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SECTION 1. GENERAL PART

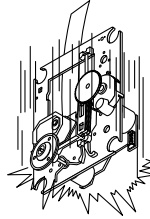
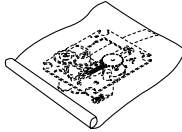
SERVICING PRECAUTIONS

NOTES REGARDING HANDLING OF THE PICK-UP

1. Notes for transport and storage

- 1) The pick-up should always be left in its conductive bag until immediately prior to use.
- 2) The pick-up should never be subjected to external pressure or impact.

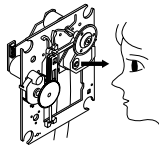
Storage in conductive bag



Drop impact

2. Repair notes

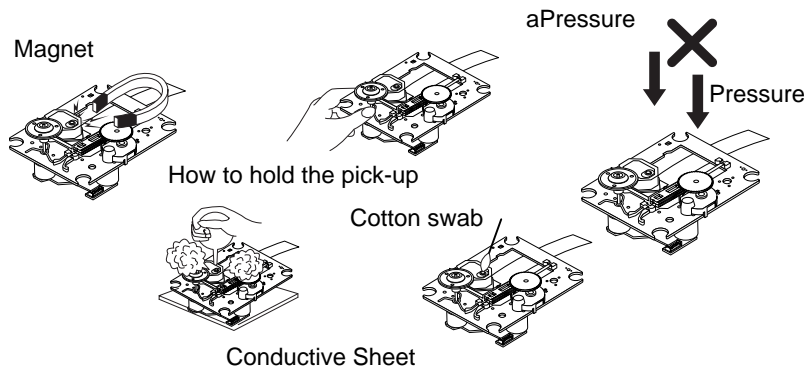
- 1) The pick-up incorporates a strong magnet, and so should never be brought close to magnetic materials.
- 2) The pick-up should always be handled correctly and carefully, taking care to avoid external pressure and impact. If it is subjected to strong pressure or impact, the result may be an operational malfunction and/or damage to the printed-circuit board.
- 3) Each and every pick-up is already individually adjusted to a high degree of precision, and for that reason the adjustment point and installation screws should absolutely never be touched.
- 4) Laser beams may damage the eyes!
Absolutely never permit laser beams to enter the eyes!
Also NEVER switch ON the power to the laser output part (lens, etc.) of the pick-up if it is damaged.



NEVER look directly at the laser beam, and don't let contact fingers or other exposed skin.

5) Cleaning the lens surface

If there is dust on the lens surface, the dust should be cleaned away by using an air bush (such as used for camera lens). The lens is held by a delicate spring. When cleaning the lens surface, therefore, a cotton swab should be used, taking care not to distort this.



6) Never attempt to disassemble the pick-up.

Spring by excess pressure. If the lens is extremely dirty, apply isopropyl alcohol to the cotton swab. (Do not use any other liquid cleaners, because they will damage the lens.) Take care not to use too much of this alcohol on the swab, and do not allow the alcohol to get inside the pick-up.

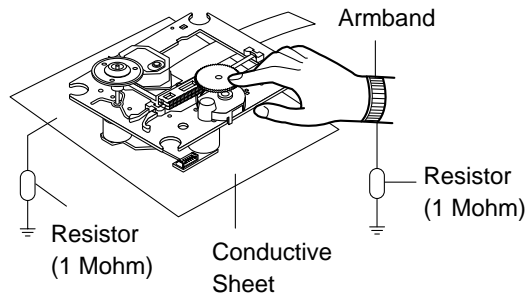
NOTES REGARDING COMPACT DISC PLAYER REPAIRS

1. Preparations

- 1) Compact disc players incorporate a great many ICs as well as the pick-up (laser diode). These components are sensitive to, and easily affected by, static electricity. If such static electricity is high voltage, components can be damaged, and for that reason components should be handled with care.
- 2) The pick-up is composed of many optical components and other high-precision components. Care must be taken, therefore, to avoid repair or storage where the temperature of humidity is high, where strong magnetism is present, or where there is excessive dust.

2. Notes for repair

- 1) Before replacing a component part, first disconnect the power supply lead wire from the unit
- 2) All equipment, measuring instruments and tools must be grounded.
- 3) The workbench should be covered with a conductive sheet and grounded.
When removing the laser pick-up from its conductive bag, do not place the pick-up on the bag. (This is because there is the possibility of damage by static electricity.)
- 4) To prevent AC leakage, the metal part of the soldering iron should be grounded.
- 5) Workers should be grounded by an armband (1M)
- 6) Care should be taken not to permit the laser pick-up to come in contact with clothing, in order to prevent static electricity changes in the clothing to escape from the armband.
- 7) The laser beam from the pick-up should NEVER be directly facing the eyes or bare skin.



ESD PRECAUTIONS

Electrostatically Sensitive Devices (ESD)

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
6. Do not remove a replacement ESD device from its protective package until immediately before you are ready to install it. (Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).
7. Immediately before removing the protective material from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : BE SURE NO POWER IS APPLIED TO THE CHASSIS OR CIRCUIT, AND OBSERVE ALL OTHER SAFETY PRECAUTIONS.

8. Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

CAUTION. GRAPHIC SYMBOLS



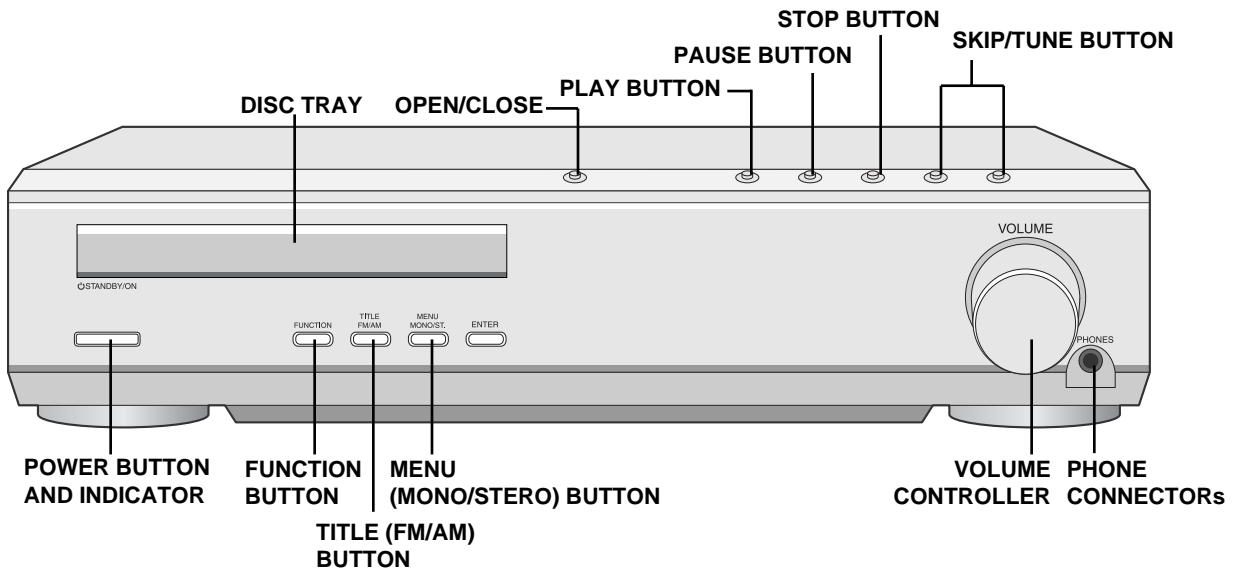
THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



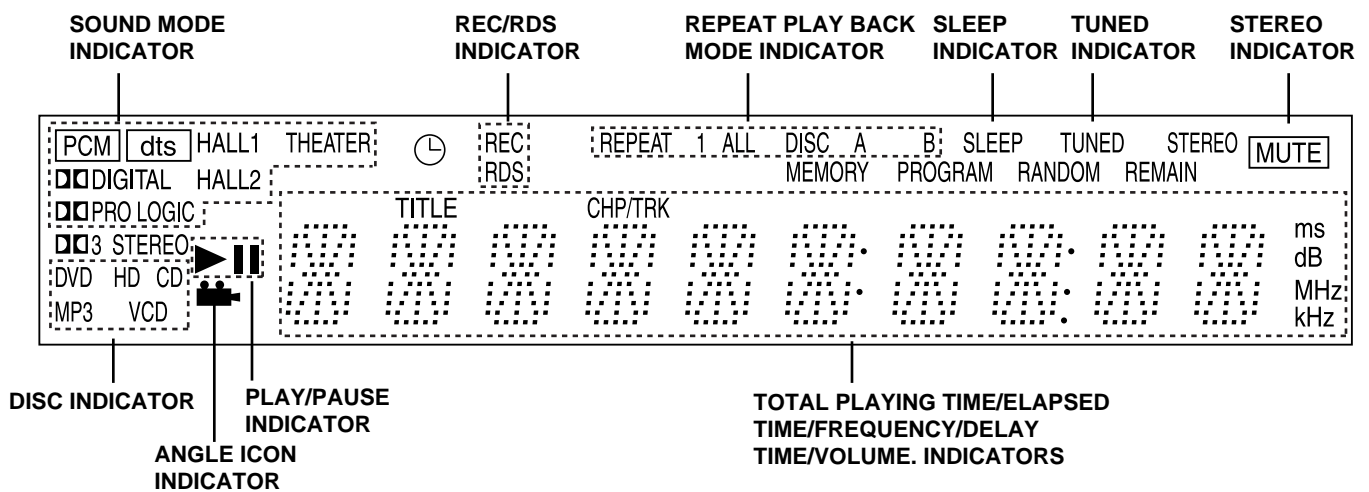
THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

