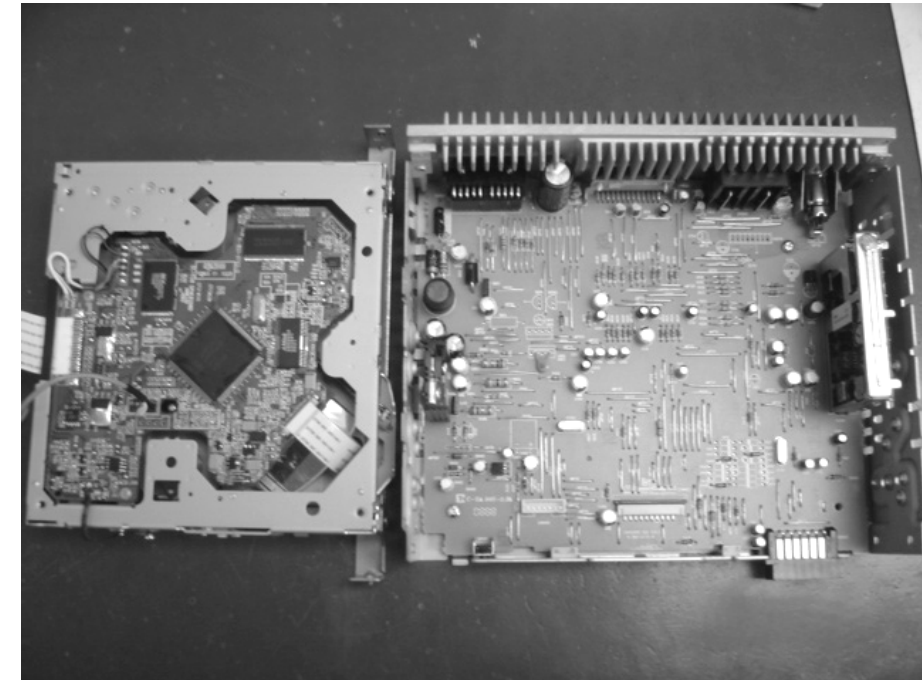
Service Position A



Service Position C



Service Position B

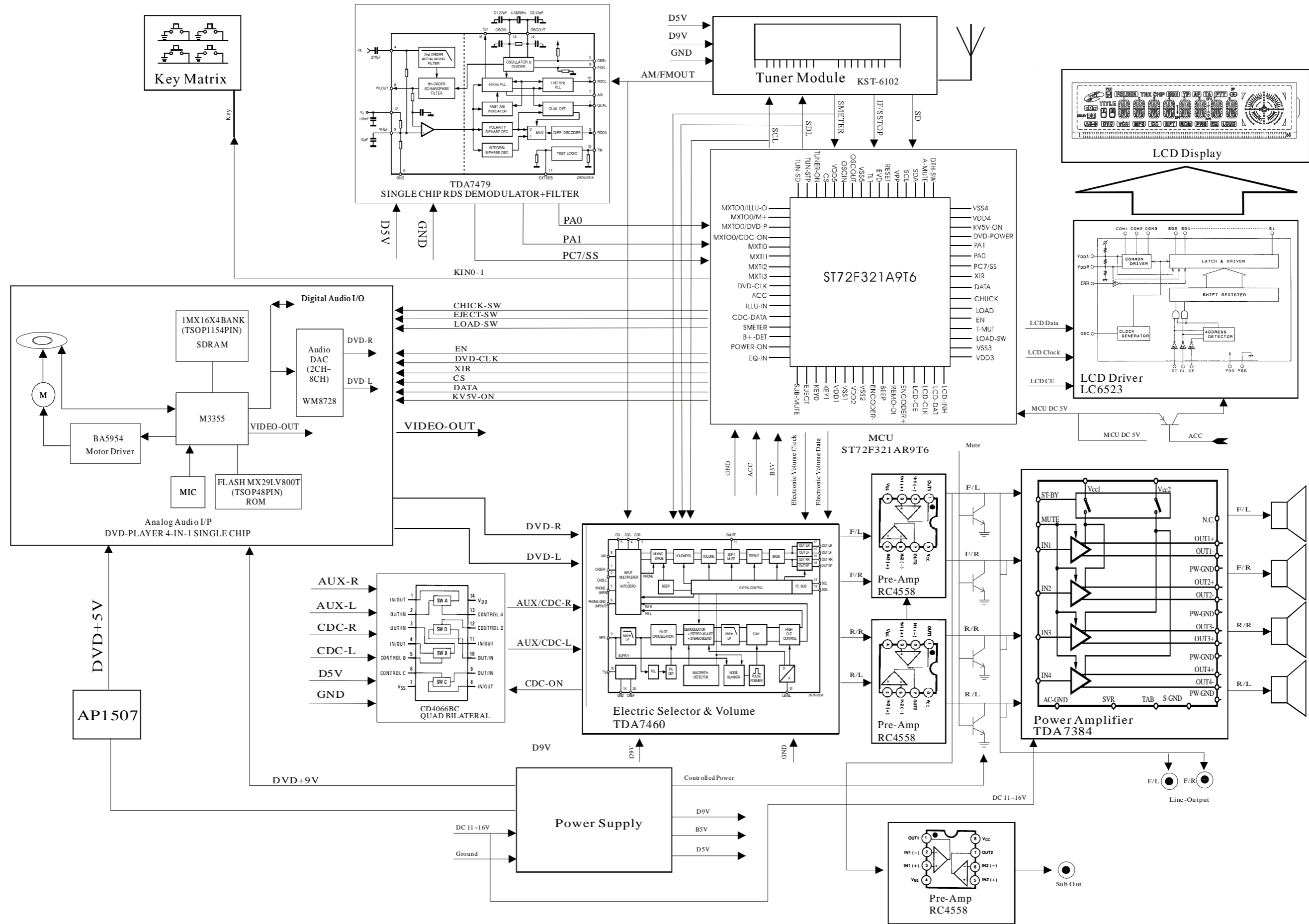


Service Position D

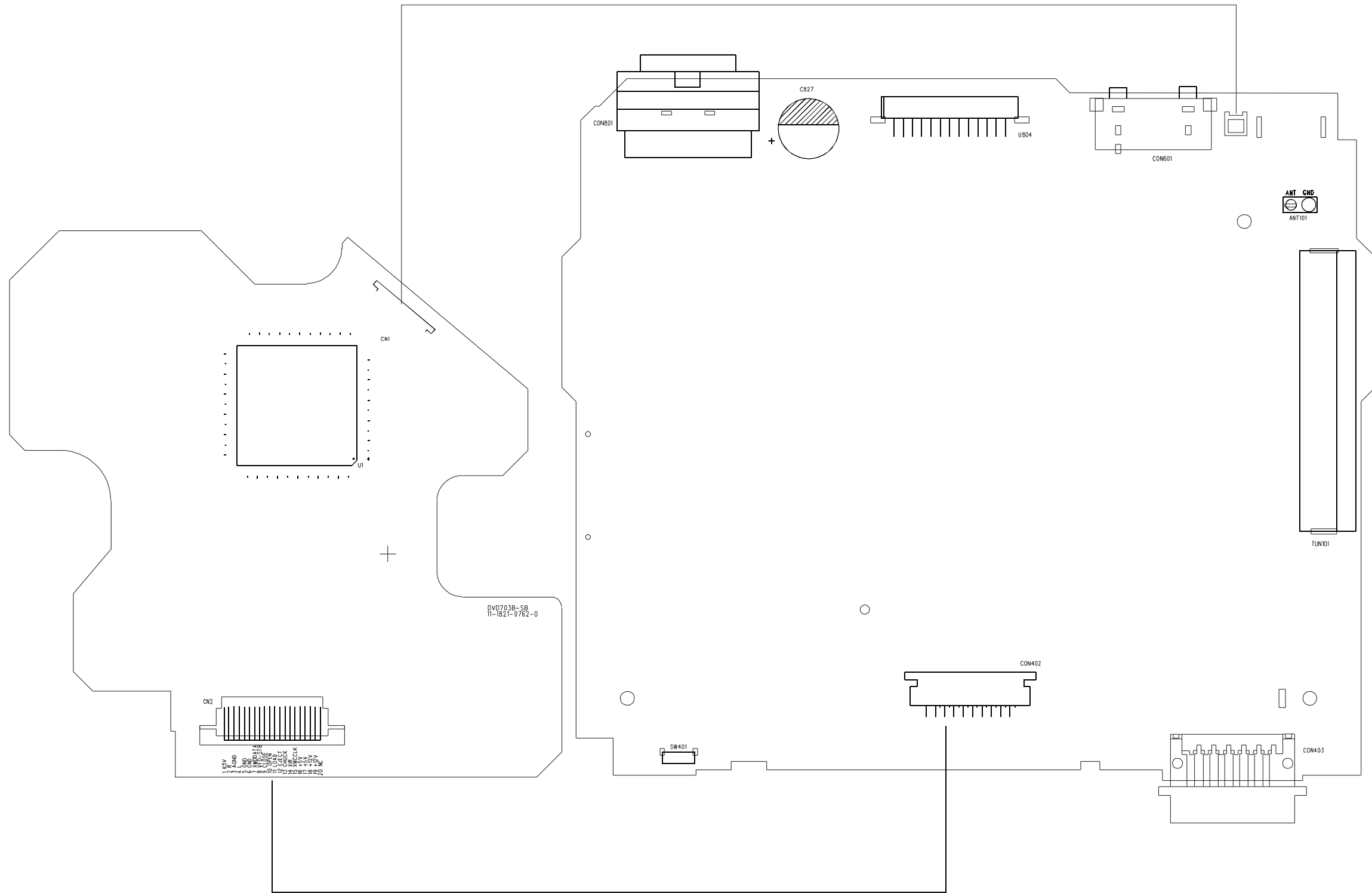
# SET BLOCK DIAGRAM

3

3



# SET WIRING DIAGRAM

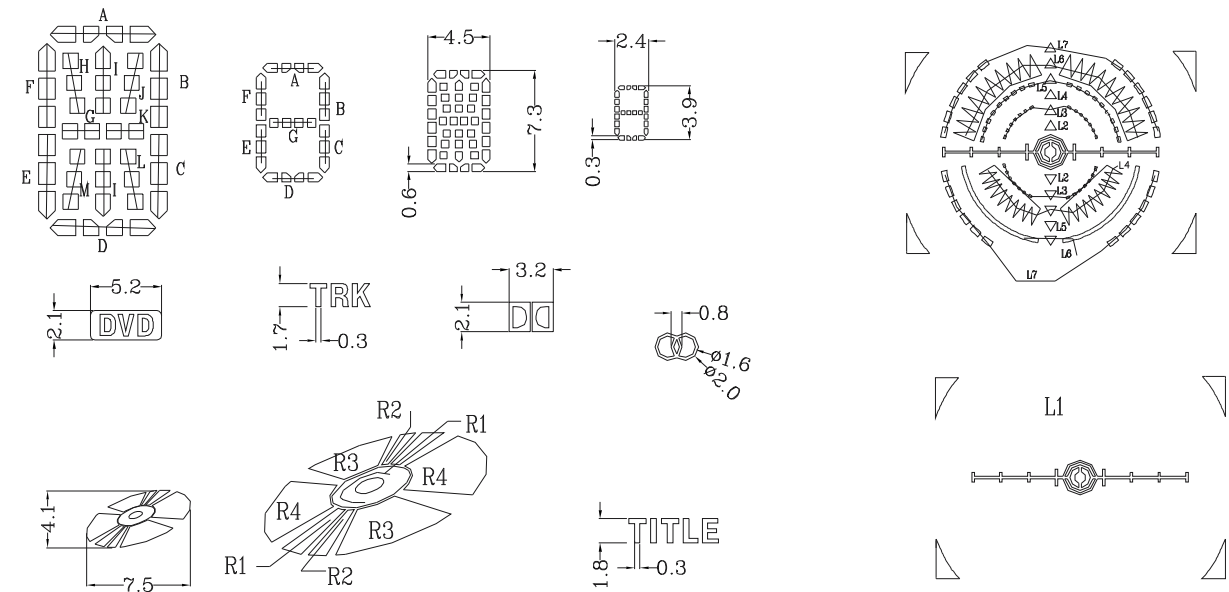
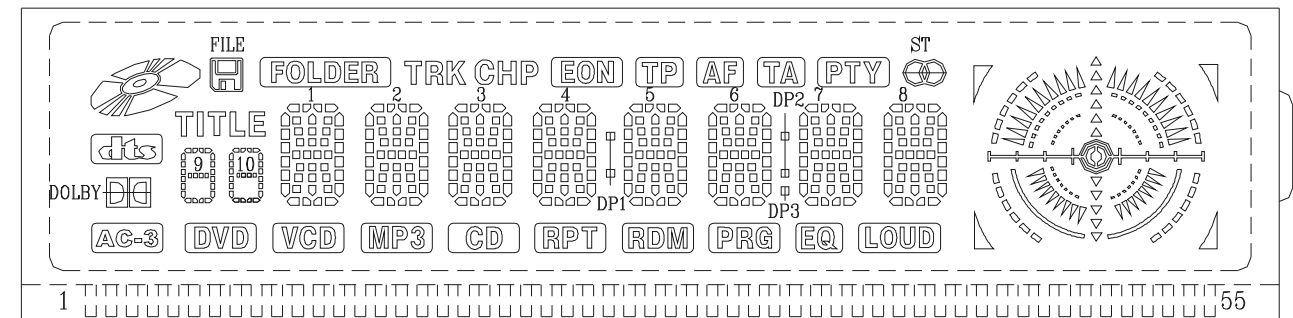


# KEY BOARD

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 Electrical Parts List(Red Light).....5-5