LOCATION OF CUSTOMER CONTROLS

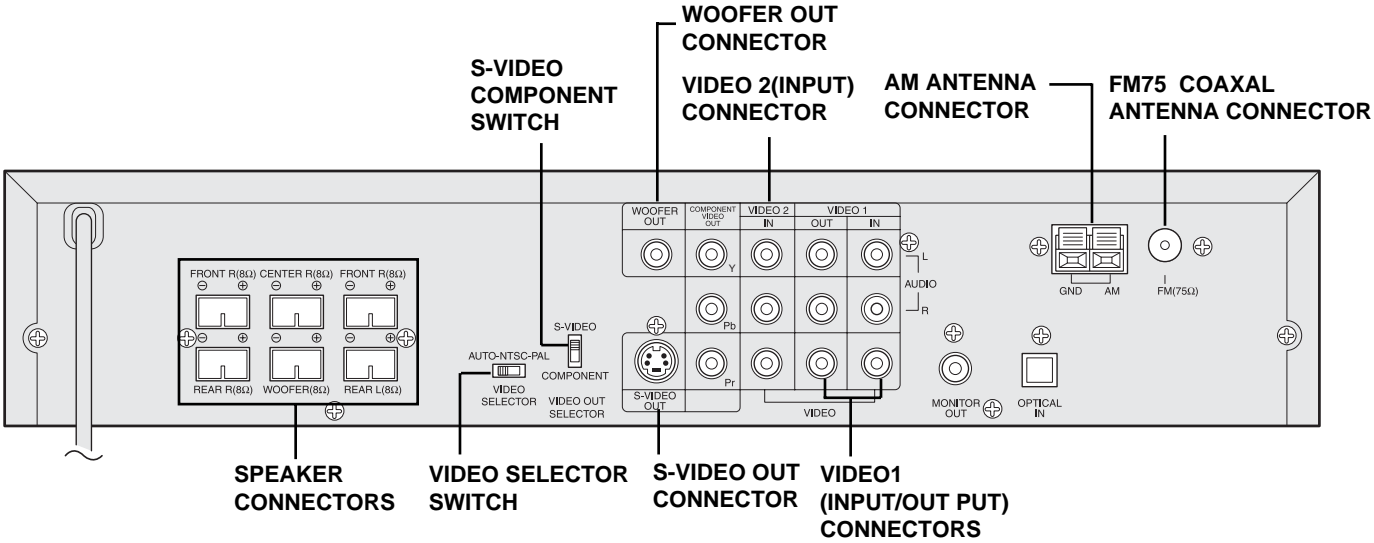
FRONT PANEL



DISPLAY WINDOW



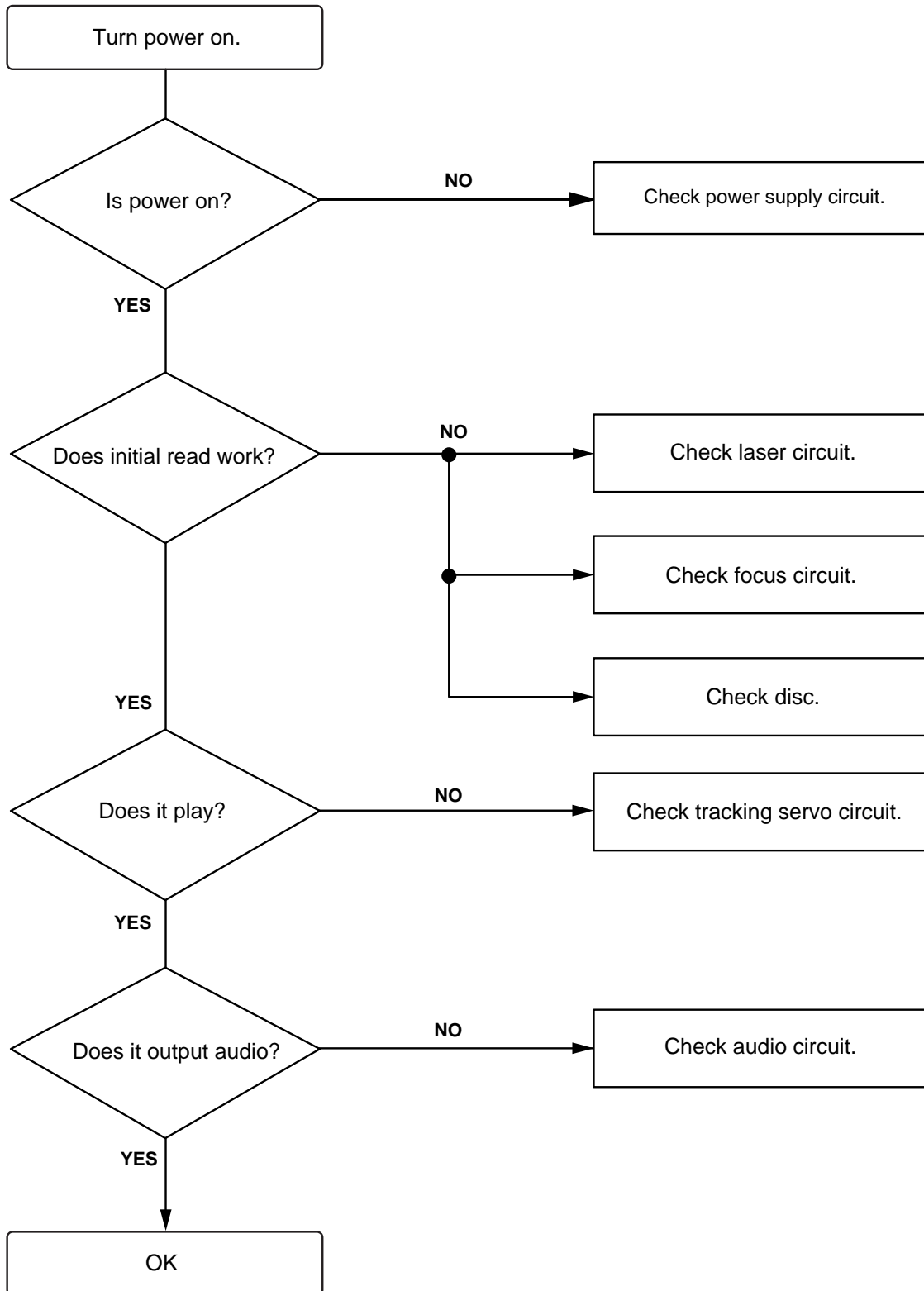
REAR PANEL



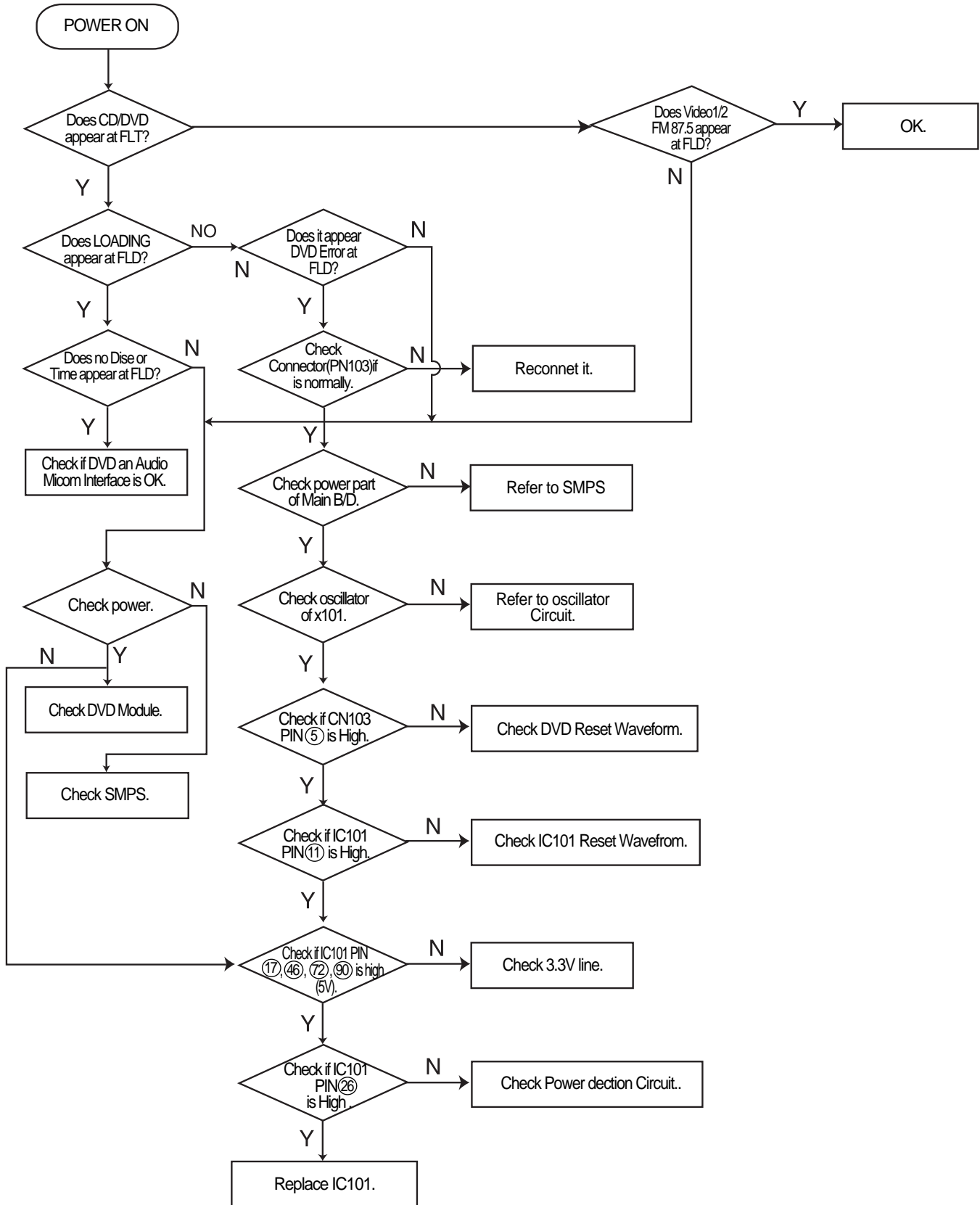
SECTION 2. AUDIO PART

ELECTRICAL TROUBLESHOOTING GUIDIE

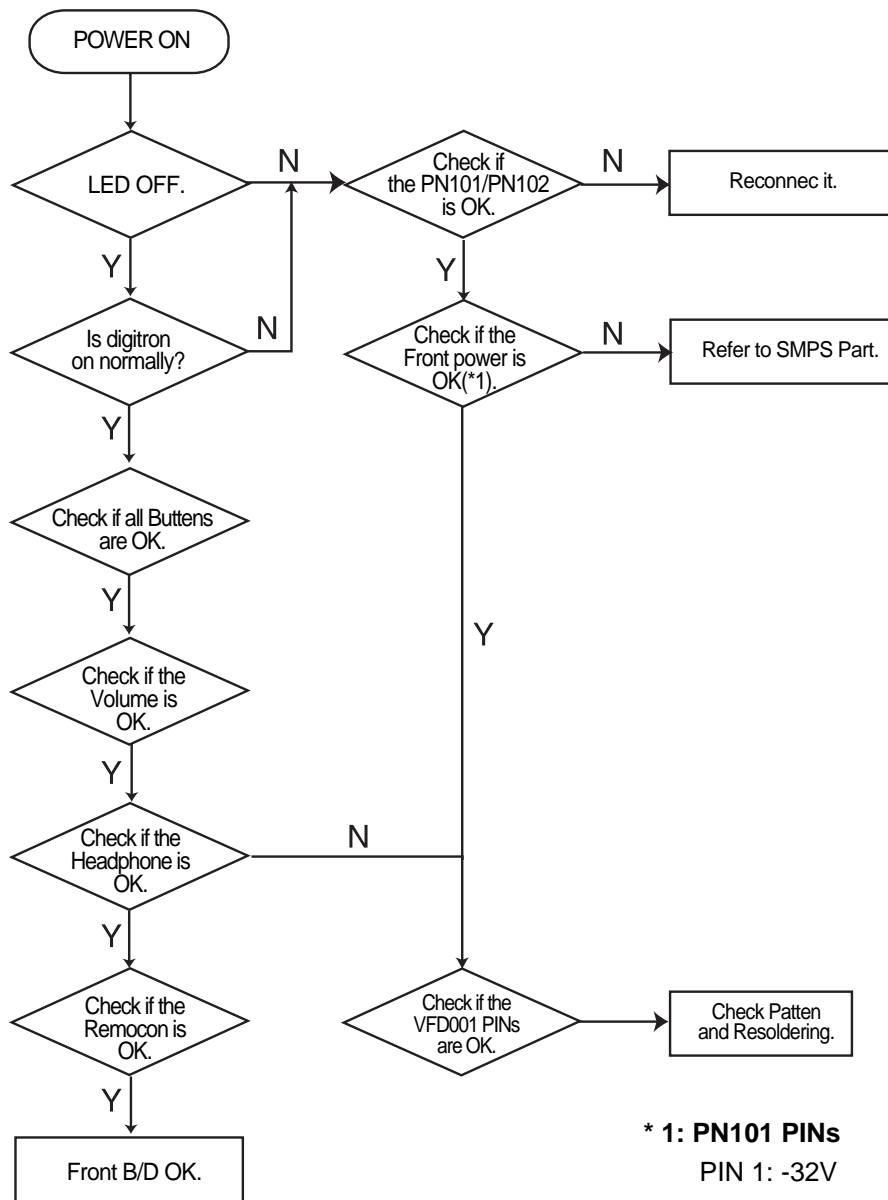
1.



2. AUDIO μ . COM Circuit

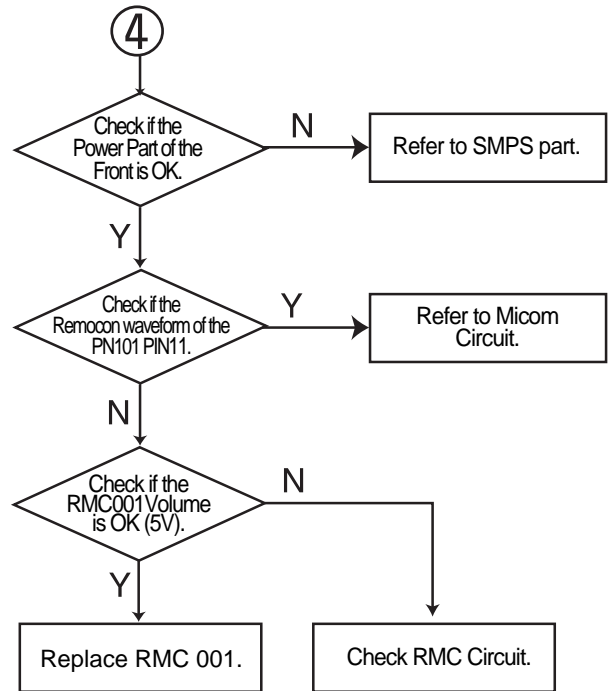
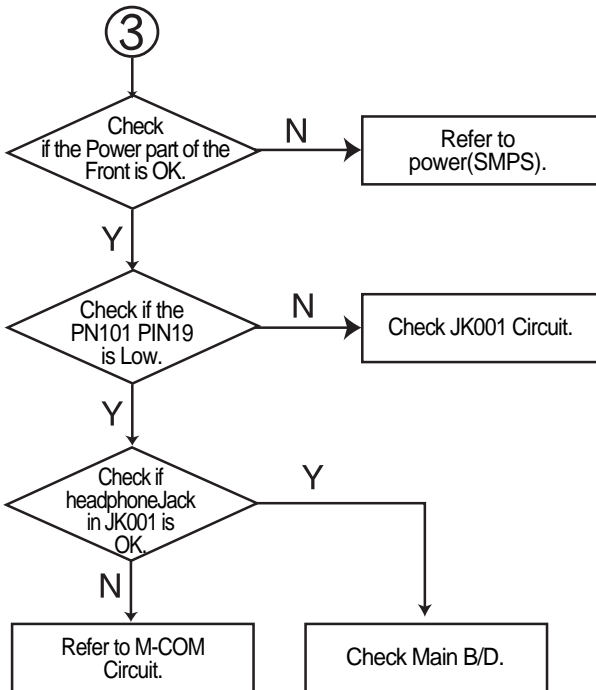
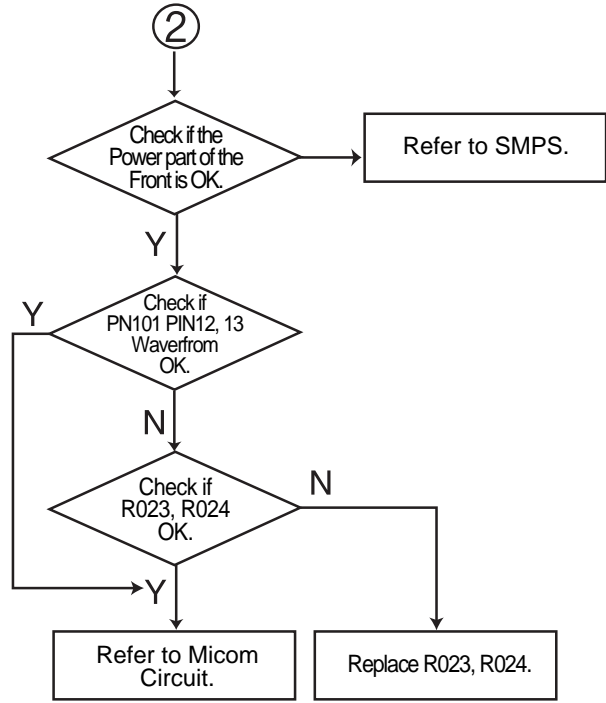
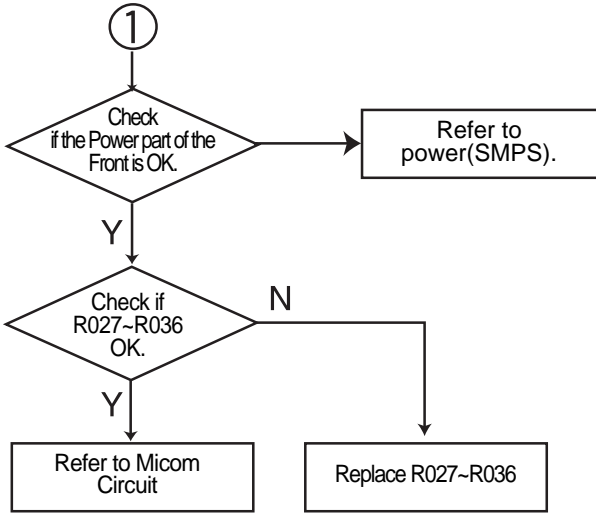


3. Front Circuit (1/2)



- * 1: PN101 PINs**
 PIN 1: -32V
 PIN 8: -28V
 PIN 9: -32V
 PIN 20: 12V

Front Circuit (2/2)



DVD PLAYER PROGRAM DOWNLOAD METHOD

1. DVD player without CD-RW option

1-1) Download the DVD program from your PC as following procedure

ACTION	FLD display
<ul style="list-style-type: none">• Plug the Power cord out• Connect the Fixture for download (Refer to Deck Mechanism Adjustment)• Execute the program for download(Flashrom.exe)• Open the DVD program file• Plug the Power cord in• Press the MENU Key on the Remote controller• Select Down icon with injector icon then start download from the P.C	FLASH
■ In status of download	
<ul style="list-style-type: none">• Erased the Flash memory• Written the Flash memory• Verified the Flash memory• Completed the download	FLASH ERA FLASH XX(XX: Program counter) FLASH XX(XX: Program counter) FINISHED
■ If an error was occurred during download, do not unplug the Power cord, and retry the download form the P.C until it is completed.	

2. DVD player with CD-RW option(for models using C-CUBE MPEG chip, marking on the IC is ZIVA)

2-1) Make the DVD program upgrade Disc as following procedure

*Recommended S/W: adaptec Easy CD Creator

*use file format: ISO9660

- Rename the souce file from the P.C to FIRMWARE.BIN
(Ex, If Source file is lg_a3_korea.bin, rename to FIRMWARE.BIN)
- Format the CD-RW Disc as below Make the Folder name to UPGRSADE.DVD under root folder
(Ex, ₩UPGRADE.DVD)
- Download the source file renamed to FIRMWARE.BIN in the folder
(Ex, ₩UPGRADE.DVD ₩FIRMWARE.BIN)

2-2) Insert the upgrade Disc into the DVD player slot, then the DVD player reads the Disc and upgrade the Firmware itself as followings

Status	FLD display on DVD player
• Detect the upgrade Disc	No display
• Read the Disc	Cd rEAD XX(XX: Program counter)
• Erased the Flash memory	FLASH ERA
• Written the Flash memory	FLASH XX(XX: Program counter)
• Verified the Flash memory	FLASH XX(XX: Program counter)
• Completed the upgrade	FINISHED

Note: After completed, plug the Power cord out and in again, and then press the Open key, then the Disc will be ejected.

Caution: While CD detecting and reading, if Open key or Power is pressed Then download procedure will be aborted.