## LCD PIN CONNECTION



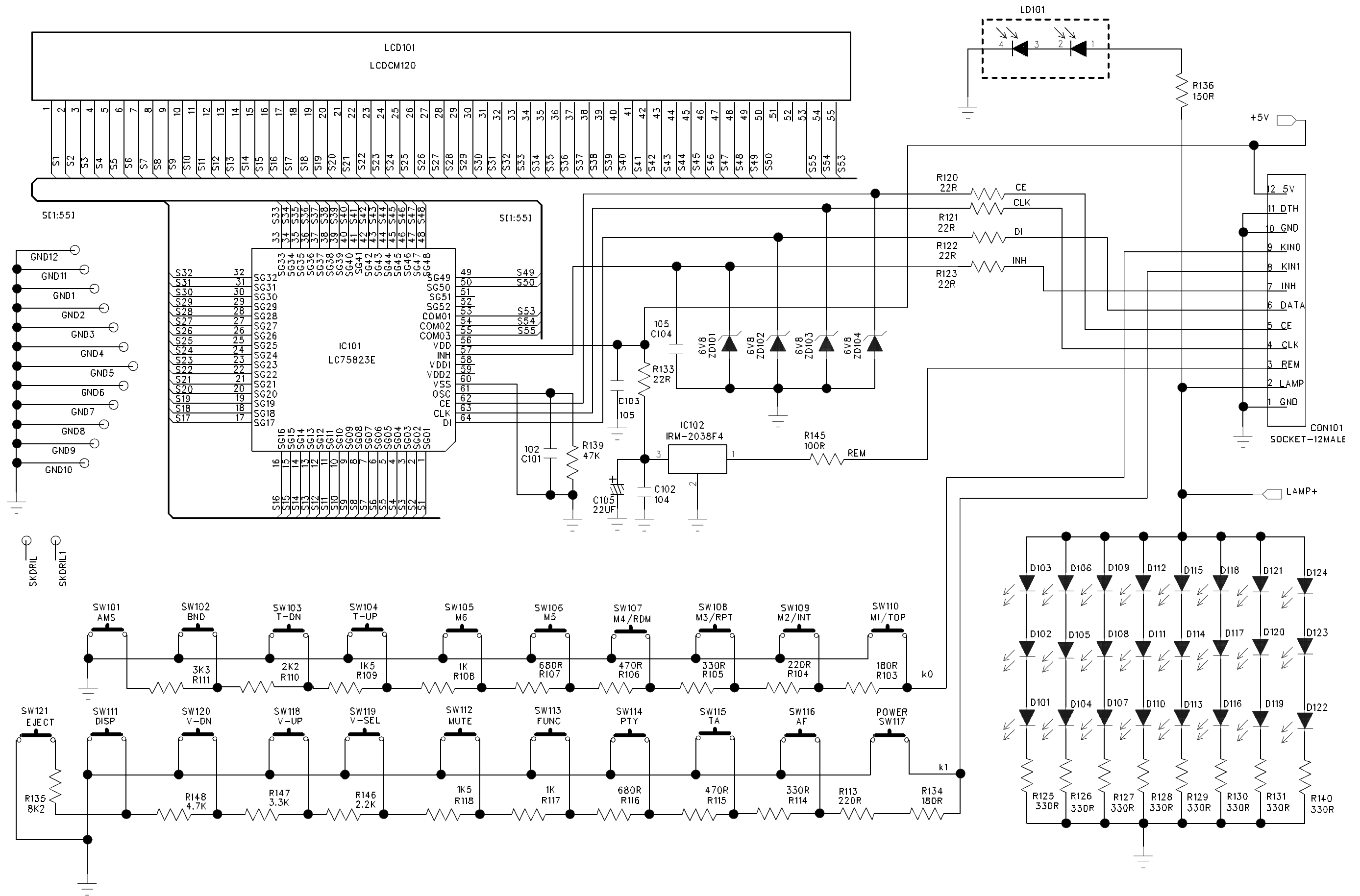
## PIN SEGMENT DISPLAY

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
COM1	TITLE	9A	9B	10A	10B	CD	1E	1M	1D	1L	R2	2E	2M	2D	2L	VCD	3E	3M	3D	3L	CHP	4E	4M	4D	4L	DP1	5E	5M
COM2	9F	9G	9C	10D	10C	DVD	1G	1I	1K	1C	R3	2G	2I	2K	2C	DP2	3G	3I	3K	3C	TRK	4G	4I	4K	4C	RDM	5G	5I
COM3	9E	9D	10G	10E	10F	1F	1H	1A	1J	1B	2F	2H	2A	2J	2B	3F	3H	3A	3J	3B	4F	4H	4A	4J	4B	5F	5H	5A

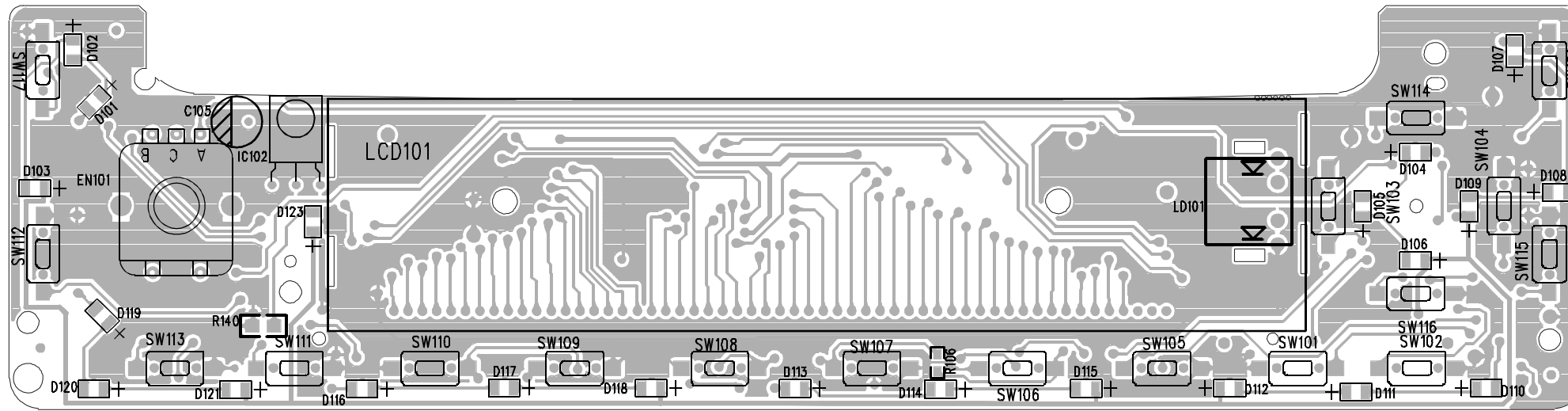
  

PIN	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
COM1	5D	5L	RPT	6E	6M	6D	6L	FOLDER	7E	7M	7D	7L	LOUD	8E	8M	8D	8L	R4	EON	PTY	DTS	DOLBY	L6	L3	COM1		
COM2	5K	5C	MP3	6G	6I	6K	6C	FILE	7G	7I	7K	7C	ST	8G	8I	8K	8C	R1	DP3	AF	PRG	AC-3	L5	L2		COM2	
COM3	5J	5B	6F	6H	6A	6J	6B	7F	7H	7A	7J	7B	8F	8H	8A	8J	8B		TA	TP	EQ	L7	L4	L1			COM3

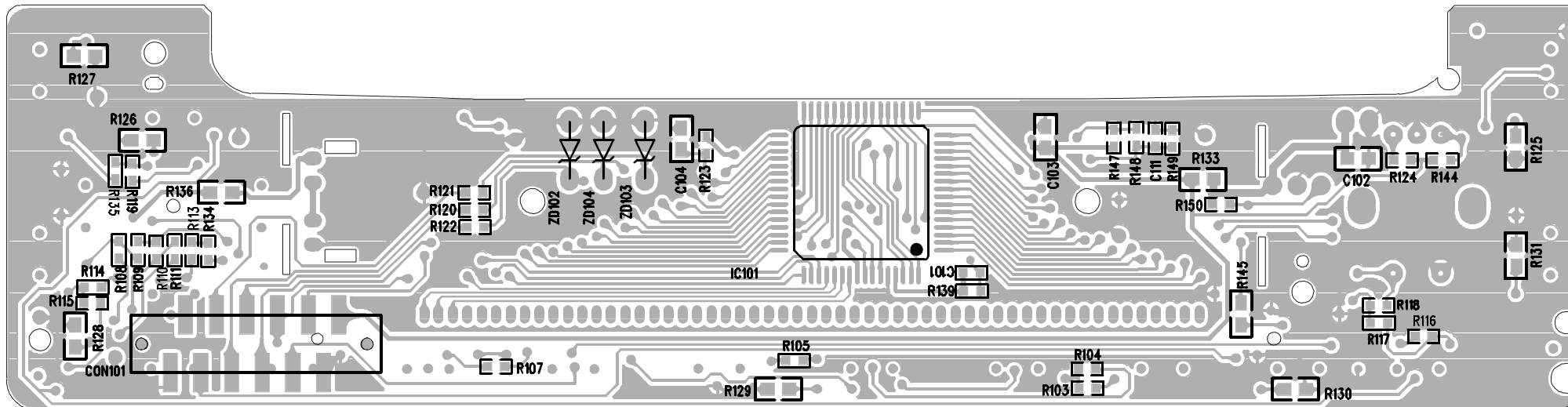
# KEY BOARD - CIRCUIT DIAGRAM



### KEY BOARD - LAYOUT DIAGRAM TOP VIEW



### KEY BOARD - LAYOUT DIAGRAM BOTTOM VIEW





**ELECTRICAL PARTS LIST - KEY BOARD(GREEN LIGHT)**

Part NO.	Description	QTY	Location
84-DVD120RS-KB00-A	DVD120RS-58A	1	
82-CM120EN-KB02-A	CM120EN GREEN LED SMT KB	1	
11-1821-0232-C	CM120 KB D/ENCODER 1.2MM VER.1	1	
11-0901-0065-A	IC PT6523 LCD DRIVE	1	IC101
11-2011-0002-0	KEY SWITCH 4.3MM	18	SW101~SW117, SW121
11-0406-0005-A	LED 2.2V 10MA GREEN SMT 0603	22	D101~D121, D123
11-0202-1021-0	CC1000PF/50V $\pm$ 10% 0603(X7R)	1	C101
11-0203-1051-0	CC 1 $\mu$ F/25V -80% +20% SMT 0805	3	C103, C104, C102
11-0102-1022-0	RMF 1K $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R108, 117
11-0102-1521-0	RMF 1K5 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R109, R118
11-0102-1811-0	RMF 180 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R103, 134
11-0102-2202-0	RMF 22 $\Omega$ 1/16W $\pm$ 5% SMT 0603	5	R120-123, R133
11-0102-2211-0	RMF 220 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R104, R113
11-0103-1512-0	RMF 150 $\Omega$ 1/10W $\pm$ 5% SMT 0805	1	R136
11-0102-2222-0	RMF 2K2 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R110
11-0103-4711-0	RMF 470 $\Omega$ 1/10W $\pm$ 5% SMT 0805	11	R125~R132, R138, R140, R141
11-0102-3311-0	RMF 330 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R105, R114
11-0102-3322-0	RMF 3K3 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R111
11-0102-4711-0	RMF 470 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R106, R115
11-0102-4732-0	RMF 47K $\Omega$ 1/16W $\pm$ 5% SMT 0603	3	R139, 124, 144
11-0102-1032-0	RMF 10K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R119
11-0102-6811-0	RMF 680 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R107, R116
11-0102-8222-0	RMF 8K2 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R135
11-0102-1012-0	RMF 100 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R145
11-3400-0001-0	ZEBRA STRIP FOR CM110	1	INSIDE PF THE CD CPVER
11-0421-0001-B	REMOTE-CRM HEADER	1	IC102
11-2602-0029-0	LCD DVD120 NEGATIVE COLOUR (SA)	1	LCD101
16-0300-0002-A	CONNECTOR 12PIN MALE 1.6MM	1	CON101
11-0406-0008-A	LED 3.5V 20MA WHITE	2	LD101~102
11-0181-0012-A	EC110201M2D-4A1-007[ECB11(7X5)(PV)S18.5]	1	EN101

**ELECTRICAL PARTS LIST - KEY BOARD(RED LIGHT)**

Part NO.	Description	QTY	Location
84-DVD120RS-KB00-A	DVD120RS-58A	1	
82-CM120EN-KB02-A	CM120EN GREEN LED SMT KB	1	
11-1821-0232-C	CM120 KB D/ENCODER 1.2MM VER.1	1	
11-0901-0065-A	IC PT6523 LCD DRIVE	1	IC101
11-2011-0002-0	KEY SWITCH 4.3MM	18	SW101~SW117, SW121
11-0406-0002-A	LED 2.2V 10MA RED SMT 0603	22	D101~D121, D123
11-0202-1021-0	CC1000PF/50V ±10% 0603(X7R)	1	C101
11-0203-1051-0	CC 1 μ F/25V -80% +20% SMT 0805	3	C103, C104, C102
11-0102-1022-0	RMF 1KΩ 1/16W ±5% SMT 0603	2	R108, 117
11-0102-1521-0	RMF 1K5Ω 1/16W ±5% SMT 0603	2	R109, R118
11-0102-1811-0	RMF 180Ω 1/16W ±5% SMT 0603	2	R103, 134
11-0102-2202-0	RMF 22Ω 1/16W ±5% SMT 0603	5	R120-123, R133
11-0102-2211-0	RMF 220Ω 1/16W ±5% SMT 0603	2	R104, R113
11-0103-1512-0	RMF 150Ω 1/10W ±5% SMT 0805	1	R136
11-0102-2222-0	RMF 2K2Ω 1/16W ±5% SMT 0603	1	R110
11-0103-4711-0	RMF 470Ω 1/10W ±5% SMT 0805	11	R125~R132, R138, R140, R141
11-0102-3311-0	RMF 330Ω 1/16W ±5% SMT 0603	2	R105, R114
11-0102-3322-0	RMF 3K3Ω 1/16W ±5% SMT 0603	1	R111
11-0102-4711-0	RMF 470Ω 1/16W ±5% SMT 0603	2	R106, R115
11-0102-4732-0	RMF 47KΩ 1/16W ±5% SMT 0603	3	R139, 124, 144
11-0102-1032-0	RMF 10KΩ 1/16W ±5% SMT 0603	1	R119
11-0102-6811-0	RMF 680Ω 1/16W ±5% SMT 0603	2	R107, R116
11-0102-8222-0	RMF 8K2Ω 1/16W ±5% SMT 0603	1	R135
11-0102-1012-0	RMF 100Ω 1/16W ±5% SMT 0603	1	R145
11-3400-0001-0	ZEBRA STRIP FOR CM110	1	INSIDE PF THE CD CPVER
11-0421-0001-B	REMOTE-CRM HEADER	1	IC102
11-2602-0029-0	LCD DVD120 NEGATIVE COLOUR (SA)	1	LCD101
16-0300-0002-A	CONNECTOR 12PIN MALE 1.6MM	1	CON101
11-0406-0008-A	LED 3.5V 20MA WHITE	2	LD101~102
11-0181-0012-A	EC110201M2D-4A1-007[ECB11(7X5)(PV)S18.5]	1	EN101