**3. DVD player with CD-RW option
(for models using NS MPEG chip, marking on the IC is PANTERA)**

3-1) Make the DVD program upgrade Disc as following procedure

*Recommended S/W: adaptec Easy CD Creator

*use file format: ISO9660

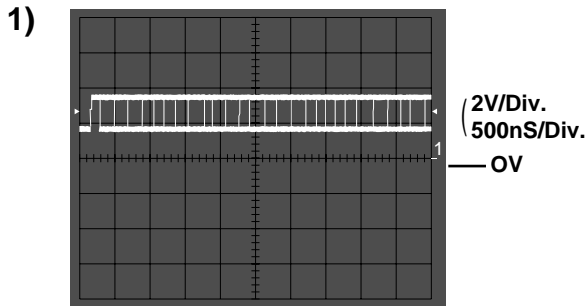
- Format the CD-RW Disc as below.
Make the Folder name to "lg_dvd ₩UPGRADE ₩lg" under root folder
(₩lg_dvd_firmware ₩upgrade ₩lg)
- Download the source file in the folder
(Ex, If the source file is "lg_a3_korea.bin, "lg_dvd ₩firmware ₩upgrade ₩lg ₩lg_a3_korea.bin")

3-2) UPgrade the firmware for DVD player as followings

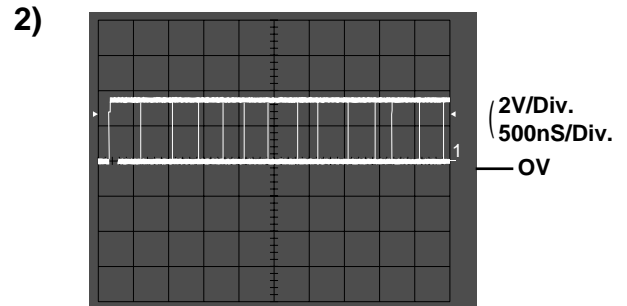
ACTION	FLD display on dvd player
• Insert the upgraded Disc into the DVD player slot then starts the detecting	Press Up
• Press the UP key on the Remote controller then starts the reading	READ 0(If error is occurred, displayed retry counter)
- Starts the upgrading	UPGRADE 0(If error is occurred, displayed retry counter)
- Completed the upgrading	FINISHED → checksum
- Opened the Tray Disc	("FINISHED → checksum" is displayed repeatedly at 2 second intervals)
• Plug the Power Cord out	

Note: In the status of FLD with "READ 0" or "UPGRADE 0"
If an error is occurred, the read counter, "READ 0", shows retry counter or "ERROR num"
If the num has 0~2, retry the firmware upgrade procedure.
If the error is continued after retrying 5 times, replace the Flash ROM IC.

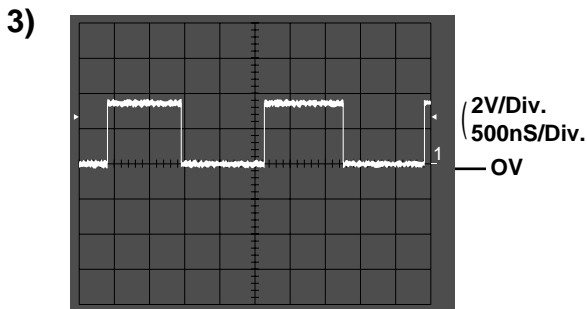
WAVEFORMS OF MAJOR CHECK POINT



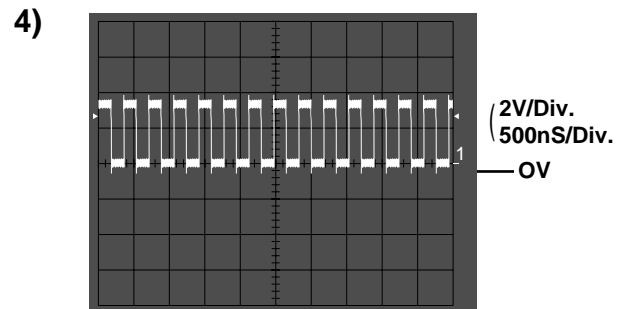
- IC 208 pin ⑤
- Serial data clock waveform during normal play.



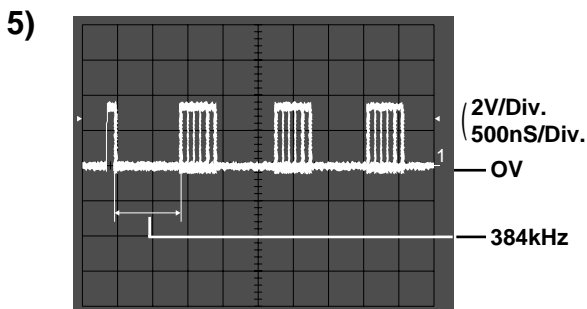
- IC 208 pin ⑦
- Serial data output waveform during normal play.



- IC 201 pin ④②
- L/R clock data input waveform during normal operation.



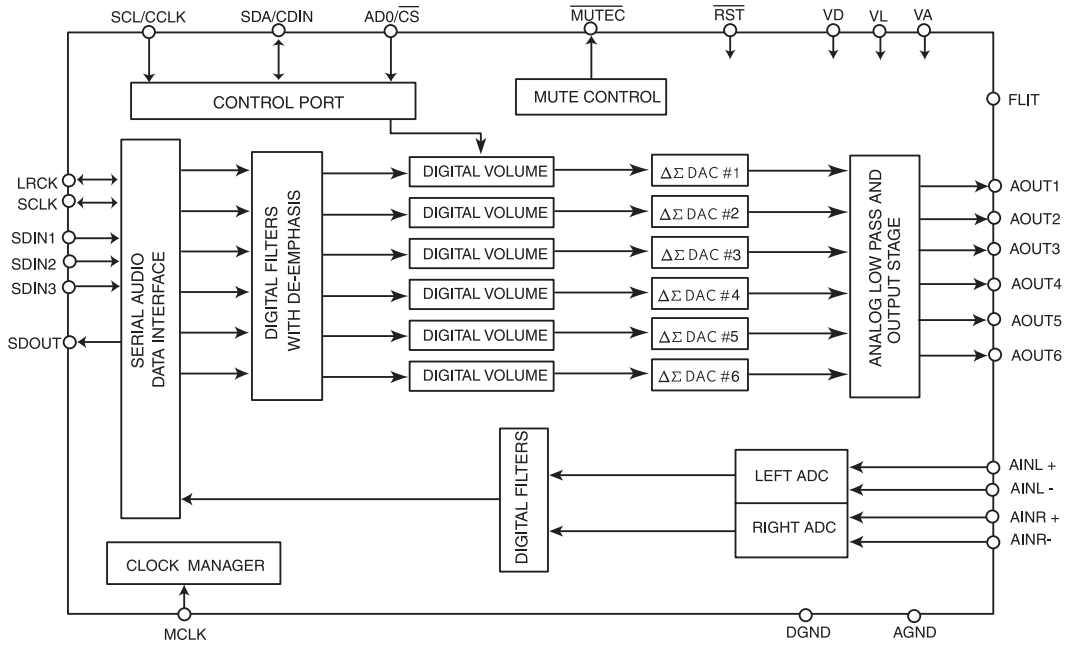
- IC 201 pin ④③
- Bit clock data input waveform during normal operation.



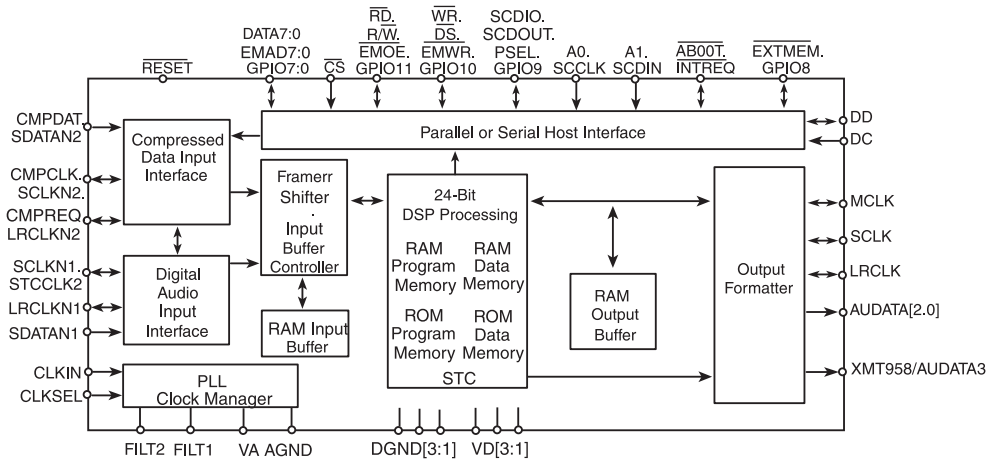
- IC 301 pin ⑤③, ⑤④, ⑤⑥, ⑤⑦, ⑥①, ⑥②, ⑥③, ⑥④, ⑥⑦, ⑥⑧, ⑦①, ⑦②.
- PWM data output waveform during normal operation.

INTERNAL BLOCK DIAGRAM OF ICs

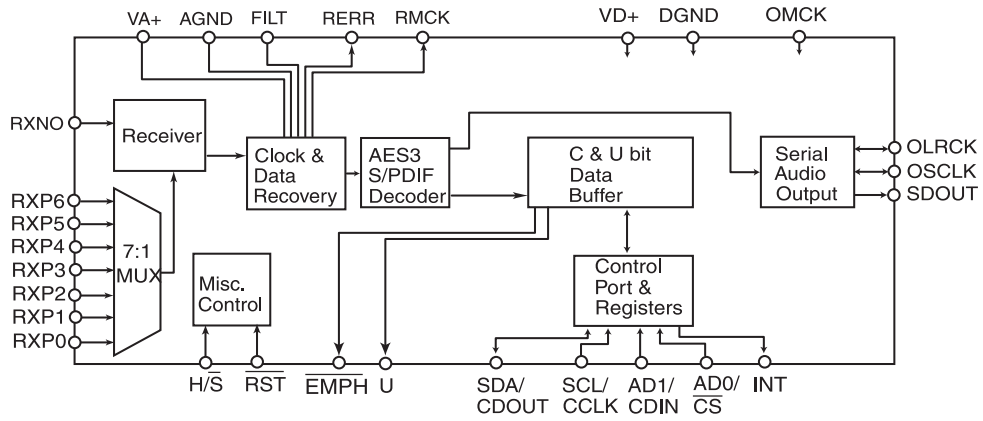
CS4228



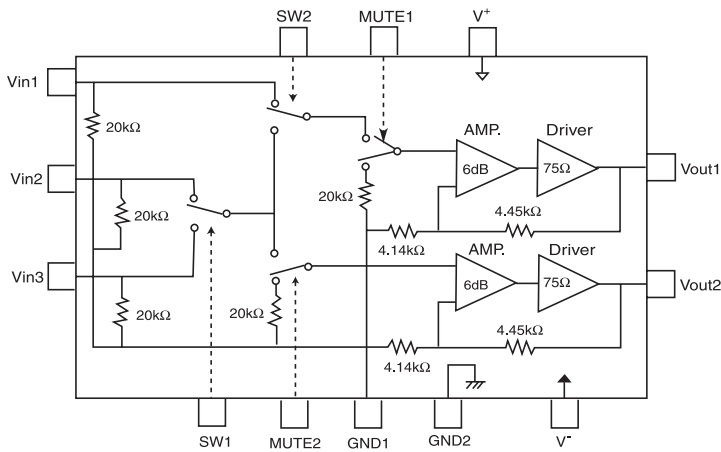
CS49300



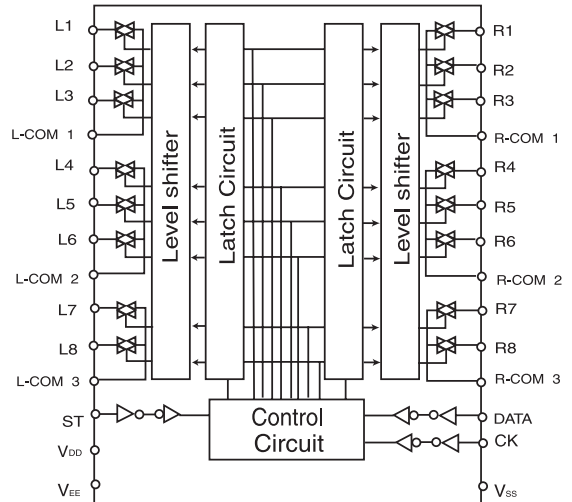
■ CS8415A



■ NJM2279



■ NJU7312A



IC VOLTAGE SHEET

■ STA505 (IC710, IC730, IC750, IC770)

PIN No.	Volt(V)
1	
2	
3	
4	32
5	
6	
7	32
8	
9	
10	
11	
12	32
13	
14	
15	32
16	
17	
18	
19	
20	
21	
22	
23	3.3
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	

■ NJM 2279 (IC102)

PIN No.	Volt(V)
1	0
2	2
3	0
4	5
5	1.3
6	0
7	0
8	5
9	0
10	1.3
11	0
12	1.4
13	5
14	-5

■ CS8415 (IC206)

PIN No.	Volt(V)	PIN No.	Volt(V)
1	2.8	15	0
2	2.9	16	1.6
3	3.2	17	1.6
4	2.8	18	0
5	2.8	19	3
6	5	20	0
7	0	21	0
8	2.2	22	3
9	1.6	23	0
10	1.6	24	0
11	0	25	0
12	0	26	3
13	0	27	0
14	0	28	

■ PS9702B (IC301)

PIN No.	Volt(V)	PIN No.	Volt(V)	PIN No.	Volt(V)	PIN No.	Volt(V)
1	0	26	0	51	3.21	76	2.92
2	0	27	0	52	0	77	3.21
3	3.21	28	0	53	1.6	78	0
4	4.78	29	0	54	1.6	79	3.28
5		30		55	0	80	0
6	2.95	31	0	56	1.6	81	3.21
7	1.67	32	3.21	57	1.6	82	3.21
8	0	33	0	58	3.21	83	0
9	0	34	0	59	0	84	3.21
10	0	35	0	60	1.6	85	0
11	0	36	0	61	1.6	86	1.67
12	0	37	0	62	0	87	0
13	0	38	1.62	63	1.6	88	0
14	0	39	0	64	1.6	89	0
15	3.21	40	3.21	65	3.21	90	3.21
16	0	41	0	66	0	91	0
17	0	42	0	67	1.6	92	4.77
18	0	43	0	68	1.6	93	0
19	0	44	0	69	0	94	0
20	0	45	0	70	1.6	95	0
21	0	46	3.21	71	1.6	96	0
22	1.6	47	0	72	3.21	97	0
23	1.64	48	0	73	0	98	0
24	3.21	49	0	74	0	99	3.21
25	0	50	0	75	0	100	0

■ LC87F67
(IC101)

PIN No.	Volt(V)	PIN No.	Volt(V)	PIN No.	Volt(V)	PIN No.	Volt(V)
1	0	26	2.45	51	-1	76	-3.25
2	0	27	1.02	52	-1	77	-3.25
3	0	28	1.63	53	0	78	-3.25
4	0	29	4.96	54	-17.71	79	-3.25
5	5.19	30	-1	55	-1	80	4.97
6	0	31	-1	56	-1	81	1.27
7	0	32	-1	57	-1	82	2
8	0	33	-1	58	-1	83	4.98
9	3.23	34	-1	59	-14.91	84	4.98
10	1.21	35	-1	60	1.31	85	4.79
11	4.9	36	-1	61	-3.23	86	1.83
12	0	37	-1	62	-3.23	87	0
13	4.85	38	-1	63	-3.23	88	4.79
14	0	39	-1	64	-3.23	89	0
15	2.4	40	-1	65	4.99	90	4.86
16	2.52	41	-1	66	4.93	91	4.86
17	4.98	42	-1	67	4.93	92	4.33
18	0	43	-1	68	0	93	4.99
19	0	44	-14.91	69	4.97	94	4.99
20	0	45	-1	70	4.97	95	4.86
21	3.58	46	5.4	71	0	96	4.79
22	3.59	47	-1	72	5.08	97	4.79
23	3.59	48	-1	73	0	98	0
24	3.59	49	-1	74	-3.94	99	1.79
25	0.9	50	-1	75	0	100	3.19