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# SERVO BOARD

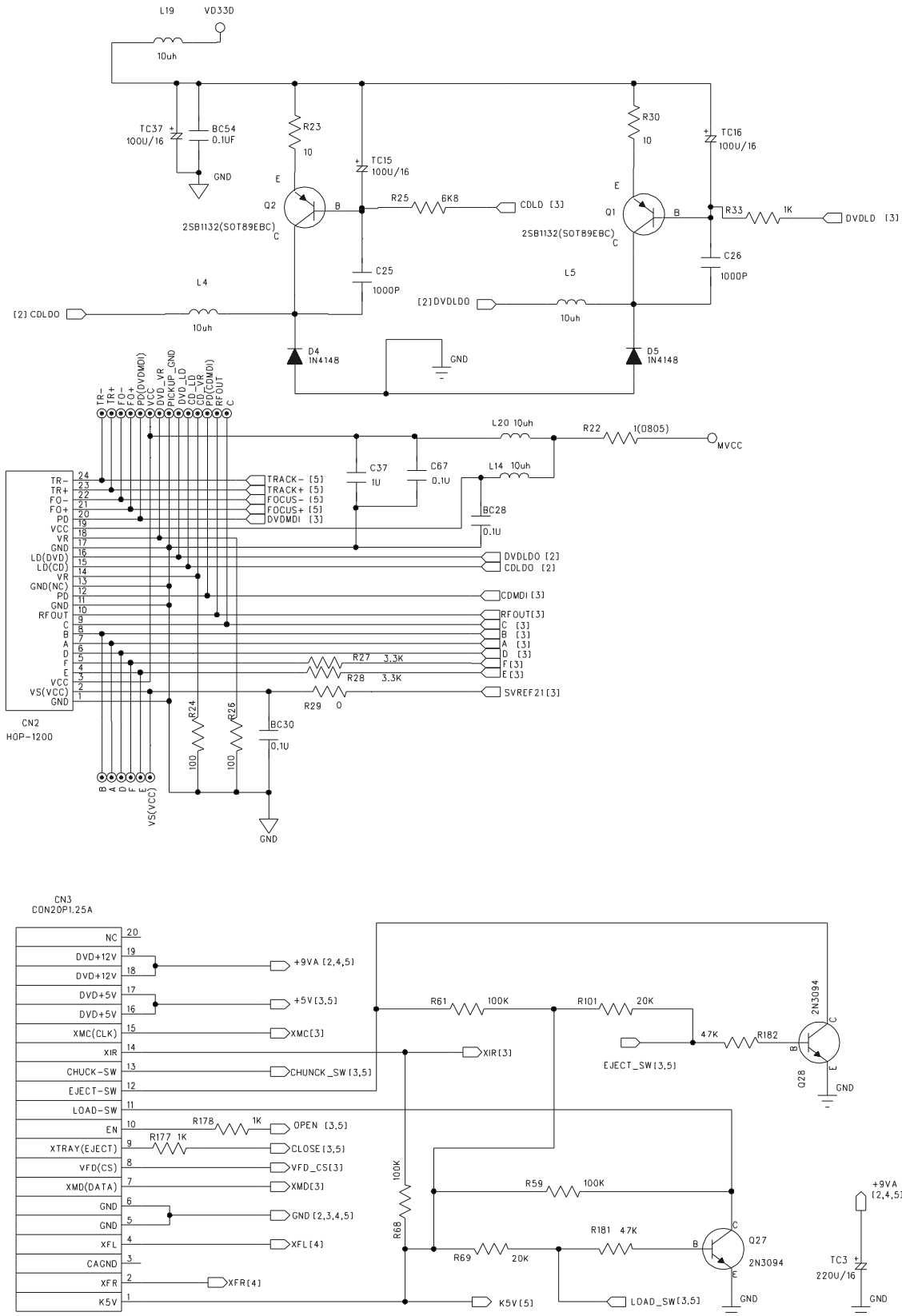
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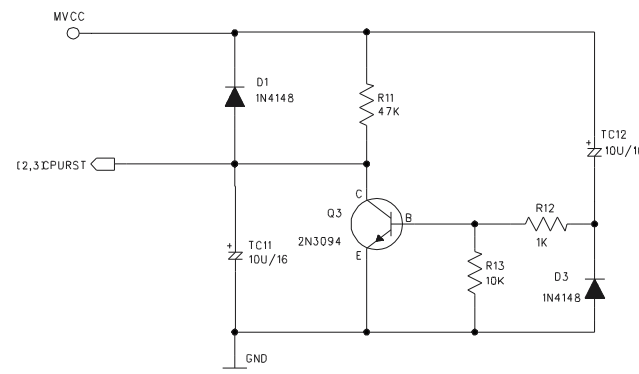
Circuit Diagram.....	6-2 to 6-5
PCB Layout .....	6-6
Electrical Parts List.....	6-7