■ NJU7312AM(IC501)

PIN No.	Volt(V)	PIN No.	Volt(V)
1	-12	16	0
2	0	17	0
3	0	18	0
4	0	19	0
5	0	20	0
6	0	21	0
7	0	22	0
8	0	23	0
9	0	24	0
10	0	25	0
11	0	26	0
12	0	27	0
13		28	0
14		29	0
15		30	12

■ CS49326(IC201)

PIN No.	Volt(V)	PIN No.	Volt(V)
1	2.4	23	2.5
2	0	24	
3	0	25	1.6
4	0	26	1.6
5		27	1
6	2.9	28	1.6
7	0	29	1.6
8	2.4	30	1
9	2.4	31	0
10	2.4	32	2
11	2.4	33	1.3
12	2.5	34	2.5
13	0	35	0
14	2.4	36	3.2
15	2.4	37	2.5
16	2.4	38	2.5
17	2.4	39	0
18	3.2	40	0
19	1.7	41	0
20	2.4	42	1.6
21	2.4	43	1.6
22	0	44	1.6

■ CS4228 (IC205)

PIN No.	Volt(V)	PIN No.	Volt(V)
1	0	16	2.5
2	0	17	2.2
3	0	18	3.5
4	1.5	19	2.2
5	1.5	20	2.2
6	1.5	21	5
7		22	
8	3.2	23	2.3
9	2.5	24	2.3
10	1.6	25	2.3
11	0	26	2.3
12	2.9	27	2.3
13	3.2	28	2.3
14	3.2	29	2.3