# SERVO BOARD - CIRCUIT DIAGRAM

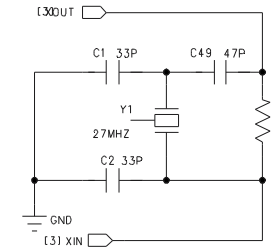
## PICK UP 1200W CONNECTOR



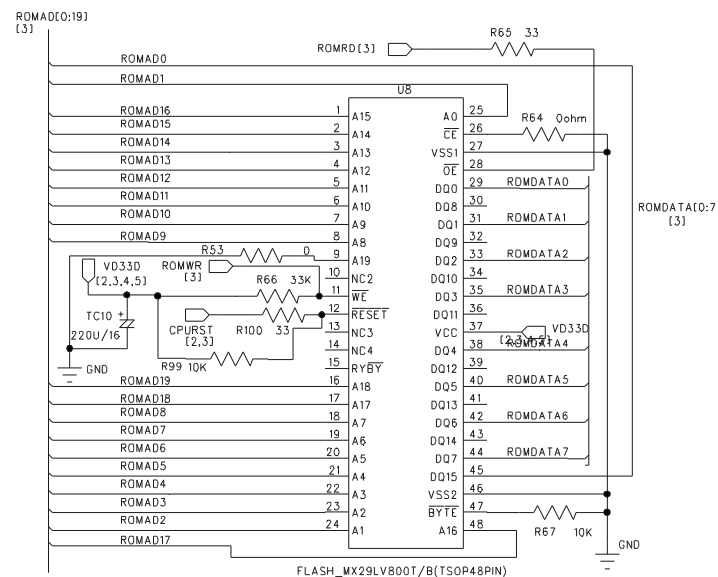
## CPU RESET



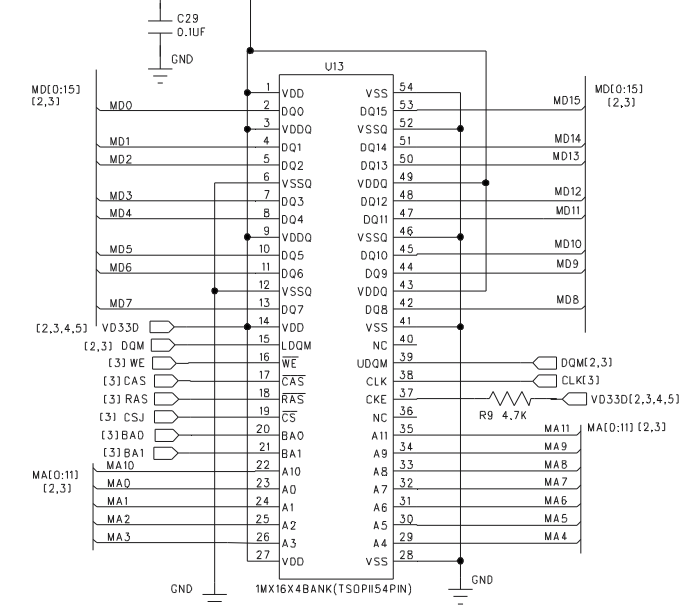
## SYSTEM CRYSTAL



## FLASH ROM & EEPROM

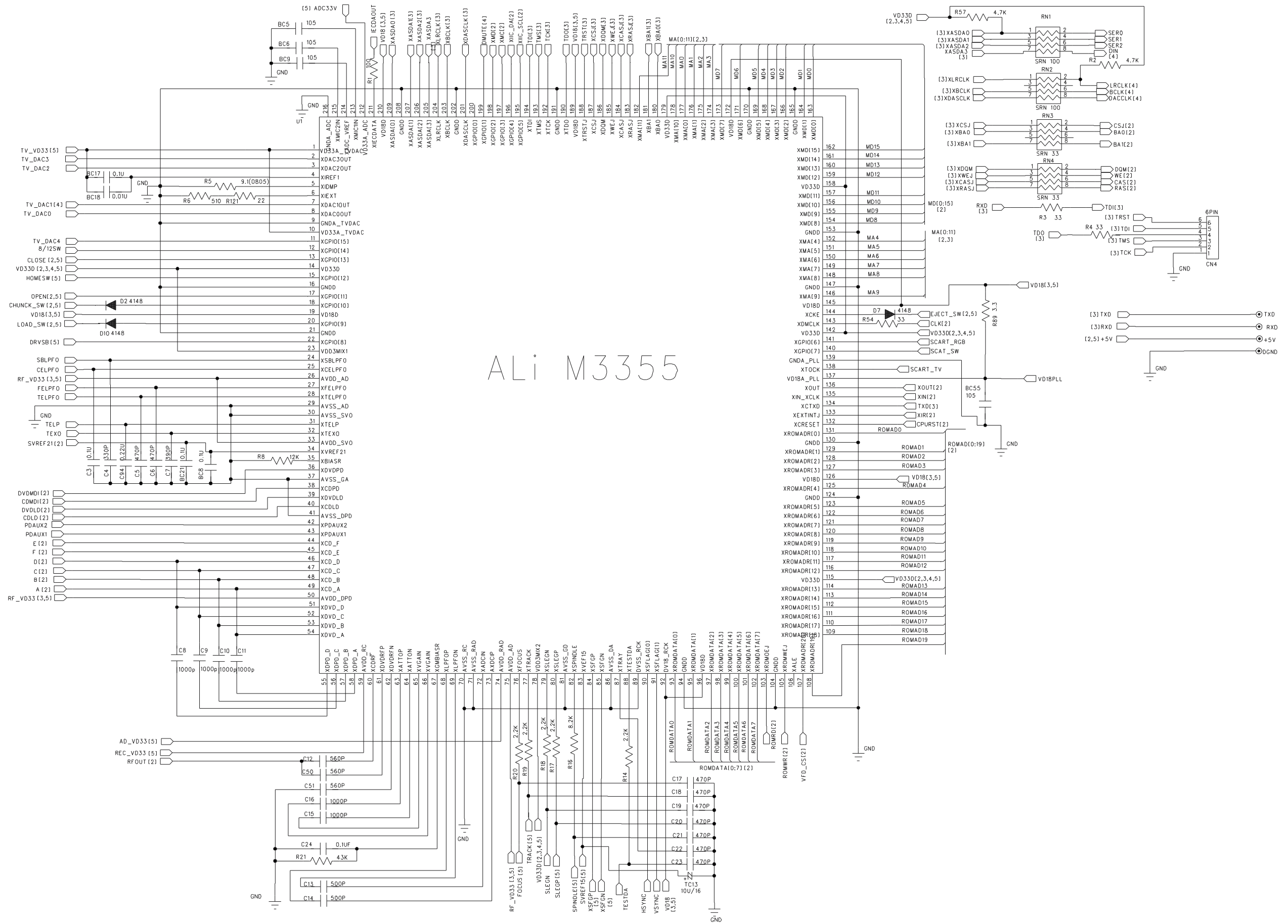


## SDRAM



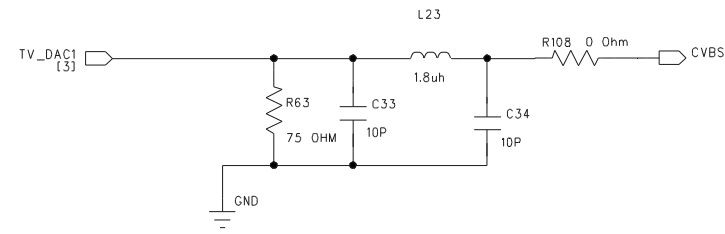
6-3  
SERVO BOARD - CIRCUIT DIAGRAM

6-3

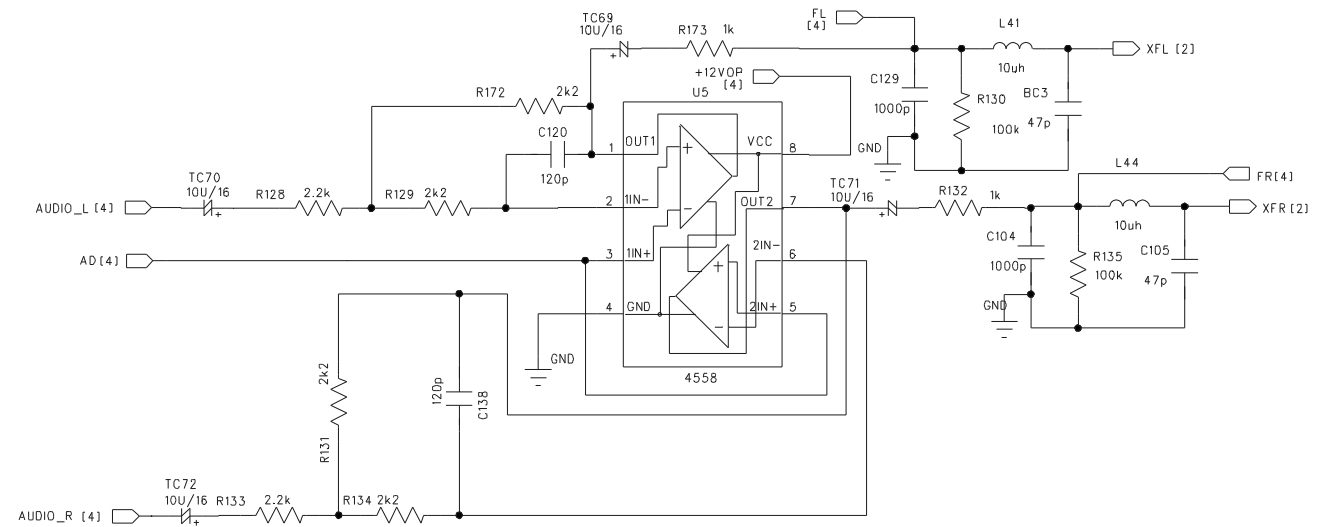
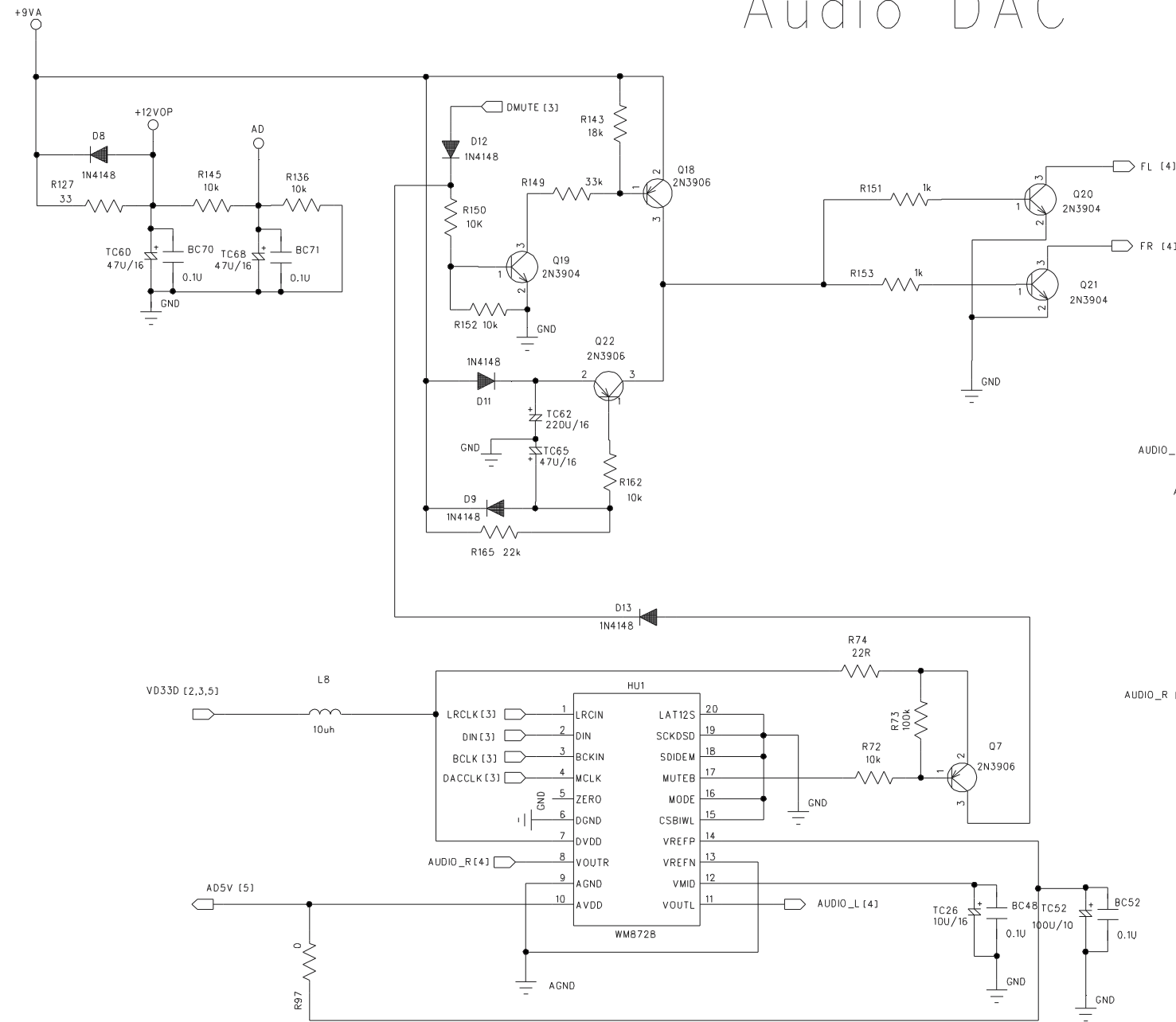