■ IC910

PIN No.	Volt(V)
1	
2	
3	-12

■ IC921

PIN No.	Volt(V)
1	
2	12
3	

■ PN901, CN901

PIN No.	Volt(V)
1	-30
2	-25
3	-37
4	-37
5	-37
6	5.1
7	
8	
9	
10	

■ PN902, CN902

PIN No.	Volt(V)
1	27.6
2	27.6
3	27.6
4	16.9
5	5.8
6	5.8
7	0
8	
9	
10	5.8

■ IC911

PIN No.	Volt(V)
1	
2	
3	-5

■ IC922

PIN No.	Volt(V)
1	
2	8.1
3	

■ IC926

PIN No.	Volt(V)
1	
2	3.3
3	

■ IC923

PIN No.	Volt(V)
1	
2	5
3	

■ IC924

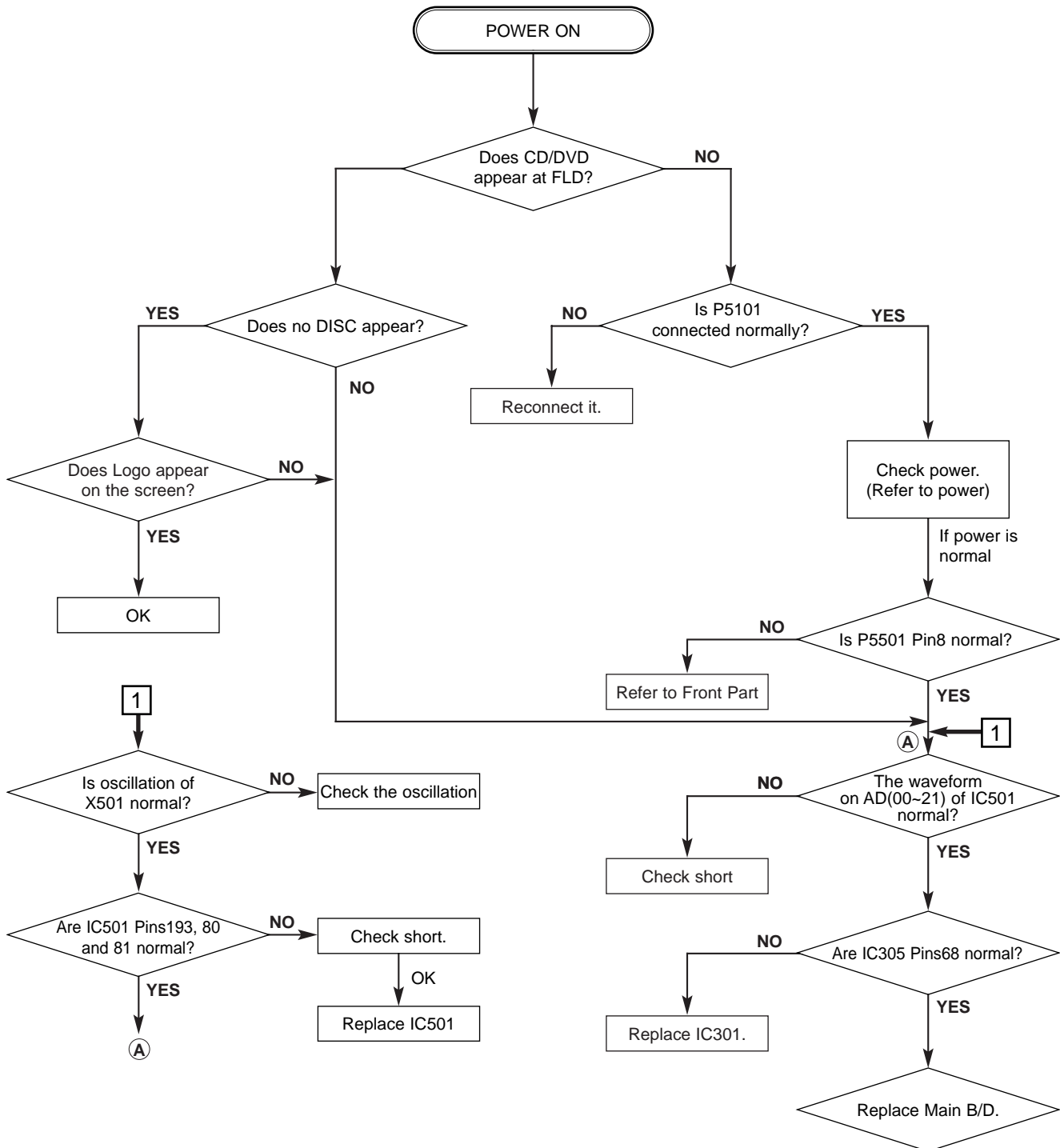
PIN No.	Volt(V)
1	
2	3.3
3	

SECTION 3. DVD PART

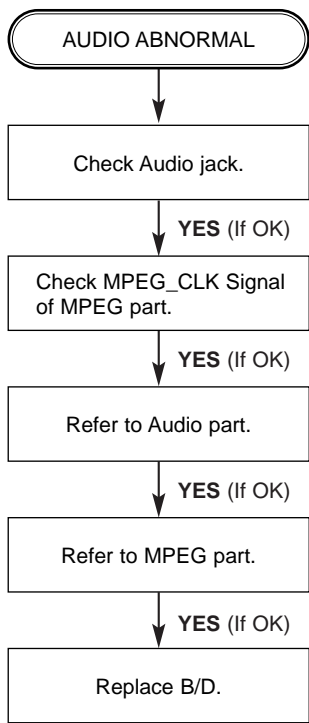
ELECTRICAL TROUBLESHOOTING GUIDE

1. μ -COM Circuit

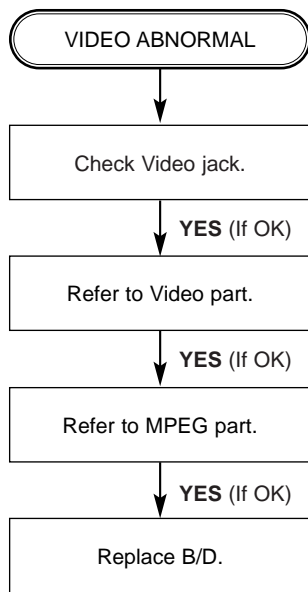
A. No Power



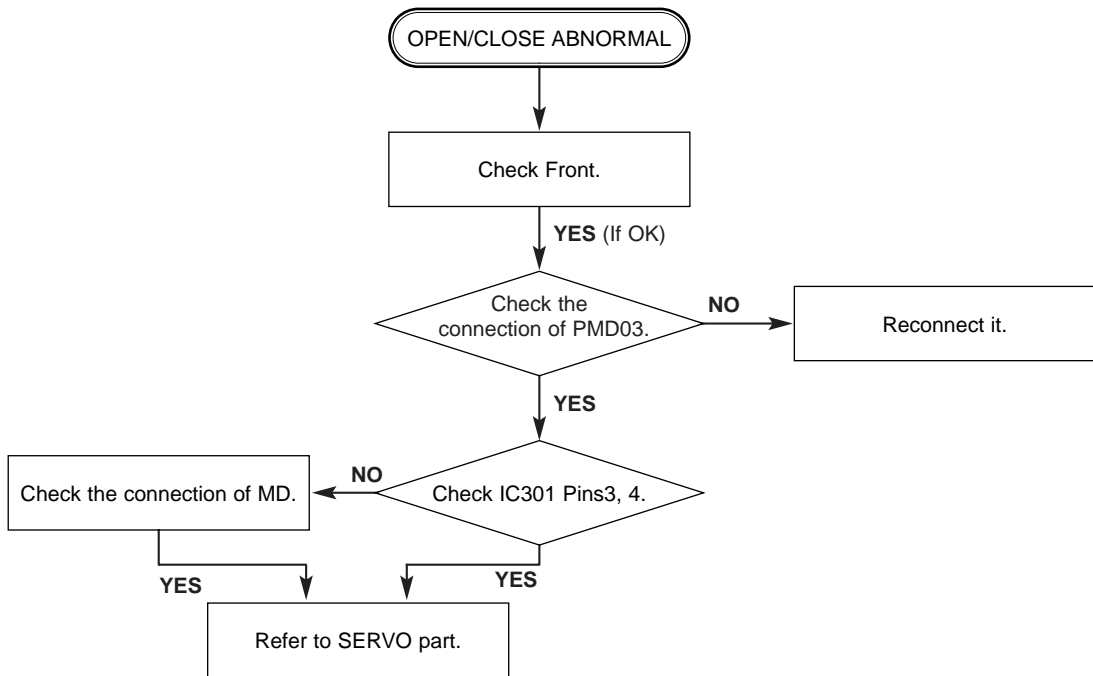
B. Audio abnormal



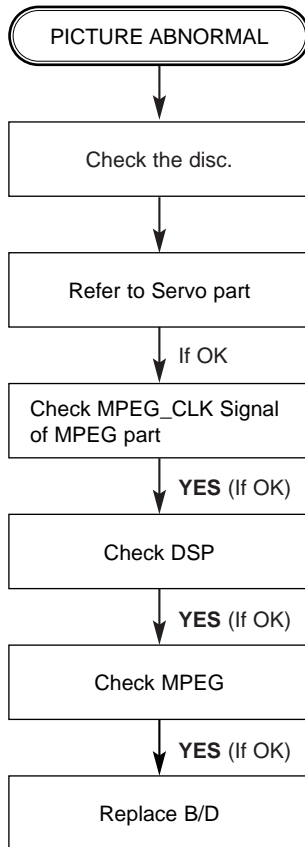
C. Video abnormal



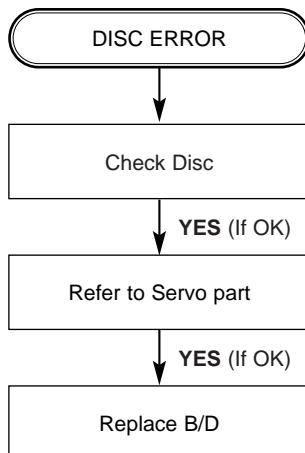
D. Open/Close abnormal



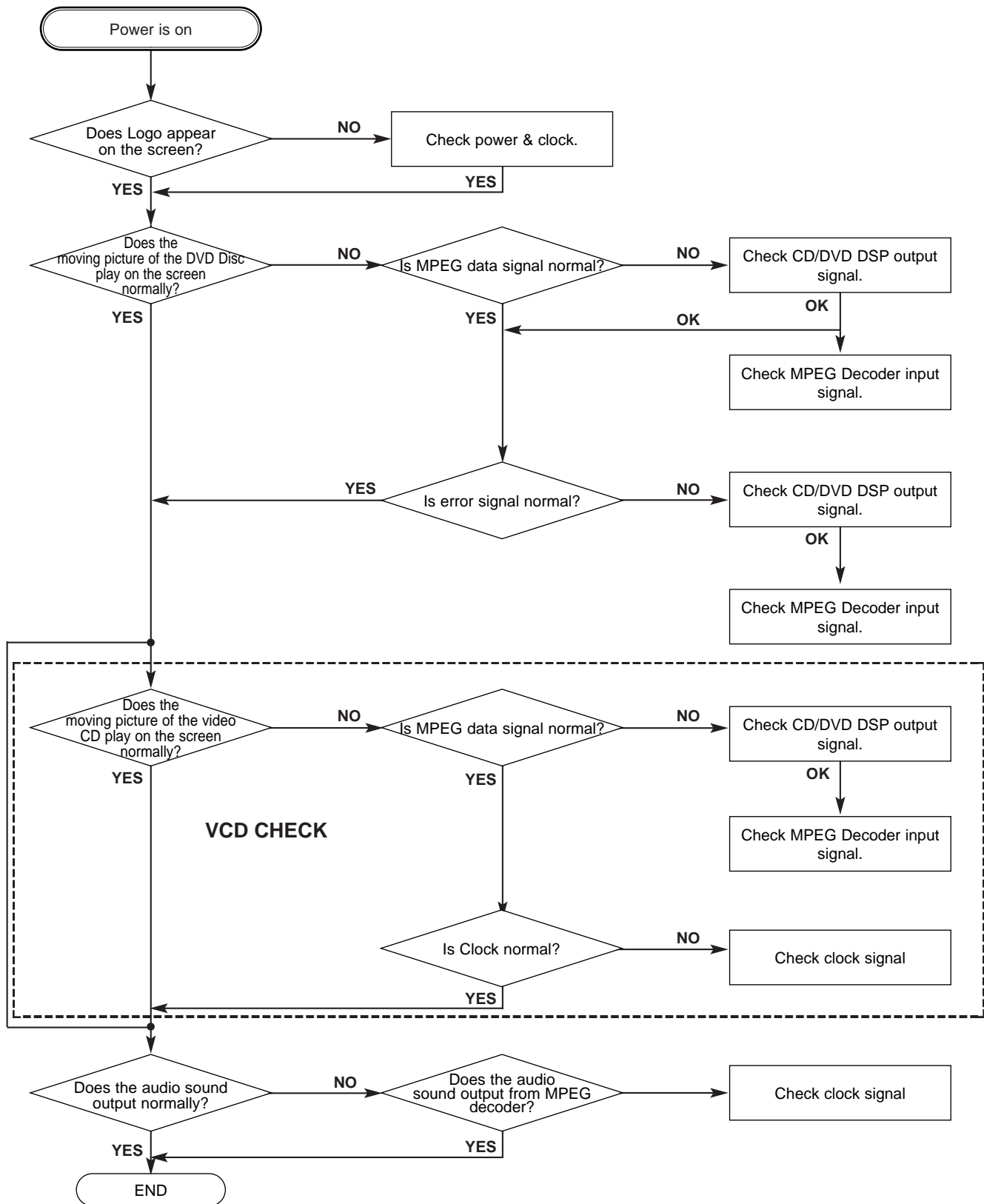
E. Picture abnormal



F. Disc Error

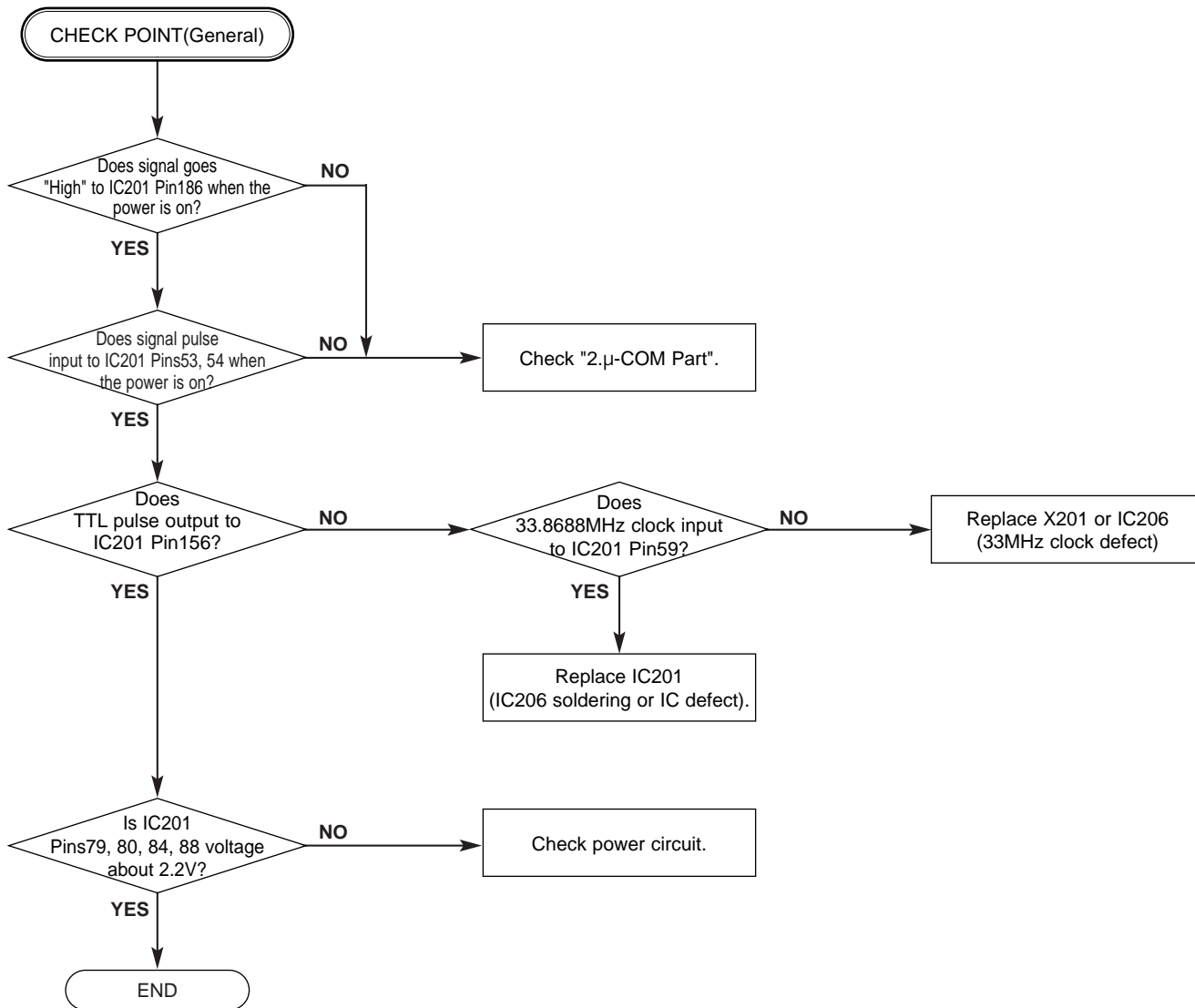


2. MPEG Circuit

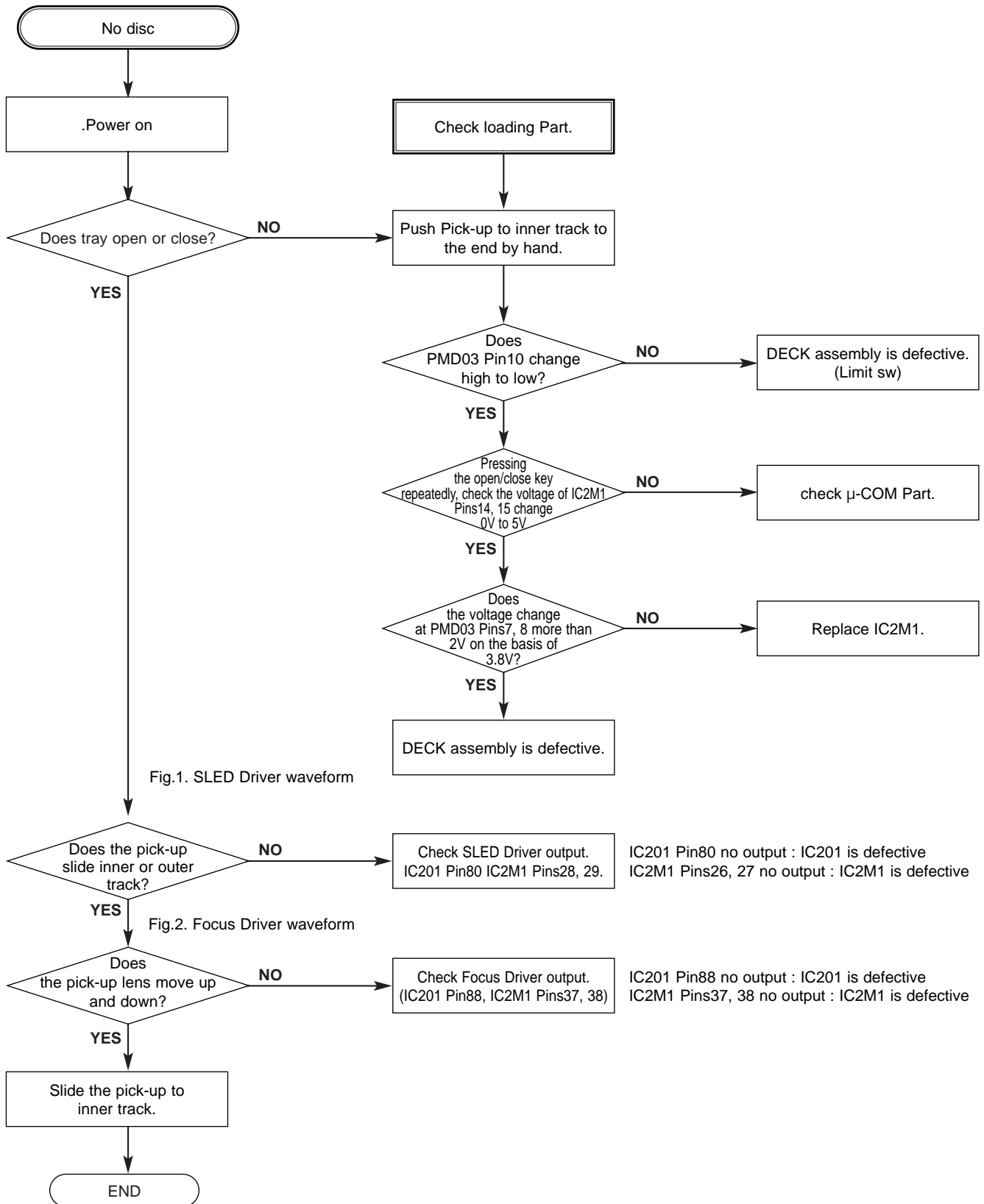


3. RF/Servo Circuit

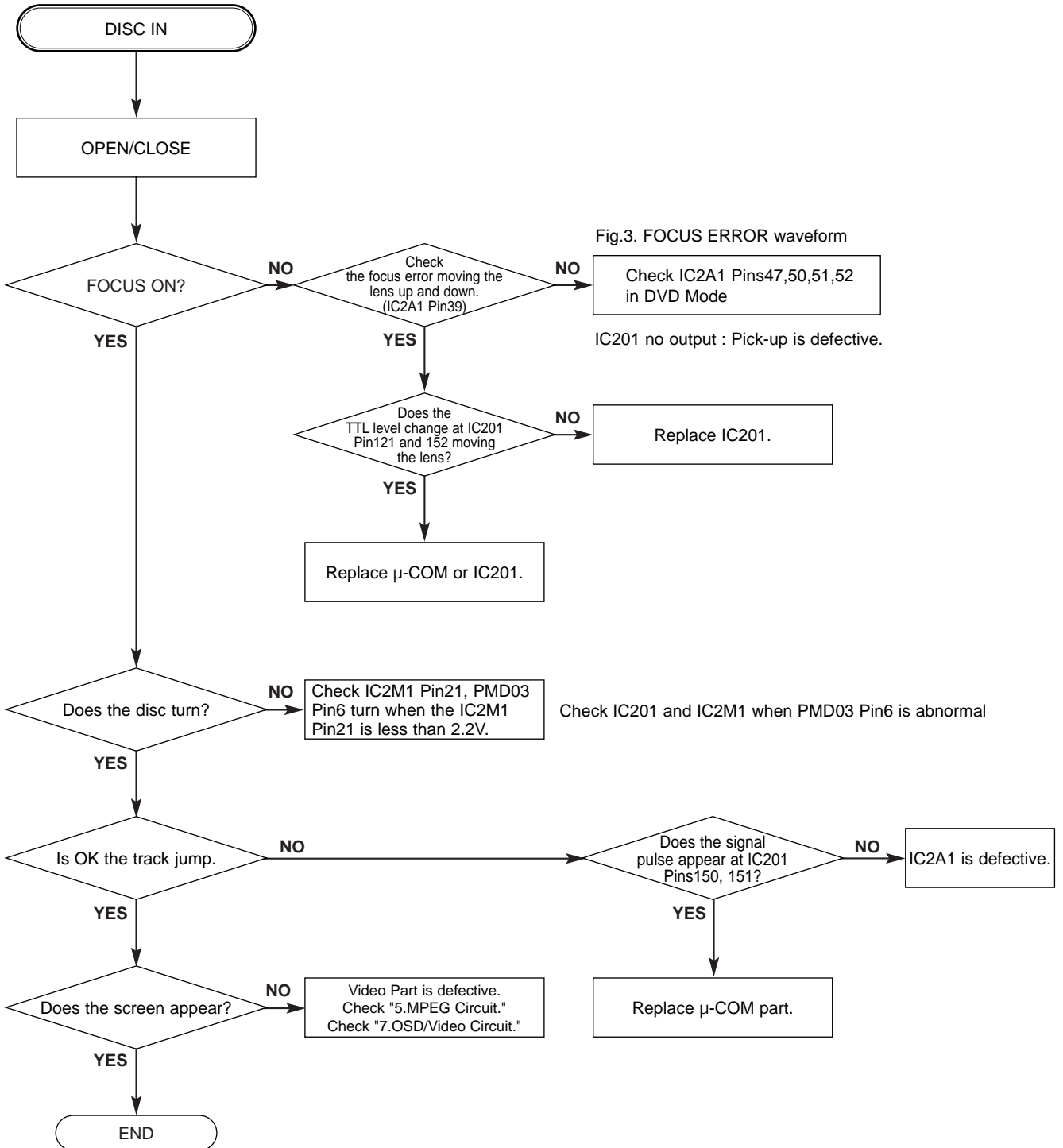
A.



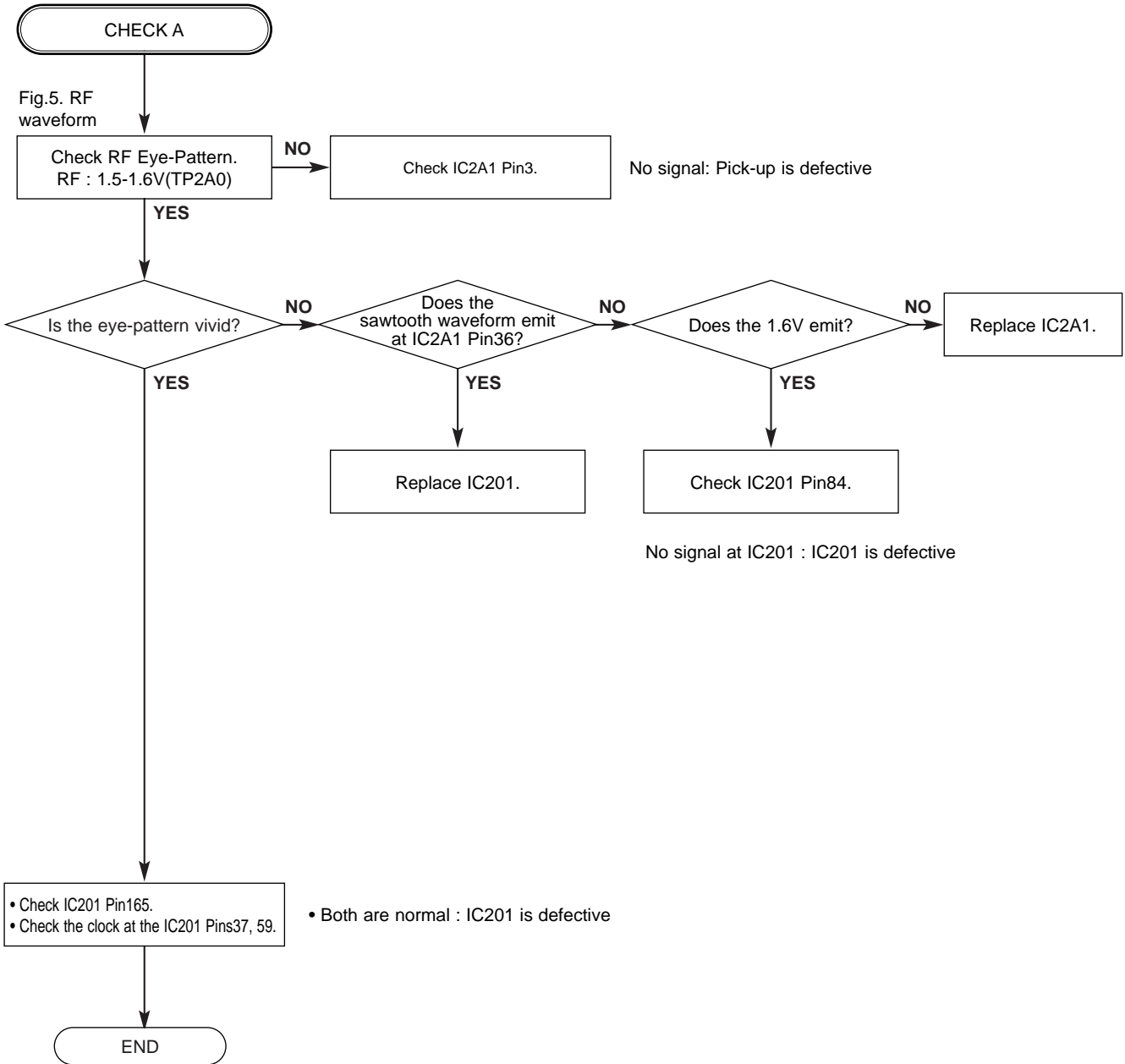
B.



C.