# SERVO BOARD - CIRCUIT DIAGRAM

## Video output

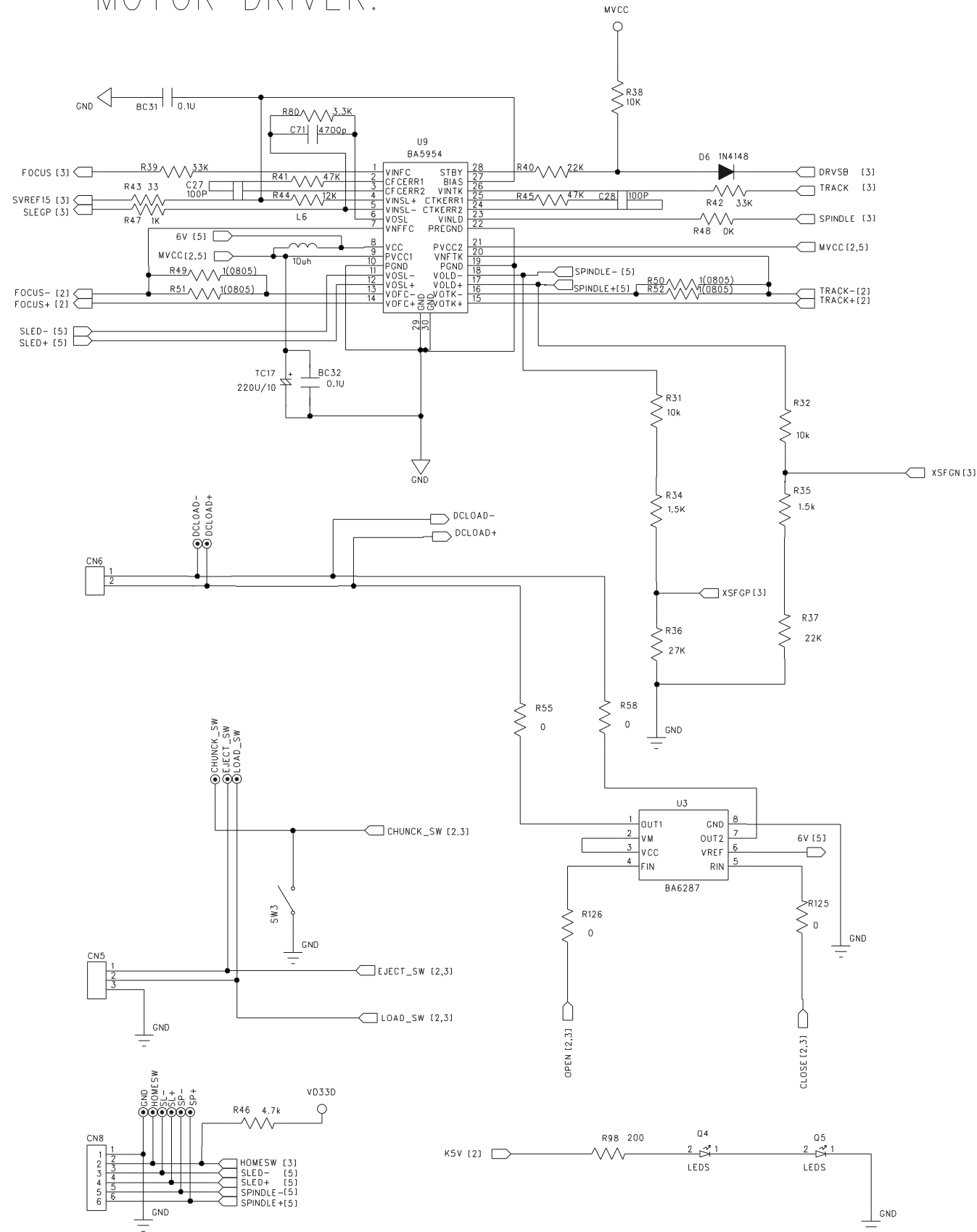


## Audio DAC

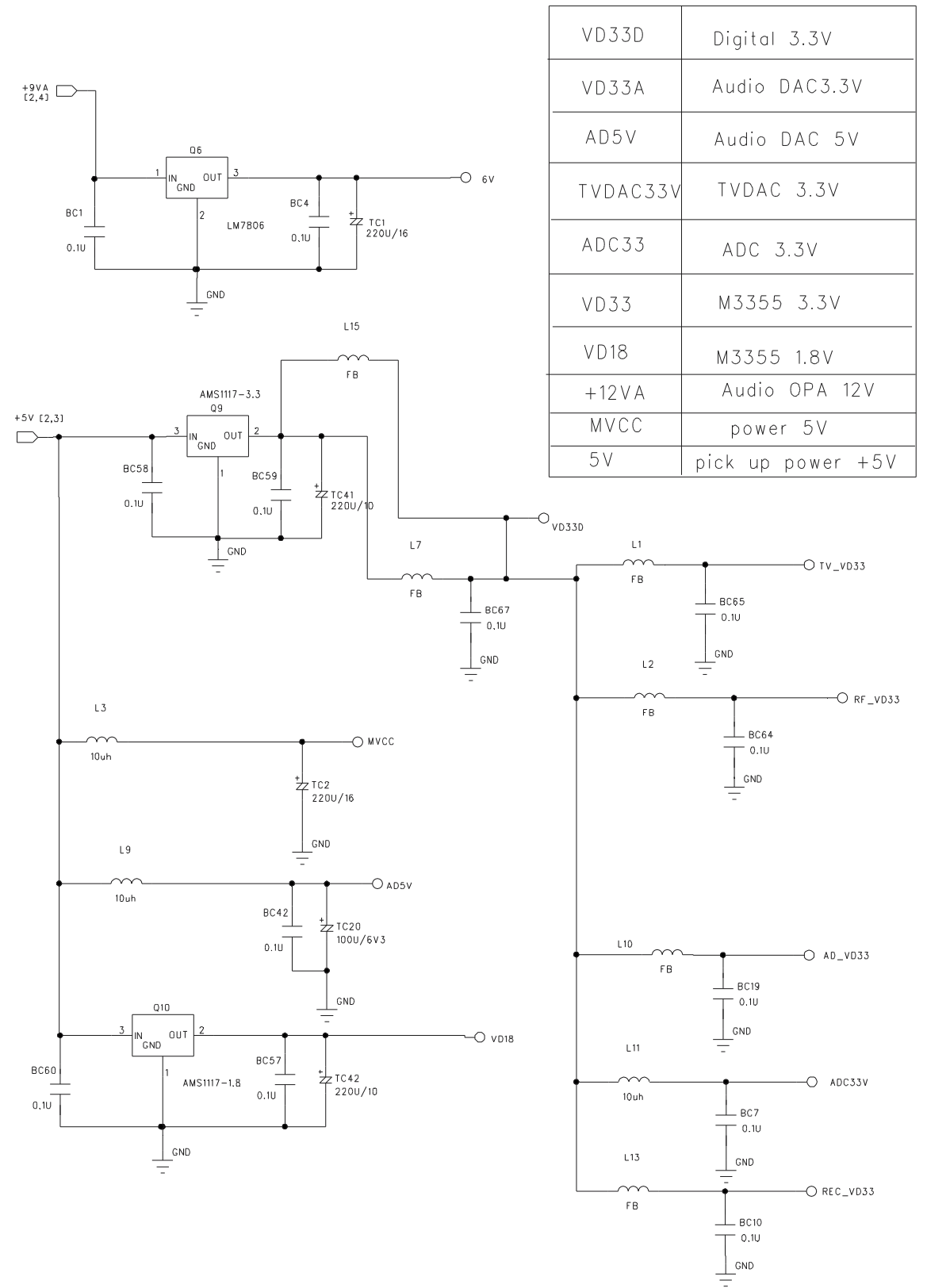


# SERVO BOARD - CIRCUIT DIAGRAM

## MOTOR DRIVER:

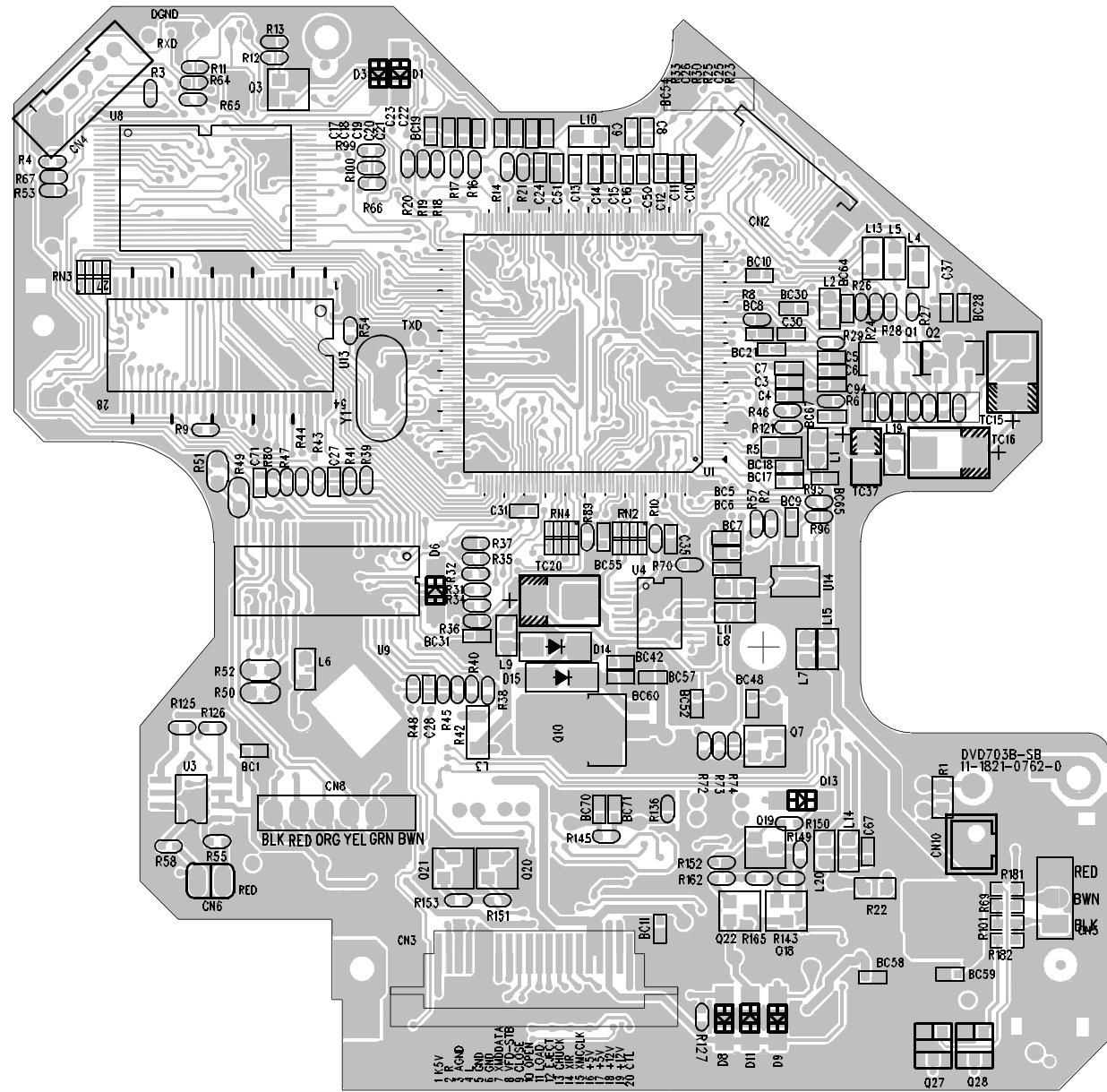


## POWER SUPPLY:

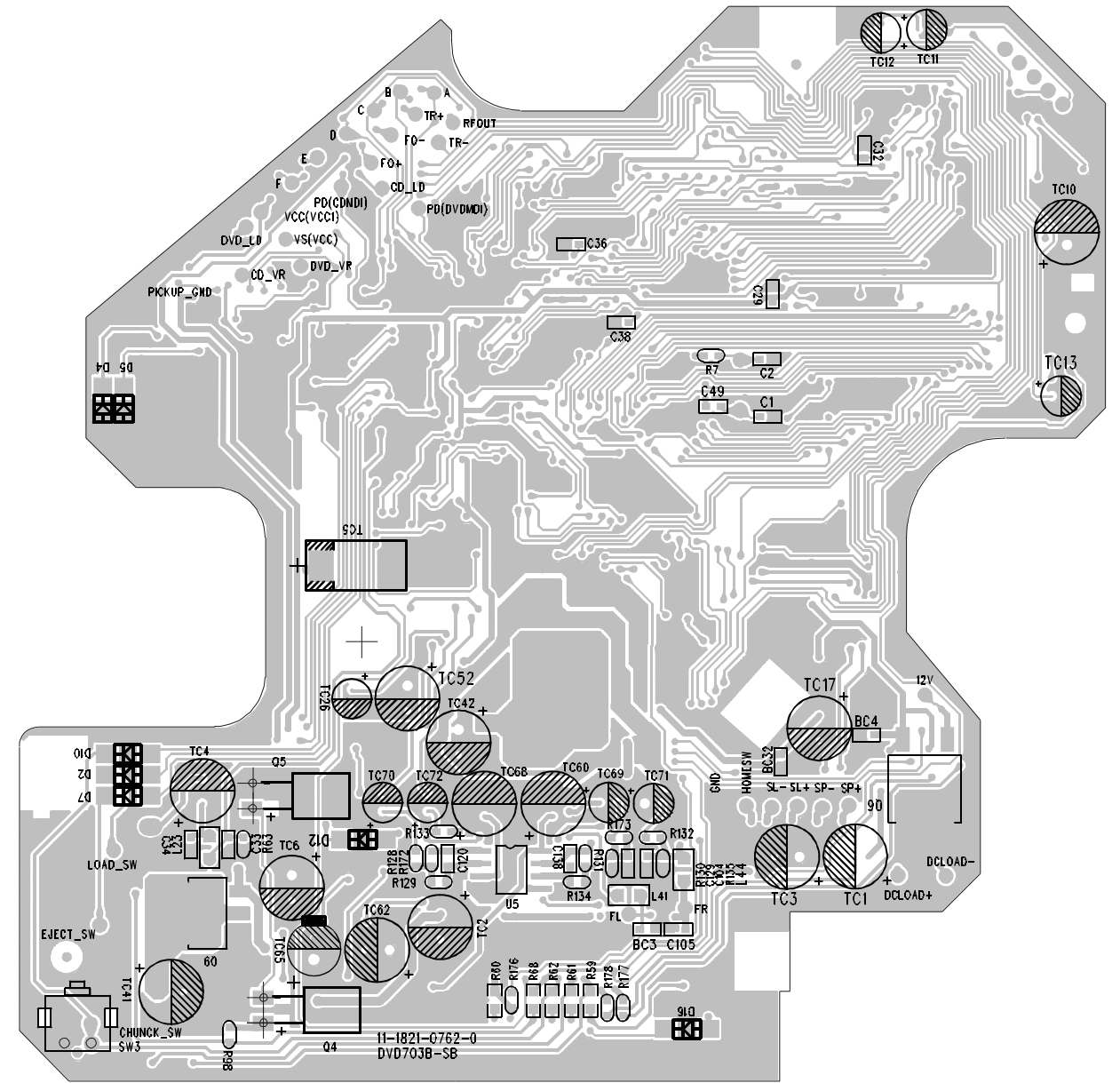


VD33D	Digital 3.3V
VD33A	Audio DAC3.3V
AD5V	Audio DAC 5V
TVDAC33V	TVDAC 3.3V
ADC33	ADC 3.3V
VD33	M3355 3.3V
VD18	M3355 1.8V
+12VA	Audio OPA 12V
MVCC	power 5V
5V	pick up power +5V

# SERVO BOARD - LAYOUT DIAGRAM TOP VIEW



# SERVO BOARD - LAYOUT DIAGRAM BOTTOM VIEW





## ELECTRICAL PARTS LIST - SERVO BOARD

Part NO.	Description	QTY	Location	Part NO.	Description	QTY	Location
83-DVD705-SB02-A	DVD705 ESP SB	1		11-0102-1042-0	RMF 100K $\Omega$ 1/16W $\pm$ 5% SMT 0603	7	R130 R135 R73 R59 R61 R62 R68
82-DVD705-SB01-A	DVD705 ESP SB SMT	1		11-0102-1051-0	RMF 1M $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R7
11-0202-1001-0	CC10PF/50V $\pm$ 5% 0603(NPO)	2	C33 C34	11-0109-3301-0	RMF 4X33 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	RN3,RN4
11-0202-3301-0	CC33PF/50V $\pm$ 5% SMT 0603	2	C1 C2	11-0109-1011-0	RMF 100 $\Omega$ X4 1/16W $\pm$ 5% SMT 0603	1	RN2
11-0202-4701-0	CC 47PF/50V $\pm$ 5% SMT 0603(NPO)	3	C49 C105 BC3	11-0302-1H81-0	F MLC1 1.8 $\mu$ H /50MA $\pm$ 10% 0805	1	L23
11-0202-1012-0	CC100PF/50V $\pm$ 10% 0603(X7R)	2	C27 C28	11-0351-1001-0	F COIL 10 $\mu$ H $\pm$ 10% SMT 1206	1	L3
11-0202-1211-0	CC120PF/50V $\pm$ 5% 0603(NPO)	2	C120 C138	11-0351-1002-0	F COIL 10 $\mu$ H $\pm$ 10% SMT 0805	4	L4 L5 L9 L11
11-0202-3310-0	CC330PF/50V $\pm$ 5% SMT 0603	1	C4	11-0351-0023-0	FB 120 $\Omega$ 3000MA SMT 0805	13	L1,L2,L7,L8,L10,L13,L14,L15,L19, L20,L41,L44,L6
11-0202-3911-0	CC 390PF/50V $\pm$ 10% SMT 0603	1	C7				
11-0202-4711-0	CC470PF/50V $\pm$ 10% 0603(X7R)	9	C5 C6 C17-C23	11-0501-0002-A	TR 3904(SMT SOT-23)NPN	5	Q19 Q20 Q21 Q27 Q28
11-0202-5111-0	CC 510PF/50V $\pm$ 10% SMT 0603	2	C13 C14	11-0501-0003-A	TR 3906(SMT SOT-23)PNP	2	Q18 Q7
11-0202-5611-0	CC 560PF/50V 0603(COG)	3	C12 C50 C51	11-0511-0005-A	TR-PNP 2SB1132 MPT3	2	Q1 Q2
11-0202-1021-0	CC1000PF/50V $\pm$ 10% 0603(X7R)	10	C8 C9 C10 C11 C15 C16 C25 C26 C104 C129	11-0901-0316-0	IC UTC1117 1.8V SOT-223	1	Q10
				11-0901-0292-0	IC UTC1117 3.3V SOT-223	1	Q9
11-0202-4721-0	CC 4700PF/50V $\pm$ 10% SMT 0603	1	C71	11-0901-0201-A	IC BA5954FP HSOP-28 ROMH	1	U9
11-0202-2242-0	CC 0.22 $\mu$ F/16V +80% -20% 0603	1	C94	11-0901-0200-A	IC BA6287F SOP-8 ROMH	1	U3
11-0202-1046-0	CC0.1 $\mu$ F/25V $\pm$ 10% X7R 0603	33	BC1,BC4,BC7,BC8,BC17,BC19,BC21, BC31,BC32,BC42,BC48,BC11,BC52, BC54,BC57,BC58,BC59,BC60,BC64, BC65,BC67,BC70,BC71,C3,C24,C67, BC10,BC30,C36,C35,C29,C38,C31	11-0911-0002-A	IC M3355 LQFP-216/EPD	1	U1
				11-0911-0004-A	IC IS42S16400A TSOPII-54	1	U13
				11-0911-0025-A	IC AT24C02 SOP-8	1	U14
				11-0901-0146-A	IC XWM8728EDS SSOP-20	1	U4
				11-0901-0315-A	IC 78M06 REGULATOR ST	1	Q6
				11-0901-0063-0	IC MC 4558 SOP DUAL OPERATIONA	1	U5
11-0202-1032-0	CC0.01 $\mu$ F/50V $\pm$ 20% 0603	1	BC18	11-1821-0762-A	PCB DVD703B SB D/S 107X109X1.2MM	1	
11-0202-1054-0	CC 1 $\mu$ F/25V $\pm$ 10% X5R 0603	6	BC5,BC6,BC9,BC55,C37,BC28	11-3111-0001-A	FPC CONNETOR 20PIN S PITCH=1.0	1	CN3
11-0102-0R02-0	RMF 0 $\Omega$ 1/16W $\pm$ 5% SMT 0603	5	R29,R48,R55,R58,R64	11-0411-0006-A	DIODE IN4001 SMT 1210	2	D14 D15
11-0103-1R01-0	RMF 1 $\Omega$ 1/10W $\pm$ 5% SMT 0805	5	R22,R49,R50,R51,R52	81-DVD705-IC05-A	DVD705 FLASH IC	1	U8
11-0102-3R31-0	RMF 3R3 $\Omega$ 1/16W $\pm$ 5% 0603	1	R89	11-0911-0009-A	IC MX29LV800BBTC-70 TSOP-48	1	U8
11-0103-9R11-0	RMF 9.1 $\Omega$ 1/10W $\pm$ 5% SMT 0805	1	R5	11-0241-4761-0	CT 47 $\mu$ F/6.3V $\pm$ 20% SMT 3528	1	TC37
11-0102-1002-0	RMF 10 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R23 R30	11-0241-1071-0	CT 100 $\mu$ F/6.3V $\pm$ 20% SMT	3	TC15 TC16 TC20
11-0102-2202-0	RMF 22 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R121,R74	11-0411-0008-A	DIODE IN4148 SMT 1/2W	11	D2,D7,D10,D12,D4,D5,D8,D13,D1, D3,D6
11-0102-3301-0	RMF 33 $\Omega$ 1/16W $\pm$ 5% SMT 0603	6	R3,R4,R43,R54,R65,R127				
11-0102-7501-0	RMF 75 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R63	11-3111-0037-0	24PIN FPC SOCKET PITCH=0.5MM	1	CN2
11-0102-1012-0	RMF 100 $\Omega$ 1/16W $\pm$ 5% SMT 0603	4	R24 R26 R98,R10	11-0103-0R01-0	RMF 0 $\Omega$ 1/10W $\pm$ 5% SMT 0805	1	R1
11-0102-5111-0	RMF 510 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R6	11-0241-2271-1	CT 220 $\mu$ F/6.3V $\pm$ 10% SMT 7343 H=2.9	1	TC5
11-0102-1022-0	RMF 1K $\Omega$ 1/16W $\pm$ 5% SMT 0603	8	R47 R132 R151 R153 R173 R33 R177 R178	11-0202-2251-0	CC 2.2 $\mu$ F/10V +80% -20% 0603	1	C30
				11-0102-2032-0	RMF 20K $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R69,R101
11-0102-1521-0	RMF 1K5 $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R34 R35	11-0224-1067-0	CE 10 $\mu$ F/16V $\pm$ 20% 4X5 105 $^{\circ}$ C	7	TC13 TC26 TC69-72 TC12
11-0102-2222-0	RMF 2K2 $\Omega$ 1/16W $\pm$ 5% SMT 0603	11	R14 R17 R18 R19 R20 R128 R133 R131 R134 R172 R129	11-0224-1077-0	CE 100 $\mu$ F/16V $\pm$ 20% 6.3X5 105 $^{\circ}$ C	1	TC52
				11-0222-2271-0	CE 220 $\mu$ F/10V $\pm$ 20% 6.3X7 105	9	TC10 TC41 TC42 TC17 TC3 TC1 TC6 TC60 TC68
11-0102-6822-0	RMF 6K8 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R25				
11-0102-3322-0	RMF 3K3 $\Omega$ 1/16W $\pm$ 5% SMT 0603	3	R27 R28 R80	11-1500-0006-A	XT 27.000MHZ(-30 $^{\circ}$ C~+80 $^{\circ}$ C)	1	Y1
11-0102-4722-0	RMF 4K7 $\Omega$ 1/16W $\pm$ 5% SMT 0603	7	R2 R9 R46 R57 R95 R96,R12	11-0231-1081-0	CE 1000 $\mu$ F/10V $\pm$ 20% 8X16 105 $^{\circ}$ C	1	TC2
11-0102-8222-0	RMF 8K2 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R16	11-0406-0011-A	PHOTOTRANSISTOR IR928-6C	2	Q4 Q5
11-0102-1032-0	RMF 10K $\Omega$ 1/16W $\pm$ 5% SMT 0603	11	R31,R32,R38,R11,R67,R99,R136, R145,R150,R152,R72	11-3501-0014-A	SHINWA DVD DECK DL-C28D1	1	
				16-0200-0014-0	2PIN WIRE PI=2.0MM L=200MM(SOCKET WITH PIN)	1	CN10
11-0102-1231-0	RMF 12K $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R44 R8	11-2011-0005-A	CD DETECTOR CDX100	1	SW3
11-0102-1832-0	RMF 18K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R143				
11-0102-2231-0	RMF 22K $\Omega$ 1/16W $\pm$ 5% SMT 0603	2	R37 R40	11-0501-0002-A	TR 3904(SMT SOT-23)NPN	1	Q3
11-0102-2731-0	RMF 27K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R36				
11-0102-3332-0	RMF 33K $\Omega$ 1/16W $\pm$ 5% SMT 0603	4	R39 R42 R66 R149				
11-0102-4331-0	RMF 43K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R21				
11-0102-4732-0	RMF 47K $\Omega$ 1/16W $\pm$ 5% SMT 0603	5	R45 R41 R13 R181 R182				