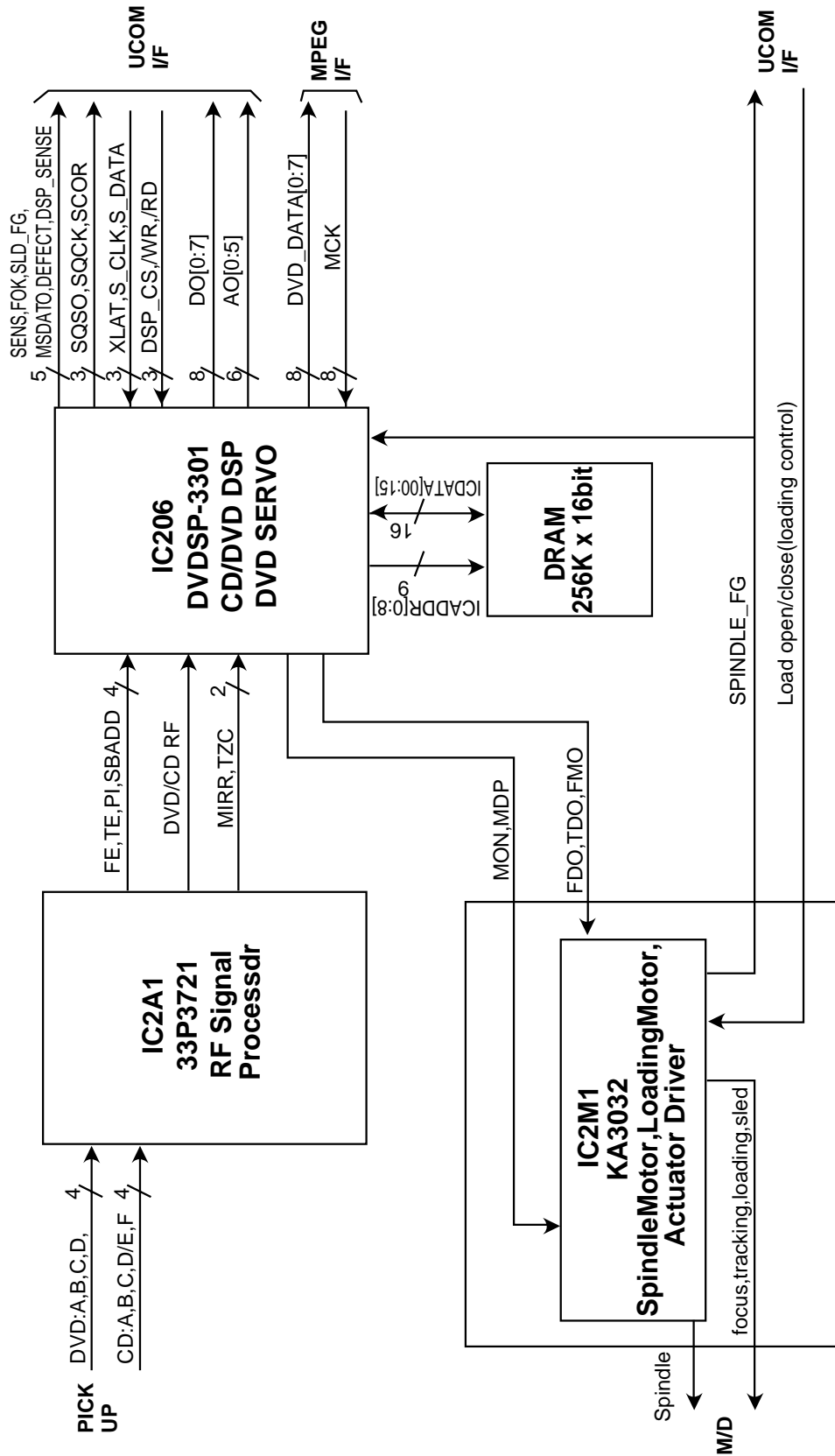


D.

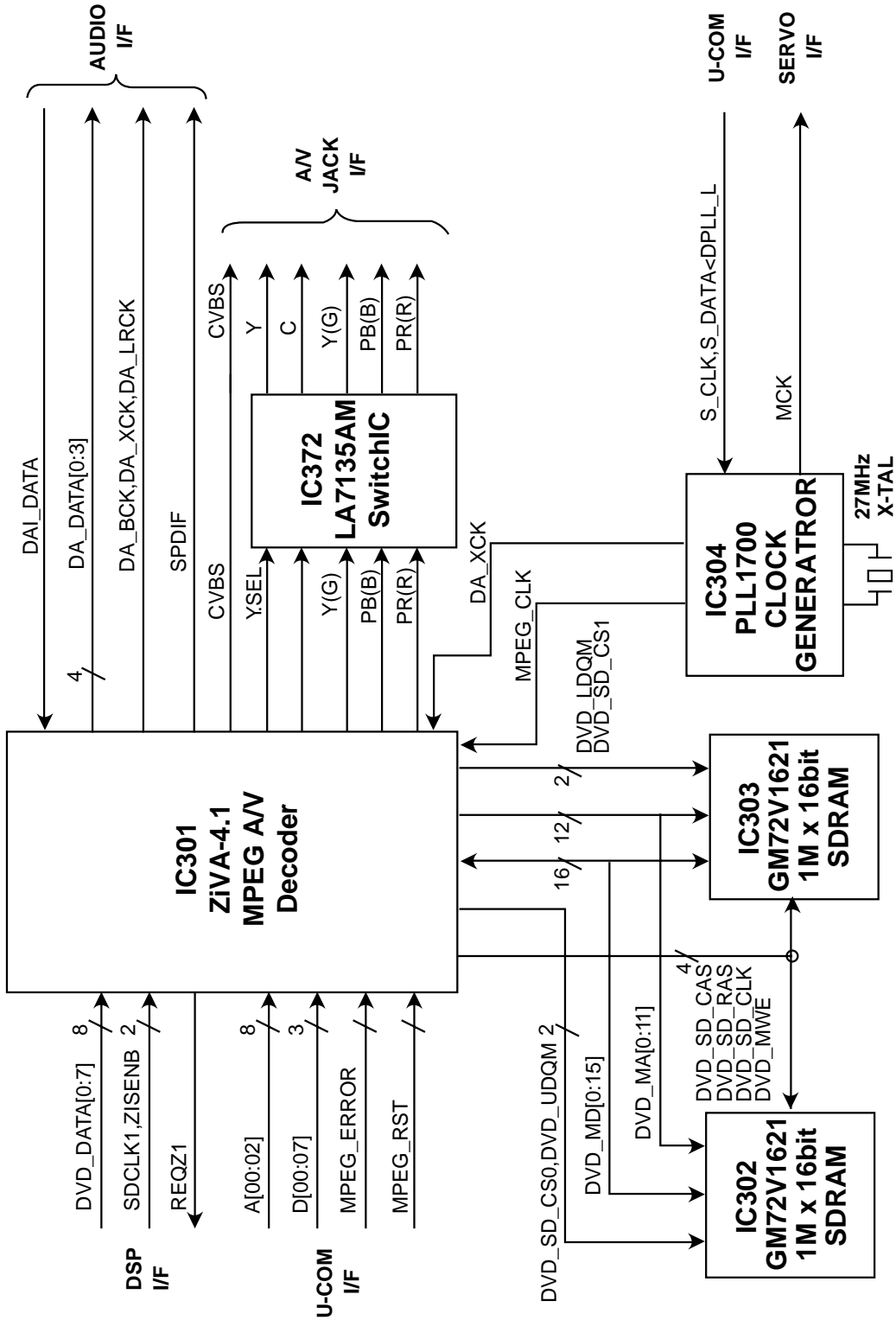


BLOCK DIAGRAMS

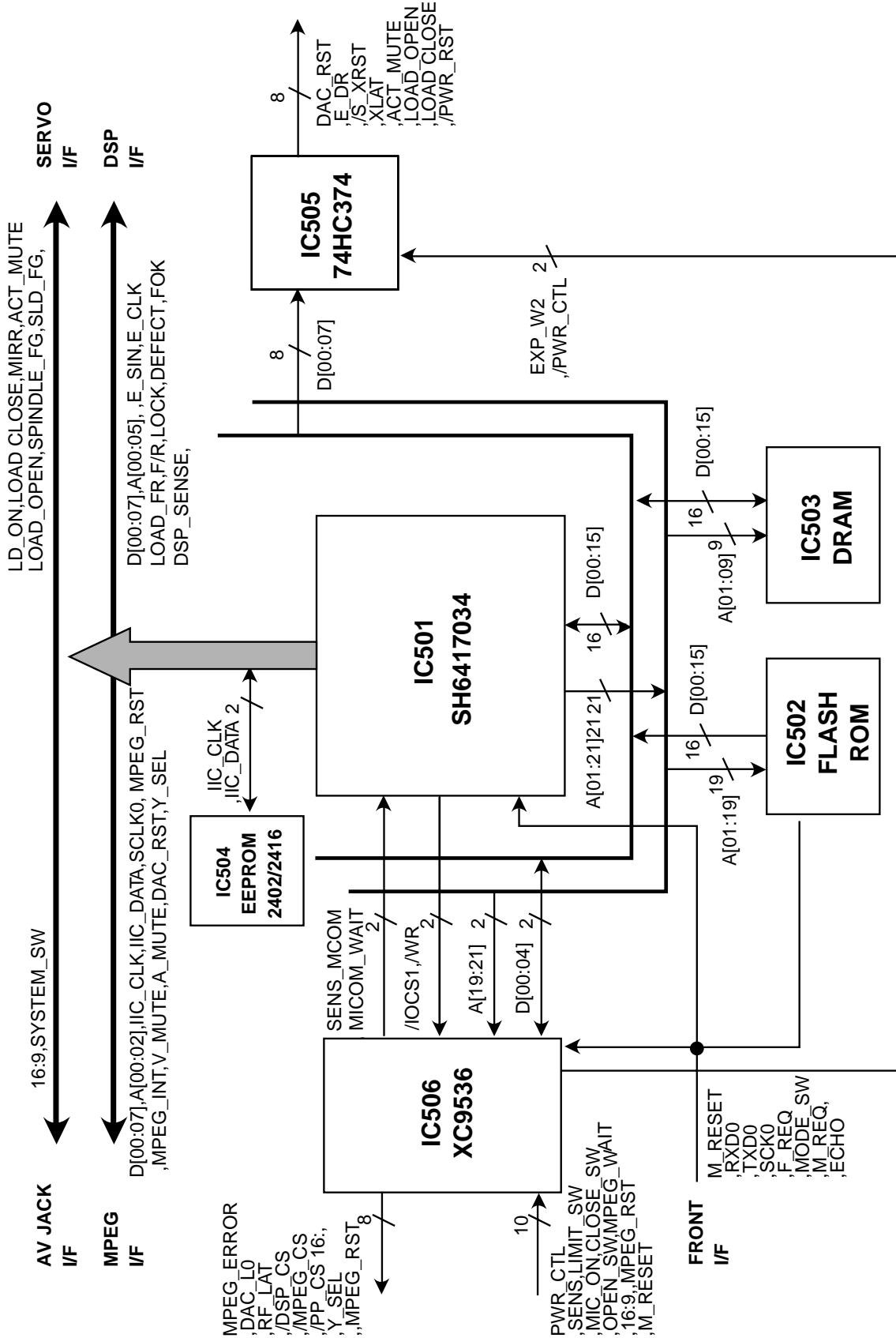
1. RF/CD DSP/DVD DSP/DVD SERVO Block Diagram



2. MPEG Block Diagram



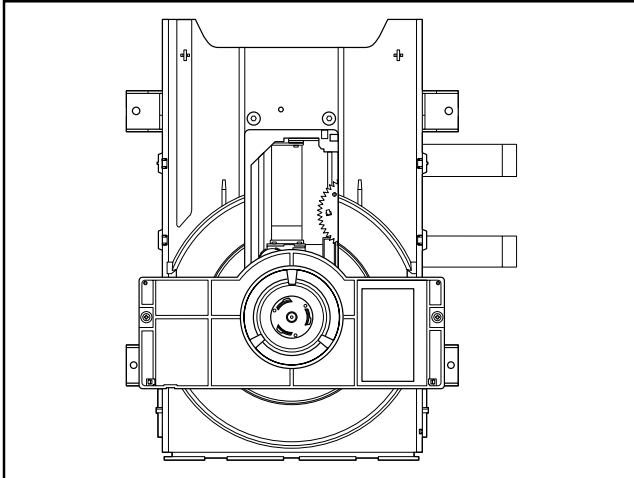
3. μ -COM Block Diagram



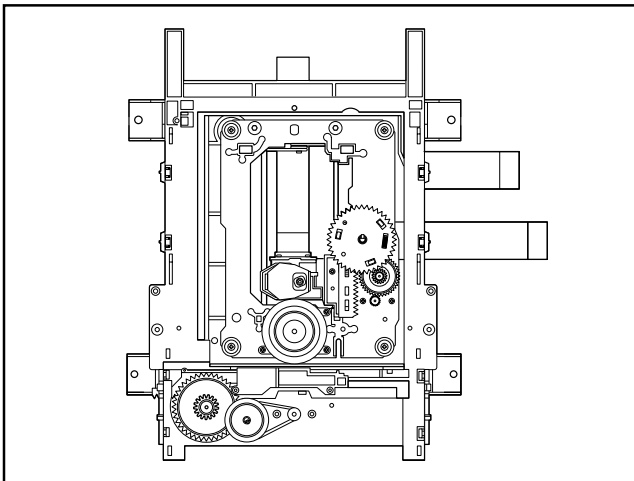
SECTION 4. MECHANISM

■ DECK MECHANISM PARTS LOCKATION

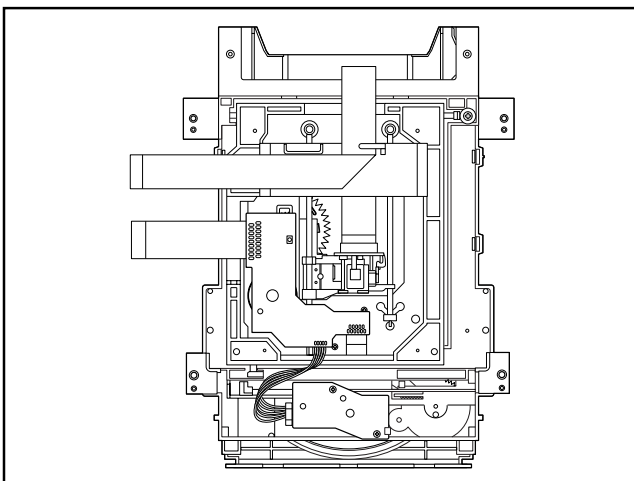
• Top View(With Tray)



• Top View(Without Tray)



• Bottom View



Procedure Starting No.	Parts	Fixing Type	Disassembly	Figure
1	2 Clamp Assembly Disc			4-1
1, 2	3 Plate Clamp			4-1
1, 2, 3	4 Magnet Clamp			4-1
1, 2, 3, 4	5 Clamp Upper			4-1
1	6 Tray Disc			4-2
1, 6	7 Base Assembly Sled			4-3
1, 2, 6	8 Gear Assembly Feed	4 Screws, 1 Connector 1 Locking Tabs		4-3
1, 2, 6, 8	9 Gear Middle			4-3
1, 2, 6, 8, 9	10 Gear Assembly Rack	1 Screw		4-3
1, 2, 7	11 Rubber Rear			4-3
1, 2, 7	12 Frame Assembly Up/Down	1 Screw	Bottom	4-4
1, 2	13 Belt Loading	1 Locking Tab		4-4
1, 2, 13	14 Gear Pulley			4-4
1, 2, 13, 14	15 Gear Loading	1 Locking Tab		4-4
1, 2, 7, 12, 13, 14	16 Guide Up/Down			4-4
1, 2, 13	17 PWB Assembly Loading	1 Locking Tab 1 Hook 2Screw	Bottom	4-4
1, 2, 7, 12, 13, 14, 15, 16, 17	18 Base Main	2 Locking Tabs		4-4

Note

When reassembling, perform the procedure in reverse order.