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# MAIN BOARD

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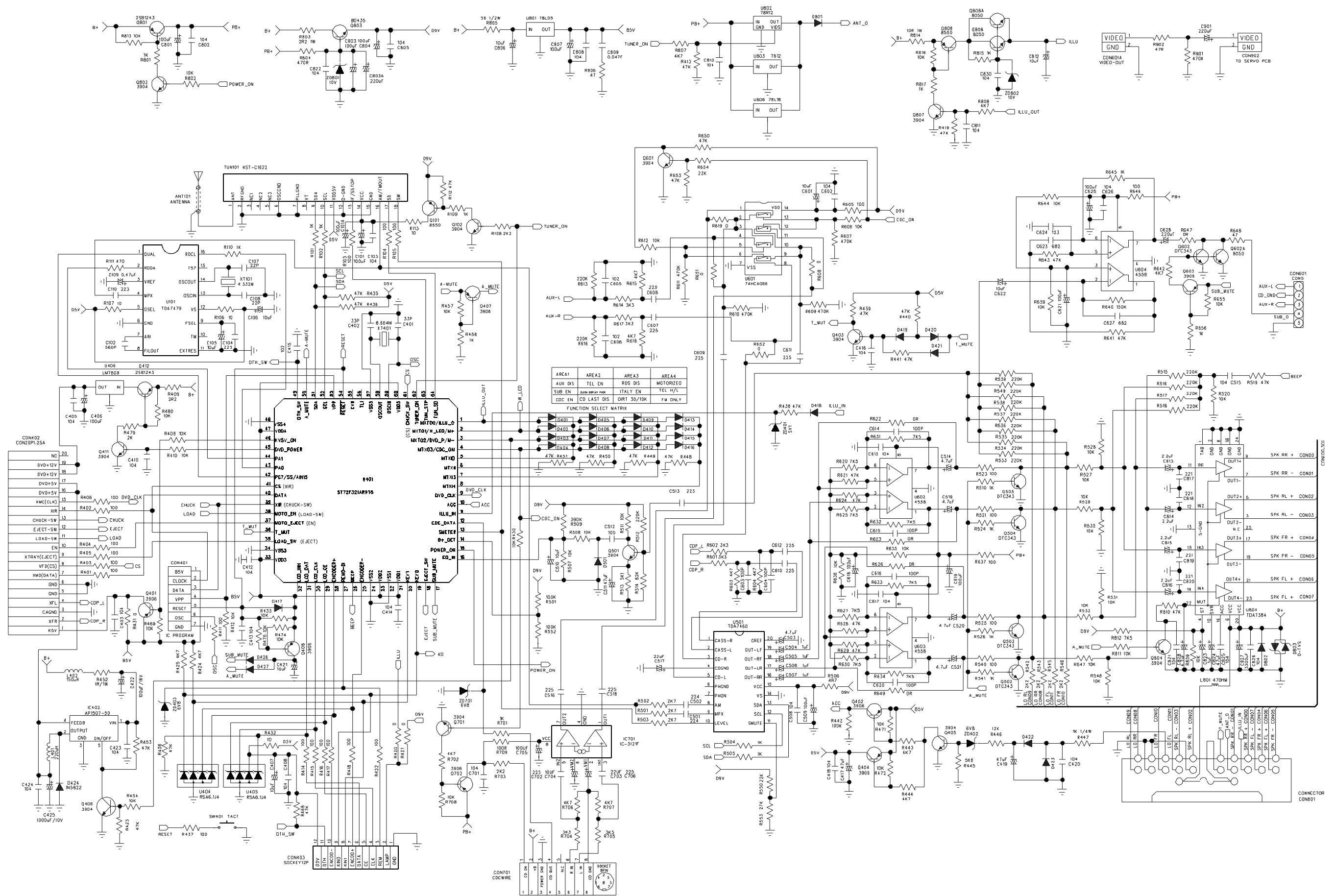
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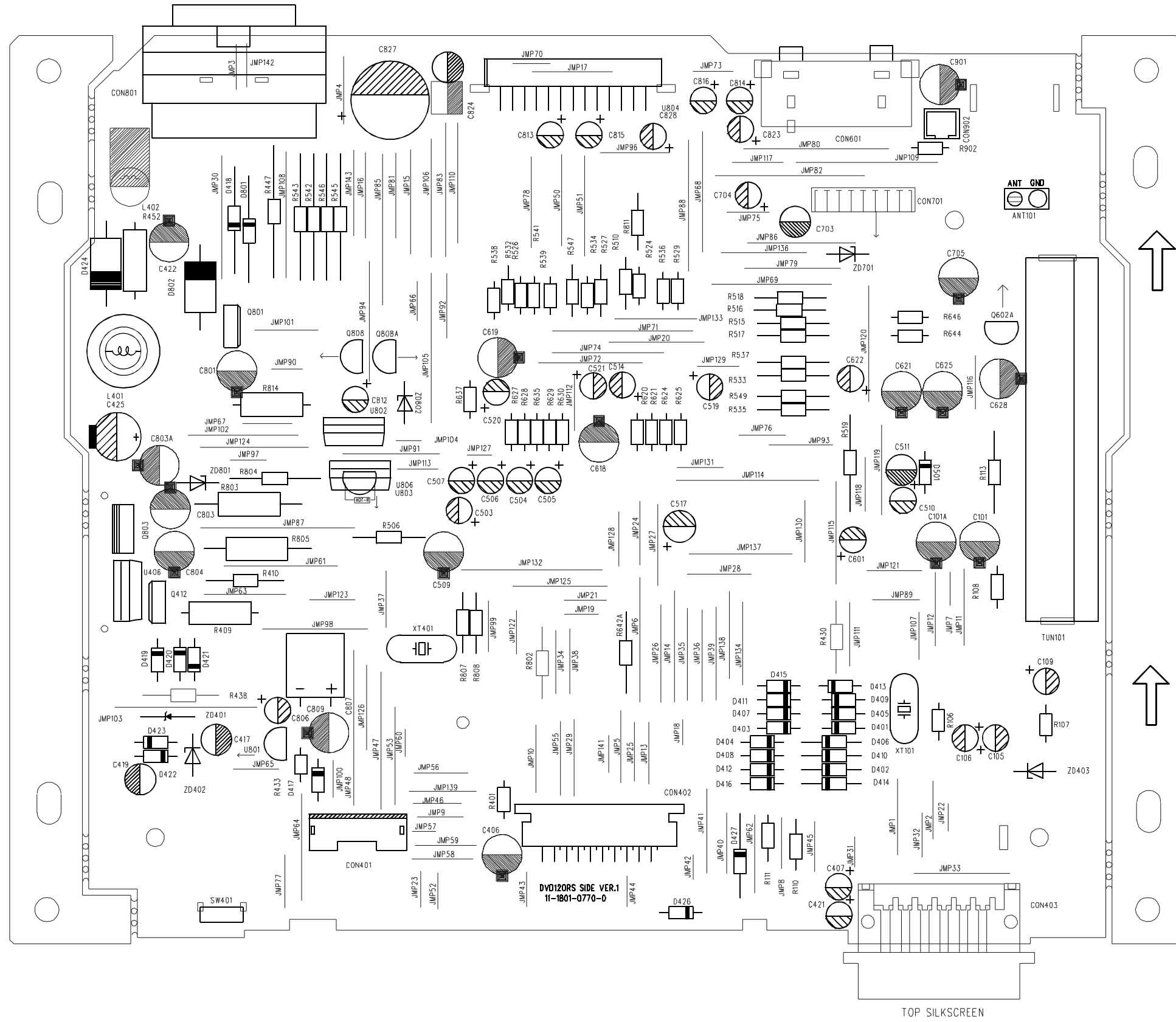
# CIRCUIT DIAGRAM

7-2

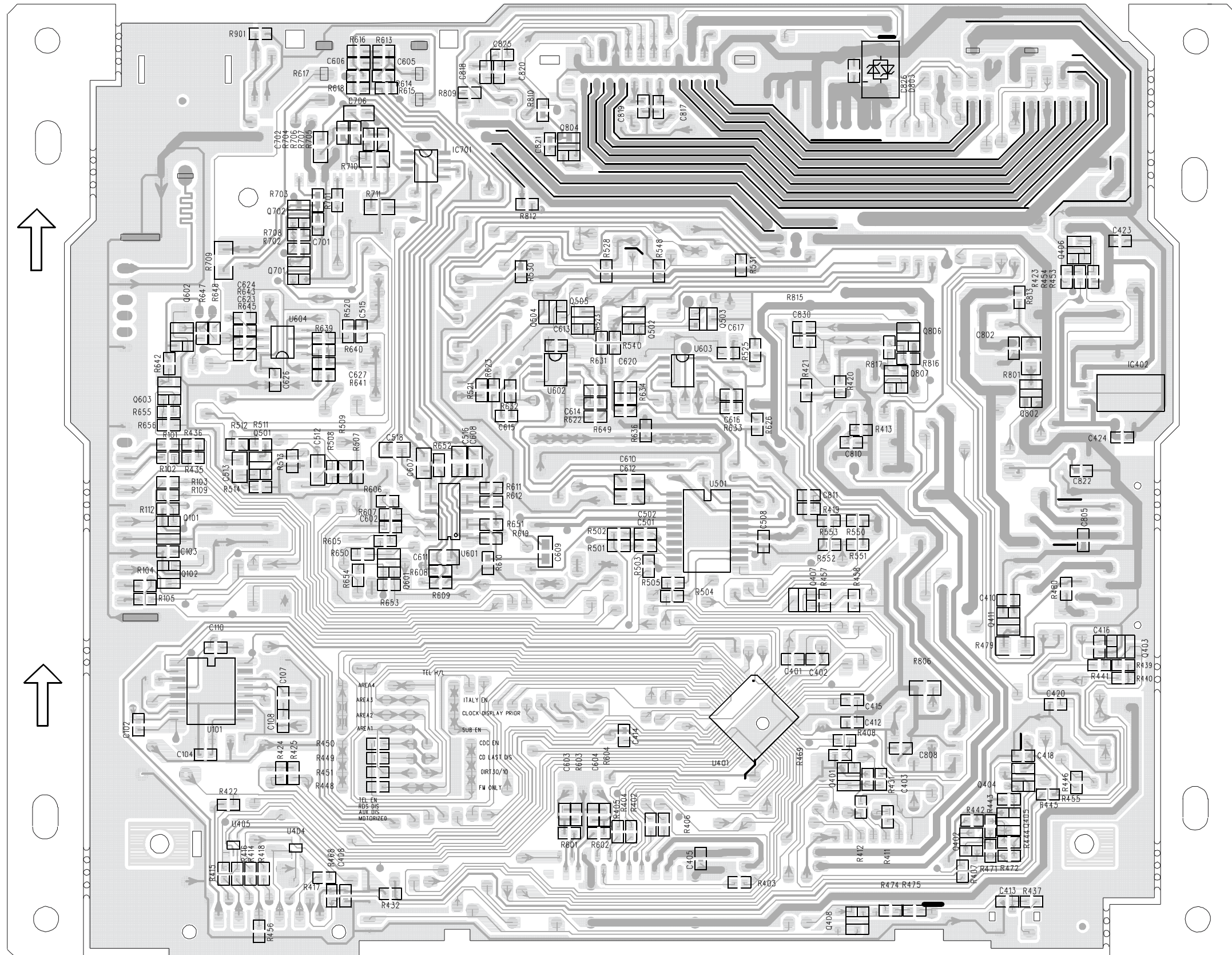
7-2



PCB LAYOUT TOP VIEW



PCB LAYOUT BOTTOM VIEW



## ELECTRICAL PARTS LIST - MAIN BOARD

Part NO.	Description	QTY	Location
83-DVD120RS-MB00-A	4X4V OIRT ESP AUXIN 4V SUB MB MI	1	
82-DVD120RS-MB00-A	4X4V OIRT ESP AUXIN 4V SUB MB SMT	1	
81-DVD120RS-JW00-A	4X4V OIRT ESP AUXIN 4V SUB MBI	1	
11-1801-0770-A	PCB MB 194.3X150.1X1.6MM 94V0 S/S FOR DVD120RS	1	
11-0402-4148-A	DIODE IN4148 1/2W	10	D417,D426,D427,D501,D422,D423,D403,D405, D410,D416
11-0122-2221-0	RCF 2K2Ω 1/8W ±5% RTS	1	R108
11-0122-1001-0	RCF 10Ω 1/8W ±5% RTS	1	R113
11-0122-1031-0	RCF 10KΩ 1/8W ±5% RTS	6	R433,R410,R802,R635,R811,R644
11-0127-2R20-0	RCF 2Ω 2W ±5% RTS	2	R409,R803
11-0126-1R01-0	RCF 1Ω 1W ±5% RTS	1	R452
11-0122-4701-0	RCF 47Ω 1/8W ±5% RTS	1	R902
11-0125-5601-0	RCF 56Ω 1/2W ±5% FL	1	R805
11-0122-4711-0	RCF 470Ω 1/8W ±5% RTS	1	R804
11-0122-4R71-0	RCF 4Ω 7 1/8W ±5% RTS	1	R506
11-0122-1022-0	RCF 1KΩ 1/8W ±5% RTS	9	R447,R510,R524,R526,R541,R542,R543,R545,R546
11-0122-7520-0	RCF 7.5KΩ 1/8W ±5% RTS	4	R620,R625,R627,R630
11-0122-4731-0	RCF 47KΩ 1/8W ±5% RTS	10	R621,R624,R628,R629,R519,R527,R529,R532, R547,ZD401
11-0122-1011-0	RCF 100Ω 1/8W ±5% RTS	3	R637,R646,R401
11-0122-2241-0	RCF 220KΩ 1/8W ±5% RTS	4	R534,R536,R538,R539
11-0122-3941-0	RCF 390KΩ 1/8W ±5% RTS	8	R515,R516,R517,R518,R533,R535,R537,R549
11-0411-0002-A	DIODE IN4001	1	D801
11-0431-0680-A	ZENER DIODE 6.8V 1/2W	2	ZD402,ZD403
11-0431-1000-A	ZENER DIODE 10V 1/2W	1	ZD801
16-0701-0501-0	JUMP WIRE 5.0MM φ 0.5MM	4	JMP42,JMP57,JMP60,JMP127
16-0701-0551-0	JUMP WIRE 5.5MM φ 0.5MM	5	JMP18,JMP19,JMP22,JMP87,JMP90
16-0701-0601-0	JUMP WIRE 6MM φ 0.5MM	2	JMP97,JMP104
16-0701-0651-0	JUMP WIRE 6.5MM φ 0.5MM	4	JMP7,JMP31,JMP43,JMP44
16-0701-0701-0	JUMP WIRE 7MM φ 0.5MM	9	JMP21,JMP23,JMP37,JMP52,JMP70,JMP73, JMP100,JMP129,JMP141
16-0701-0751-0	JUMP WIRE 7.5MM φ 0.5MM	3	JMP3,JMP9,JMP142
16-0701-0801-0	JUMP WIRE 8MM φ 0.5MM	4	JMP66,JMP75,JMP113,JMP131
16-0701-0851-0	JUMP WIRE 8.5MM φ 0.5MM	4	JMP65,JMP107,JMP122,JMP123
16-0701-0901-0	JUMP WIRE 9MM φ 0.5MM	9	JMP28,JMP32,JMP45,JMP56,JMP67,JMP76, JMP77,JMP99,JMP118
16-0701-0951-0	JUMP WIRE 9.5MM φ 0.5MM	3	JMP112,JMP116,JMP117
16-0701-1001-0	JUMP WIRE 10MM φ 0.5MM	1	JMP128
16-0701-1101-0	JUMP WIRE 11MM φ 0.5MM	6	JMP2,JMP13,JMP25,JMP46,JMP101,JMP40
16-0701-1151-0	JUMP WIRE 11.5MM φ 0.5MM	9	JMP10,JMP24,JMP34,JMP38,JMP58,JMP59,JMP92, JMP96,JMP130
16-0701-1201-0	JUMP WIRE 12MM φ 0.5MM	1	JMP93
16-0701-1301-0	JUMP WIRE 13MM φ 0.5MM	6	JMP4,JMP15,JMP12,JMP29,JMP55,JMP5
16-0701-1351-0	JUMP WIRE 13.5MM φ 0.5MM	1	JMP27
16-0701-1401-0	JUMP WIRE 14MM φ 0.5MM	6	JMP1,JMP16,JMP17,JMP62,JMP63,JMP143
16-0701-1451-0	JUMP WIRE 14.5MM φ 0.5MM	3	JMP33,JMP126,JMP134
16-0701-1501-0	JUMP WIRE 15MM φ 0.5MM	5	JMP41,JMP133,JMP136,JMP138,R642A
16-0701-1601-0	JUMP WIRE 16MM φ 0.5MM	6	JMP35,JMP36,JMP53,JMP72,JMP79,JMP125
16-0701-1651-0	JUMP WIRE 16.5MM φ 0.5MM	3	JMP50,JMP78,JMP91
16-0701-1701-0	JUMP WIRE 17MM φ 0.5MM	3	JMP15,JMP20,JMP26

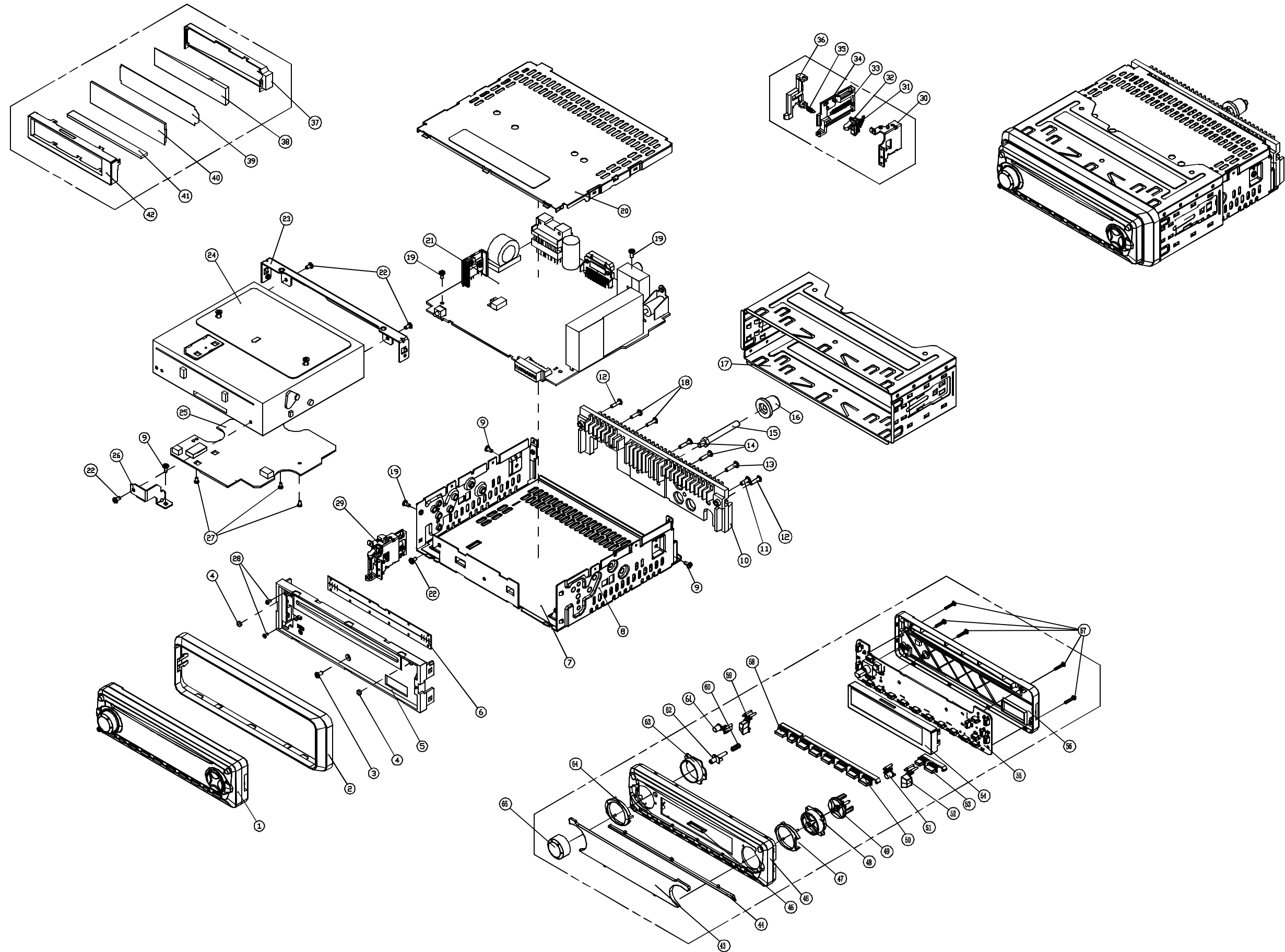
Part NO.	Description	QTY	Location
16-0701-1801-0	JUMP WIRE 18MM φ 0.5MM	2	JMP51,JMP98
16-0701-1851-0	JUMP WIRE 18.5MM φ 0.5MM	1	JMP64
16-0701-1901-0	JUMP WIRE 19MM φ 0.5MM	2	JMP14,JMP74
16-0701-2001-0	JUMP WIRE 20MM φ 0.5MM	2	JMP106,JMP110
16-0701-2051-0	JUMP WIRE 20.5MM φ 0.5MM	1	JMP69
16-0701-2101-0	JUMP WIRE 21MM φ 0.5MM	3	JMP6,JMP71,JMP94
16-0701-2201-0	JUMP WIRE 22MM φ 0.5MM	7	JMP47,JMP68,JMP88,JMP103,JMP124,JMP132, JMP108
16-0701-2301-0	JUMP WIRE 23MM φ 0.5MM	1	JMP61
16-0701-2401-0	JUMP WIRE 24MM φ 0.5MM	3	JMP48,JMP102,JMP114
16-0701-2501-0	JUMP WIRE 25MM φ 0.5MM	2	JMP105,JMP109
16-0701-2601-0	JUMP WIRE 26MM φ 0.5MM	1	JMP85
81-DVD120RS-IC00-A	DVD120RS OTP IC	1	U401
11-0901-0182-A	IC ST72F321AR9TA TQFP64 10X10	1	U401
11-0901-0183-A	IC TDA7460N AUDIOPROCESSOR SO 20	1	U501
11-0102-1022-0	RMF 1KΩ 1/16W ±5% SMT 0603	8	R101,R102,R109,R504,R505,R645,R458,R656
11-0102-1012-0	RMF 100Ω 1/16W ±5% SMT 0603	21	R103,R104,R105,R411,R402,R403,R404,R405, R406,R437,R414,R415,R416,R417,R418,R422, R521,R523,R525,R540,R647
11-0102-4732-0	RMF 47KΩ 1/16W ±5% SMT 0603	18	R435,R436,R112,R453,R423,R448,R449,R450, R451,R810,R643,R641,R468,R631,R633,R634, R632,R456
11-0202-1042-0	CC0.1μ F/16V +80% -20% 0603	25	C103,C412,C413,C414,C415,C410,C405,C403, C423,C424,C408,C802,C822,C805,C808,C508, C420,C418,C617,C613,C821,C825,C826,C515, C626
11-0501-0010-0	TR S8550 SMT SOT-23	1	Q101
11-0501-0002-A	TR 3904(SMT SOT-23)NPN	7	Q102,Q411,Q406,Q802,Q501,Q405,Q804
11-0202-3301-0	CC33PF/50V ±5% SMT 0603	2	C401,C402
11-0501-0003-A	TR 3906(SMT SOT-23)PNP	6	Q408,Q401,Q404,Q402,Q407,Q603
11-0102-1032-0	RMF 10KΩ 1/16W ±5% SMT 0603	23	R412,R474,R475,R480,R408,R469,R454,R813, R507,R508,R511,R471,R472,R636,R528,R530, R531,R548,R809,R520,R639,R457,R655
11-0104-1021-0	RMF 1KΩ 1/4W ±5% SMT 1206	2	R479,R801
11-0901-0274-0	IC AP1507-50 DC/DC CONVERTER 3A	1	IC402
11-0102-1002-0	RMF 10Ω 1/16W ±5% SMT 0603	1	R432
11-0102-0R02-0	RMF 0Ω 1/16W ±5% SMT 0603	5	R421,R651,R652,R455,R407
11-0102-4741-0	RMF 470KΩ 1/16W ±5% SMT 0603	1	R901
11-0102-3322-0	RMF 3K3Ω 1/16W ±5% SMT 0603	2	R603,R604
11-0102-4722-0	RMF 4K7Ω 1/16W ±5% SMT 0603	7	R443,R444,R424,R425,R614,R617,R642
11-0202-1013-0	CC100PF/50V ±5% 0603(NPO)	6	C603,C604,C614,C615,C616,C620
11-0203-2251-0	CC2.2μ F/16V +80% -20% 0805	5	C610,C612,C607,C608,C513
11-0102-2241-0	RMF 220KΩ 1/16W ±5% SMT 0603	3	R613,R616,R512
11-0202-1021-0	CC1000PF/50V ±10% 0603(X7R)	2	C605,C606
11-0102-6822-0	RMF 6K8Ω 1/16W ±5% SMT 0603	4	R615,R618,R601,R602
11-0103-0R01-0	RMF 0Ω 1/10W ±5% SMT 0805	1	C609
11-0102-2231-0	RMF 22KΩ 1/16W ±5% SMT 0603	1	R550
11-0102-2731-0	RMF 27KΩ 1/16W ±5% SMT 0603	1	R553
11-0102-2721-0	RMF 2K7Ω 1/16W ±5% SMT 0603	3	R501,R502,R503
11-0203-2241-0	CC0.22μ F/16V +80% -20% 0805	2	C501,C502
11-0102-3941-0	RMF 390KΩ 1/16W ±5% SMT0603	1	R509