The "Bottom" on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

■ DECK MECHANISM DISASSEMBLY

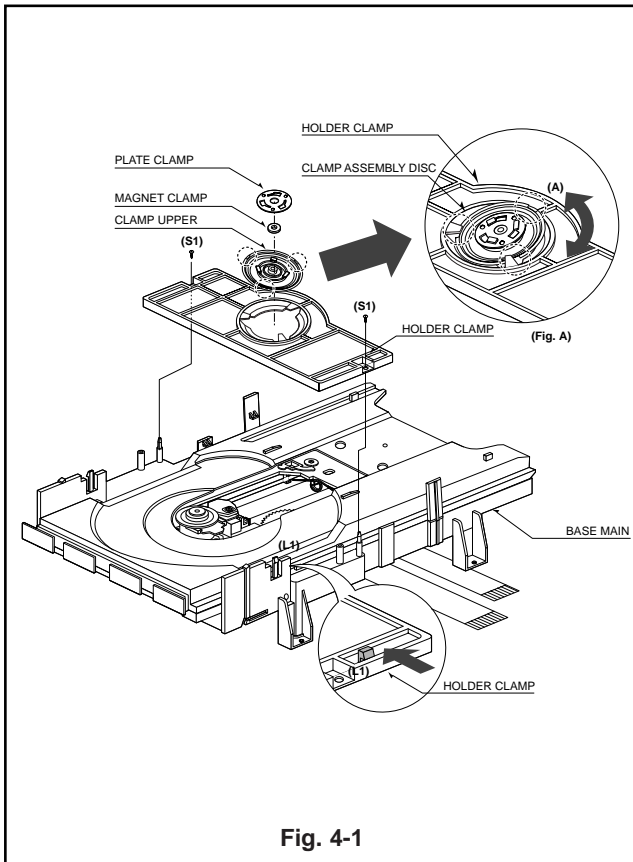


Fig. 4-1

1. Holder Clamp (Fig. 4-1)

- 1) Release 2 Screws(S1).
- 2) Unhook 2 Locking Tabs(L1).
- 3) Lift up the Holder Clamp and then separate it from the Base Main.

1-1. Clamp Assembly Disc

- 1) Place the Clamp Assembly Disc as Fig. (A)
- 2) Lift up the Clamp Assembly Disc in direction of arrow(A).
- 3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

- 1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

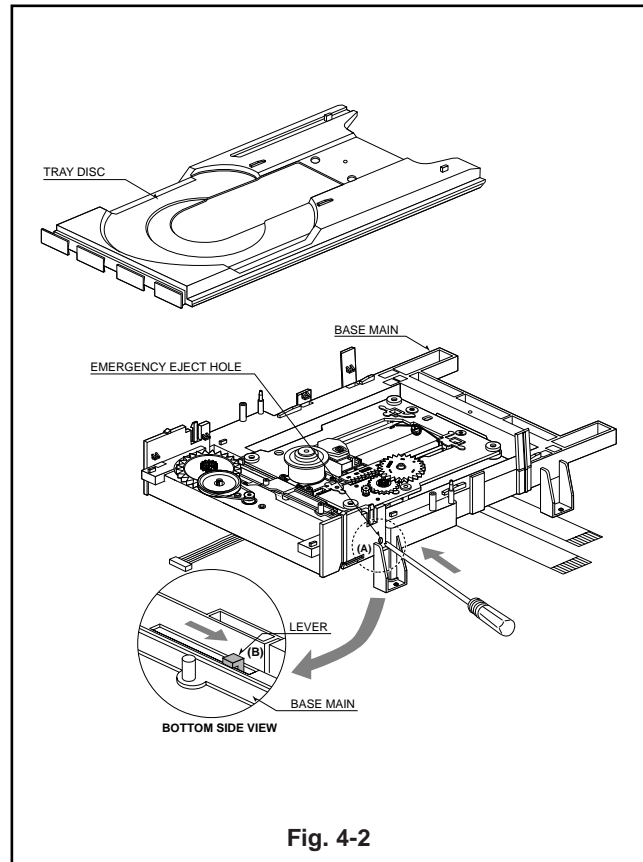


Fig. 4-2

2. Tray Disc (Fig. 4-2)

- 1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
- 2) Pull the Tray Disc until it is separated from the Base Main completely.

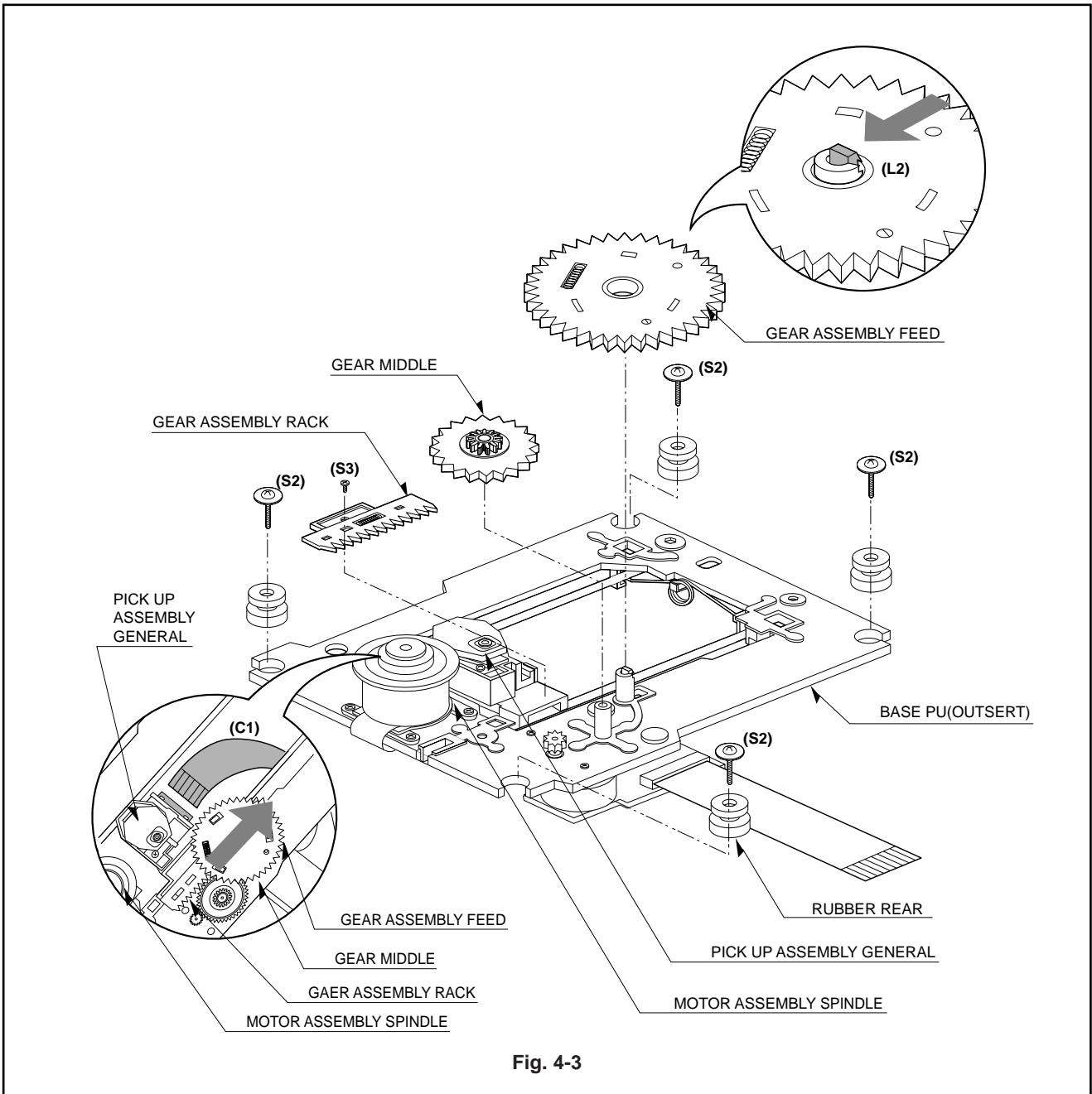


Fig. 4-3

3. Base Assembly Sled (Fig. 4-3)

- 1) Release 4 Screw(S2).
- 2) Disconnect the FFC Connector(C1)

3-1. Gear Assembly Feed

- 1) Unhook the Locking Tab(L2) in direction of arrow.

3-2. Gear Middle

3-3. Gear Assembly Rack

- 1) Release the Scerw(S3)

4. Rubber Rear (Fig. 4-3)

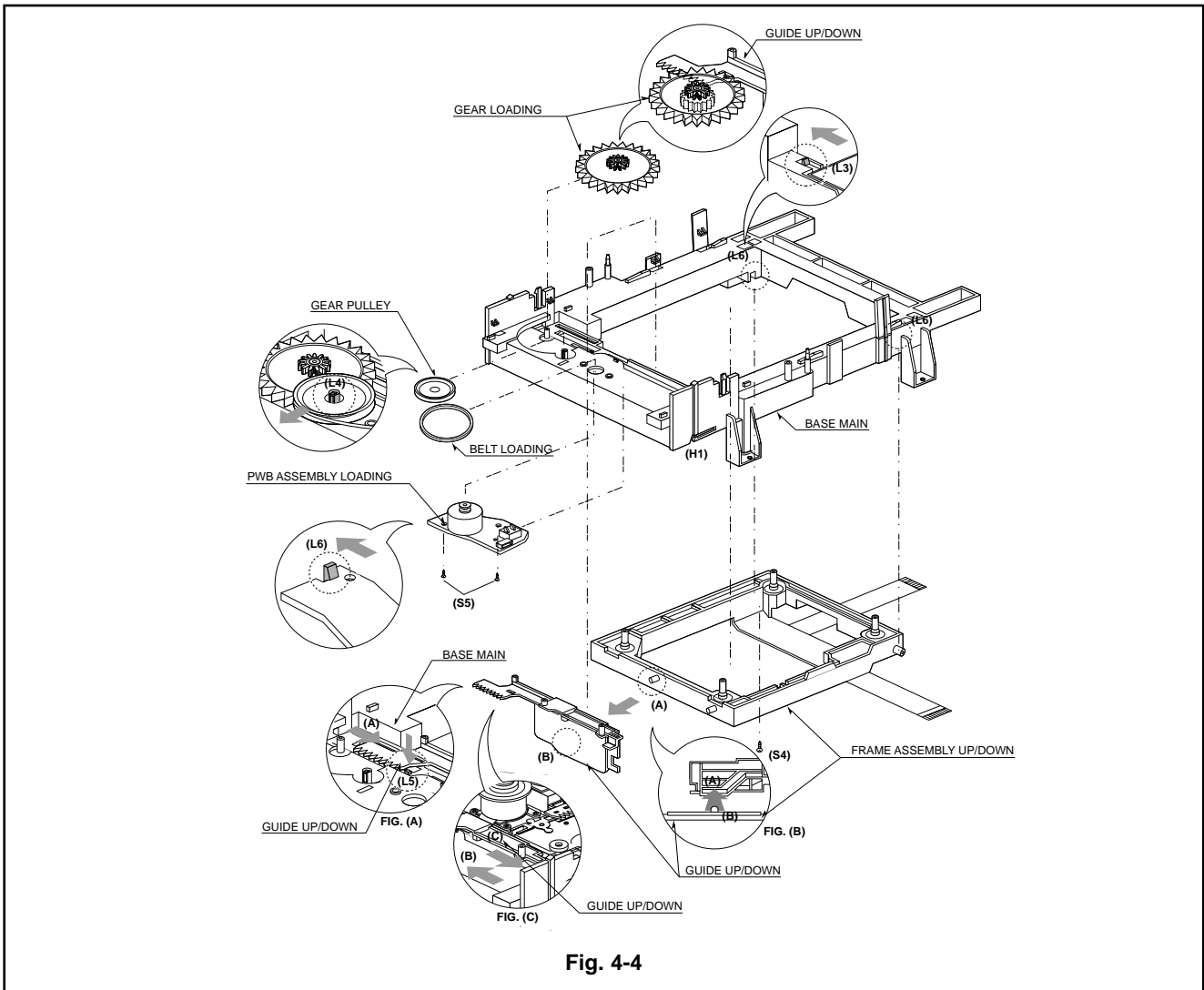


Fig. 4-4

5. Frame Assembly Up/Down

Note

Put the Base Main face down(Bottom Side)

- 1) Release the Screw(S4)
- 2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 4-4)

Note

Put the Base Assembly Main on original position(Top Side)

7. Gear pulley (Fig. 4-4)

- 1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 4-4)

9. Guide Up/Down (Fig. 4-4)

- 1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
- 2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading

Note

Put the Base Main face down(Bottom Side)

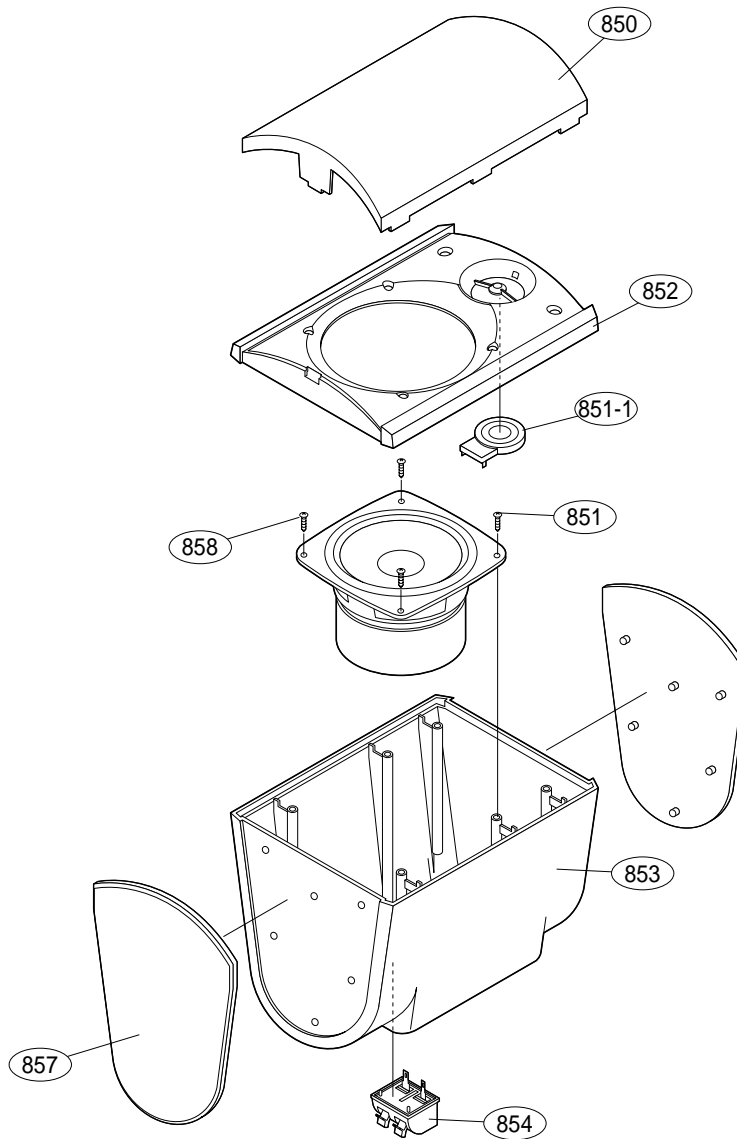
- 1) Release 2 Screws(S5)
- 2) Unhook the Loading Motor Connector (C2) from the Hook (H1) on the Base Main.
- 3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 4-4)