## ELECTRICAL PARTS LIST - MAIN BOARD

Part NO.	Description	QTY	Location
11-0203-1051-0	CC 1 $\mu$ F/25V -80% +20% SMT 0805	1	C512
11-0102-5121-0	RMF 5K1 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R513
11-0102-8232-0	RMF 82K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R514
11-0102-1231-0	RMF 12K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R446
11-0102-5622-0	RMF 5K6 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R445
11-0102-1042-0	RMF 100K $\Omega$ 1/16W $\pm$ 5% SMT 0603	3	R442,R551,R552
11-0901-0063-0	IC MC 4558 SOP DUAL OPERATIONA	3	U602,U603,U604
11-0102-7521-0	RMF 7K5 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R812
11-0501-0001-A	TR DTC343TK(SMT SOT-23)	4	Q502,Q503,Q504,Q505
11-0102-4701-0	RMF 47 $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R648
11-0202-6821-0	CC 6800PF/50V $\pm$ 10% 0603(X7R)	2	C623,C627
11-0202-1232-0	CC 0.012 $\mu$ F/50V $\pm$ 20% SMT 0603	1	C624
11-0202-2011-0	CC 200PF/25V NPO 0603	4	C817,C818,C819,C820
11-0464-0002-A	ESD DIODE PG05GBUSV (5PIN KEC)	2	U404,U405
11-0102-1542-0	RMF 150K $\Omega$ 1/16W $\pm$ 5% SMT 0603	1	R640
11-0224-1077-0	CE 100 $\mu$ F/16V $\pm$ 20% 6.3X5 105° C	14	C101,C101A,C406,C422,C801,C803,C804,C807, C509,C618,C619,C621,C625,C628
11-1500-0029-A	CRYSTAL 8.664M DIP W/30P (-20°C+70°C)	1	XT401
14-2500-0001-A	ANTTENA JACK	1	ANT101
11-2701-0024-A	FM/OIRT/AM KST-C6102LVD-100	1	TUN101
11-0224-1067-0	CE 10 $\mu$ F/16V $\pm$ 20% 4X5 105° C	5	C421,C407,C806,C510,C622
11-1801-0063-0	PCB CM206 CB S/S 36*30*1.6MM	1	
11-0321-0006-0	CHOKE INDUCTOR 470 $\mu$ H(CM206)	1	
11-0144-0008-0	GBX050 PTC	1	U806
11-0522-0001-A	TR B1243 POWER SWITCH	2	Q412,Q801
11-2011-0017-0	TACT SW.TS-40-BS-2	1	SW401
14-2000-0004-0	4PIN P=15MM AV OUTLET ASS'Y DVD120RS	1	CON601
16-0100-0001-B	20PIN FFC 120MM PITCH=1.0MM T=0.4MM	1	
11-3102-0001-0	CONNECTOR 12PIN FEMALE 1.6MM	1	CON403
11-3102-0005-0	2PIN SOCKET PITCH=2.0MM(180° )	1	CON902
11-3101-0020-1	20PIN PWR/SPK EST-KNT-20-04	1	CON801
11-3102-0026-0	7PIN WAFER PH P=2.0MM	1	CON401
16-0300-0001-A	20PIN S TYPE PITCH=1.0	1	CON402
11-0901-0055-A	IC L7809 REGULATOR ST	1	U406
11-2101-0001-0	15A DIN FUSE	1	
11-0311-1512-0	STAND INDUCTOR 150 $\mu$ H $\pm$ 10% $\Phi$ 0.3	1	L402
11-0311-2211-0	STAND INDUCTOR 220 $\mu$ H 2A	1	L401
11-0228-2270-0	CE 220UF/10V $\pm$ 20% 5X12 105°C	2	C901,C803A
11-0901-0192-0	IC HTC LM2950 5.0V 100MALDO REG	1	U801
11-0901-0075-A	IC TDA7384	1	U804
11-0411-0009-A	DIODE IN5822	1	D424
11-0411-0001-A	DIODE IN5401	1	D802
11-0512-0011-A	T.R.BD435S SAMSUNG	1	Q803
11-0224-2261-0	CE 22 $\mu$ F/16V $\pm$ 20% 4X5 105° C	1	C517
11-0231-3381-0	CE 3300 $\mu$ F/16V $\pm$ 20% 12.5X25 105	1	C827
11-0224-4767-0	CE 47 $\mu$ F/16V $\pm$ 20% 5X5 105° C	4	C511,C419,C417,C824
11-0224-4751-0	CE 4.7 $\mu$ F/16V $\pm$ 20% 4X5 105° C	6	C503,C514,C519,C520,C521,C828
11-0224-2253-0	CE 2.2 $\mu$ F/50V $\pm$ 20% 4X5 105° C	4	C813,C814,C815,C816
11-0224-1053-0	CE 1 $\mu$ F/50V $\pm$ 20% 4X5 105° C	5	C504,C505,C506,C507,C823
11-0231-1081-0	CE 1000 $\mu$ F/10V $\pm$ 20% 8X16 105° C	1	C425
11-0502-0001-A	TR S8050 NPN TO-92	1	Q602

Part NO.	Description	QTY	Location
84-RC400-0131-0	REM-PET PANEL DVD120RS 58A	1	
84-RC400-RM00-A	DVD123 REMOTE	1	
11-0223-4763-0	CE 47 $\mu$ F/10V $\pm$ 20% 4X5 85°C	1	E1
11-2511-0001-A	INFRARED LED 3MM	1	IR1
82-RC400-RM00-A	RC400 DVD123 SMT	1	
11-0103-2R21-0	RMF 2R2 $\Omega$ 1/10W $\pm$ 5% SMT 0805	1	R1
11-0203-1011-0	CC 100PF/50V $\pm$ 5% SMT 0805(NPO)	2	C1,C2
11-0501-0009-0	TR S8050 SMT SOT-23	1	Q1
81-RC400-RMT00-A	RC400 REM	1	
11-0901-0099-0	IC SC6122 PAD	1	IC1
11-1801-9991-B	PCB PD710B REM S/S 94V0 104X42X1.0MM	1	
11-0411-0008-A	DIODE IN4148 SMT 1/2W	1	D1
11-0103-1041-0	RMF 100K $\Omega$ 1/10W $\pm$ 5% SMT 0805	1	R2
11-1500-0035-0	CER RESONATOR 455KHZ	1	CT1
11-3101-0067-0	20P PWR/SPK 4RCA A4/7CHANGE CM206	1	
11-2300-0001-0	CR2025 3V BATTERY	1	

# EXPLODED VIEW - MAIN UNIT





## MECHANICAL PARTS LIST(GREEN LIGHT)

Item	Assembly Part NO	Description	QTY
1	84-DVD120-KB00-A	PANEL ASSEMBLY	1
2	13-0700-0801-A	RIM FOR CMV100 IN BLACK	1
3	14-1070-2605-0	BLACK ZINC BM SCREW2605	1
4	13-1505-0001-0	SPONGR FOR CABINET CM110	2
5	13-0300-0101-F	CABINET FOR CMV100	1
6	13-1805-0001-3	DUST PROOF FOR CM110	1
7	13-1700-0008-0	0.2MM-PC-SHEET FOR CM110	1
8	14-0400-0004-B	FRAME(01) NEW FOR CM110	1
9	14-1174-2606-0	PLATING NICKEL,BTS SCREW	3
10	14-0923-0002-B	MAIN HEATSINK FOR CM120	1
11	14-1174-3008-0	BTS,PLATING NICKEL SCREW	1
12	14-1174-2610-0	PLATING NICKEL,BTS SCREW	2
13	14-1175-3012-0	PLATING NICKEL BTP SCREW	1
14	14-1474-2612-0	BTS WHITE ZINC SCREW	2
15	14-2600-0001-0	POLE FOR CMV100	1
16	13-1600-0001-0	RUBBER FOR CMV100	1
17	14-0616-0001-E	SHORT SHEET FOR CM216	1
18	14-1153-2610-0	PLATING NICKEL,PBT SCREW 2610	2
19	14-1174-2605-0	PLATING NICKEL BTS M2.6*5	3
20	14-0500-0003-A	TOP COVER NEW FOR CMV100	1
21	83-DVD120RSA-MB00-A	PCB MAIN BOARD ASSEMBLY	1
22	14-1176-2605-0	PLATING NI BTB SCREW M2.6*5	4
23	14-0300-0009-1	BRACKET DECK BACK(01)	1
24	11-3501-0014-A	SHINWA DVD DECK DL-C28D1	1
25	83-DVD705-SB02-A	DVD705 ESP SB ASSEMBLY	1
26	14-0300-0013-B	BRACKET DECK FRONT OF CLC01 NEW FOR CM110	1
27	14-1254-2004-0	PW,COLOR ZINC,PTS,SCREW	3
28	14-1064-1604-0	BLACK ZINC,TTB,SCREW	2
29	84-CMV100LOC-A	KEY LOCK	1
30	14-0300-0012-0	BRACKET LOCK FOR CMV100	1
31	14-0200-0001-1	SPRING LOCK TOP FOR CMV100	1
32	13-0805-0003-C	LOCK TOP FOR CM110	1
33	14-0200-0004-0	SPRING LOCK FOR CMV100	1
34	13-0805-0004-B	LOCK BOTTOM FOR CM110	1
35	14-0200-0002-1	SPRING LOCK BOTTOM FOR CMV100	1
36	13-0805-0002-C	LOCK FOR CM110	1
37	13-0805-0001-C	LCD HOLDER FOR CMV100	1
38	13-0900-0002-A	REFLECTOR LCD FOR CMV100	1
39	13-1005-0001-1	FILTER SHEET FOR CM110 COLOR LCD	1
40	11-2602-0029-A	LCD DVD 120 NEGATIVE COLOR	1
41	11-3400-0001-0	ZEBRA STRIP FOR CM110	1
42	14-0305-0003-A	LCD COVER FOR CM110	1
43	13-0423-0892-A	LENS OF DVD120RS 58A PROLOGY	1
44	13-0423-0887-A	LENS-DOWN FOR DVD120	1
45	13-0923-0002-A	LIGHT_GUIDE FOR CM120	1
46	13-0123-0801-C	PANEL-FRONT FOR CM120	1
47	13-0723-0501-A	RING-RIGHT FOR CM120	1
48	13-0723-0502-A	RING-LITTLE RIGHT FOR CM120	1
49	13-0523-0715-A	KNOB LOC&MONO&SCAN FOR DVD120RS	1
50	13-0523-0805-C	KNOB-NUMBER FOR CM120	1

Item	Assembly Part NO	Description	QTY
51	13-0523-0810-B	KNOB-EJECT FOR CM120	1
52	13-0523-0709-B	KNOB-LOUD CM120	1
53	13-0523-0807-C	AMS&BAND FOR CM120	1
54	AS-1100-LCD2-0	LCD ASSEMBLY	1
55	82-CM120EN-KB02-A	KB ASSEMBLY	1
56	13-0223-0801-A	PANEL BACK FOR CM120	1
57	14-1055-2010-0	SCREW PTP2010	5
58	13-0523-0811-C	KNOB-SRC&DISP FOR CM120	1
59	13-0523-0706-B	KNOB-MUT FOR CM120	1
60	14-0200-0007-0	CMV100,SPRING RELEASE NEW	1
61	13-0523-0803-B	KNOB-PWR FOR CM120	1
62	13-0523-0804-A	KNOB-OPEN FOR CM120	1
63	13-0923-0001-A	RING LIGHT GUIDE LEFT FOR CM120	1
64	13-0723-0503-A	RIM-LEFT FOR CM120	1
65	13-0607-0501-B	KNOB ENCODER 120WATER PLUTE	1

## MECHANICAL PARTS LIST(REDF LIGHT)

Item	Assembly Part NO	Description	QTY
1	84-DVD120-KB01-A	PANEL ASSEMBLY	1
2	13-0700-0801-A	RIM FOR CMV100 IN BLACK	1
3	14-1070-2605-0	BLACK ZINC BM SCREW2605	1
4	13-1505-0001-0	SPONGR FOR CABINET CM110	2
5	13-0300-0101-F	CABINET FOR CMV100	1
6	13-1805-0001-3	DUST PROOF FOR CM110	1
7	13-1700-0008-0	0.2MM-PC-SHEET FOR CM110	1
8	14-0400-0004-B	FRAME(01) NEW FOR CM110	1
9	14-1174-2606-0	PLATING NICKEL,BTS SCREW	3
10	14-0923-0002-B	MAIN HEATSINK FOR CM120	1
11	14-1174-3008-0	BTS,PLATING NICKEL SCREW	1
12	14-1174-2610-0	PLATING NICKEL,BTS SCREW	2
13	14-1175-3012-0	PLATING NICKEL BTP SCREW	1
14	14-1474-2612-0	BTS WHITE ZINC SCREW	2
15	14-2600-0001-0	POLE FOR CMV100	1
16	13-1600-0001-0	RUBBER FOR CMV100	1
17	14-0616-0001-E	SHORT SHEET FOR CM216	1
18	14-1153-2610-0	PLATING NICKEL,PBT SCREW 2610	2
19	14-1174-2605-0	PLATING NICKEL BTS M2.6*5	3
20	14-0500-0003-A	TOP COVER NEW FOR CMV100	1
21	83-DVD120RSA-MB00-A	PCB MAIN BOARD ASSEMBLY	1
22	14-1176-2605-0	PLATING NI BTB SCREW M2.6*5	4
23	14-0300-0009-1	BRACKET DECK BACK(01)	1
24	11-3501-0014-A	SHINWA DVD DECK DL-C28D1	1
25	83-DVD705-SB02-A	DVD705 ESP SB ASSEMBLY	1
26	14-0300-0013-B	BRACKET DECK FRONT OF CLC01 NEW FOR CM110	1
27	14-1254-2004-0	PW,COLOR ZINC,PTS,SCREW	3
28	14-1064-1604-0	BLACK ZINC,TTB,SCREW	2
29	84-CMV100LOC-A	KEY LOCK	1
30	14-0300-0012-0	BRACKET LOCK FOR CMV100	1
31	14-0200-0001-1	SPRING LOCK TOP FOR CMV100	1
32	13-0805-0003-C	LOCK TOP FOR CM110	1
33	14-0200-0004-0	SPRING LOCK FOR CMV100	1
34	13-0805-0004-B	LOCK BOTTOM FOR CM110	1
35	14-0200-0002-1	SPRING LOCK BOTTOM FOR CMV100	1
36	13-0805-0002-C	LOCK FOR CM110	1
37	13-0805-0001-C	LCD HOLDER FOR CMV100	1
38	13-0900-0002-A	REFLECTOR LCD FOR CMV100	1
39	13-1005-0001-1	FILTER SHEET FOR CM110 COLOR LCD	1
40	11-2602-0029-A	LCD DVD 120 NEGATIVE COLOR	1
41	11-3400-0001-0	ZEBRA STRIP FOR CM110	1
42	14-0305-0003-A	LCD COVER FOR CM110	1
43	13-0423-0892-A	LENS OF DVD120RS 58A PROLOGY	1
44	13-0423-0887-A	LENS-DOWN FOR DVD120	1
45	13-0923-0002-A	LIGHT_GUIDE FOR CM120	1
46	13-0123-0801-C	PANEL-FRONT FOR CM120	1
47	13-0723-0501-A	RING-RIGHT FOR CM120	1
48	13-0723-0502-A	RING-LITTLE RIGHT FOR CM120	1
49	13-0523-0715-A	KNOB LOC&MONO&SCAN FOR DVD120RS	1
50	13-0523-0805-C	KNOB-NUMBER FOR CM120	1

Item	Assembly Part NO	Description	QTY
51	13-0523-0810-B	KNOB-EJECT FOR CM120	1
52	13-0523-0709-B	KNOB-LOUD CM120	1
53	13-0523-0807-C	AMS&BAND FOR CM120	1
54	AS-1100-LCD2-0	LCD ASSEMBLY	1
55	82-CM120EN-KB00-A	KB ASSEMBLY	1
56	13-0223-0801-A	PANEL BACK FOR CM120	1
57	14-1055-2010-0	SCREW PTP2010	5
58	13-0523-0811-C	KNOB-SRC&DISP FOR CM120	1
59	13-0523-0706-B	KNOB-MUT FOR CM120	1
60	14-0200-0007-0	CMV100,SPRING RELEASE NEW	1
61	13-0523-0803-B	KNOB-PWR FOR CM120	1
62	13-0523-0804-A	KNOB-OPEN FOR CM120	1
63	13-0923-0001-A	RING LIGHT GUIDE LEFT FOR CM120	1
64	13-0723-0503-A	RIM-LEFT FOR CM120	1
65	13-0607-0501-B	KNOB ENCODER 120WATER PLUTE	1