SECTION 6. SPEAKER PART

Satellite Speaker

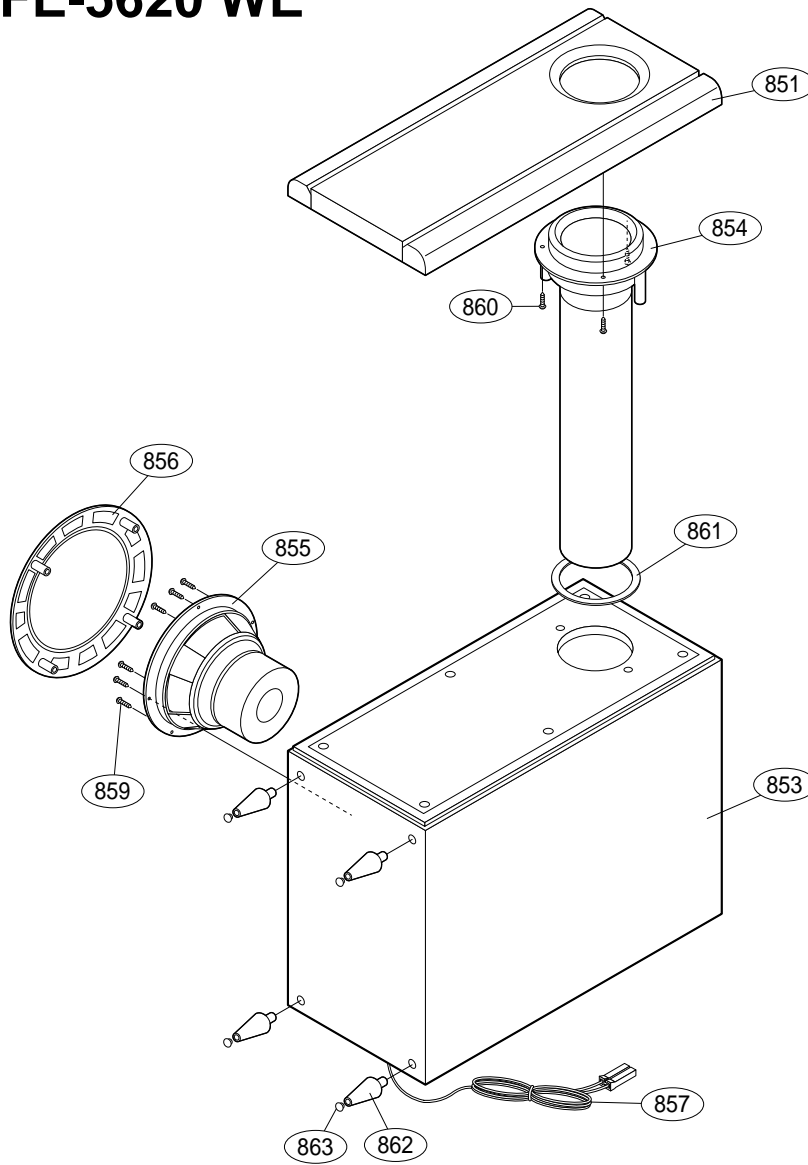
MODEL : FE-5620 TE



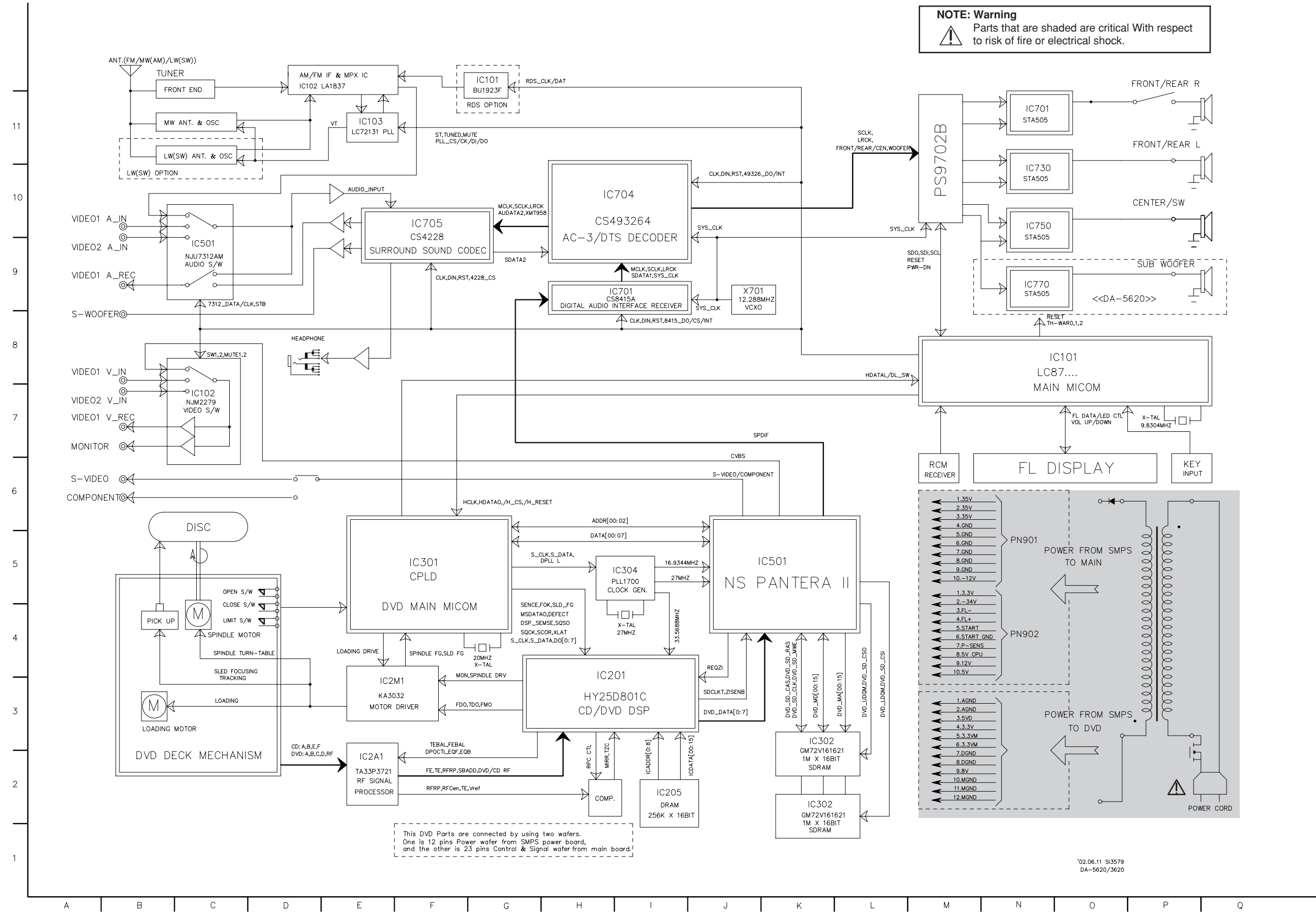
SECTION 6. SPEAKER PART

Passive (Sub) Woofer

MODEL : FE-5620 WE



□ BLOCK DIAGRAM

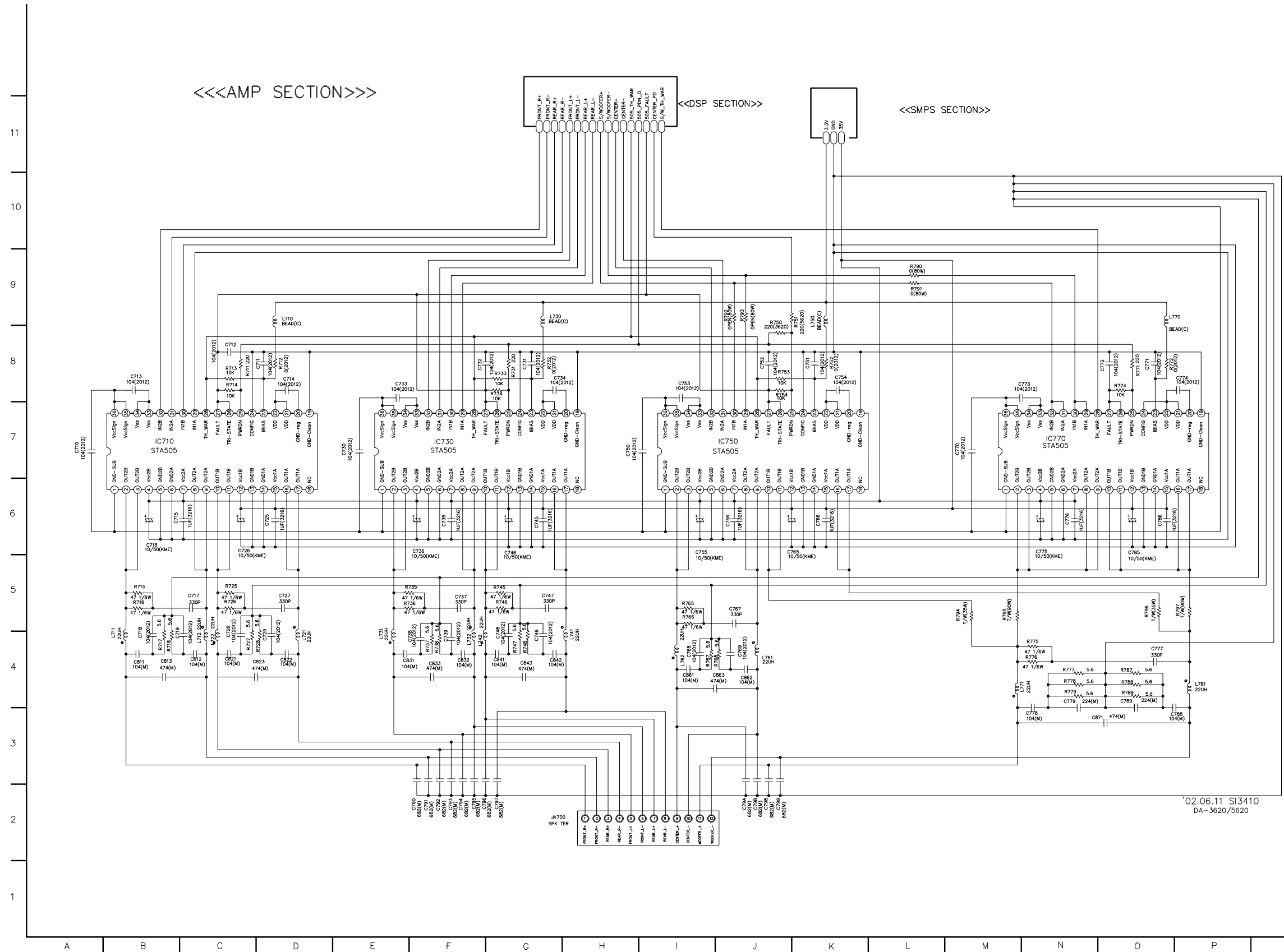


This DVD Parts are connected by using two wafers.
One is 12 pins Power wafer from SMPS power board,
and the other is 23 pins Control & Signal wafer from main board!

'02.06.11 S13579
DA-5620/3620

SHEMATIC DIAGRAMS

• AMP SCHEMATIC DIAGRAM

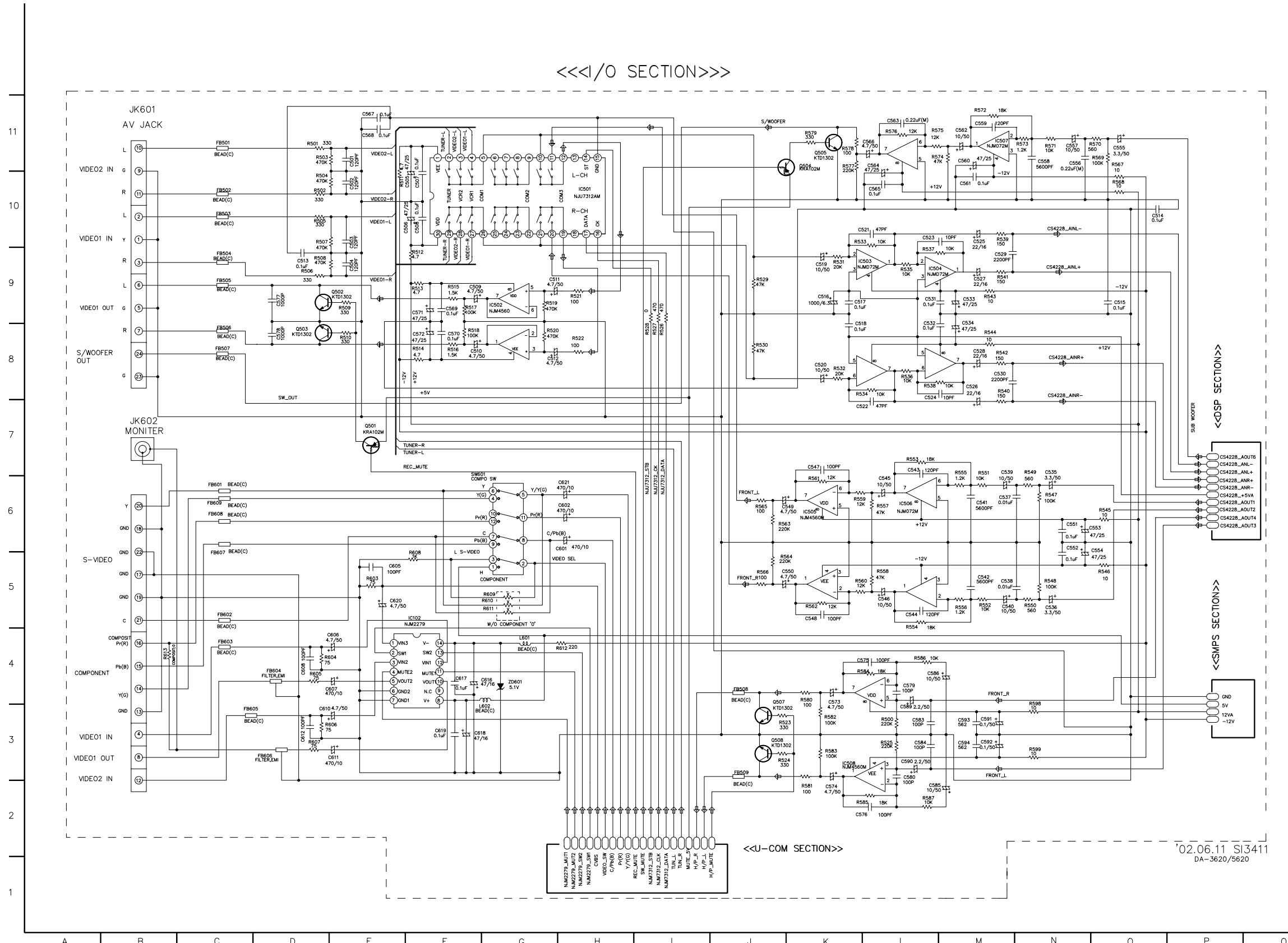


LOCATION GUIDE

C710	A7	C842	G4
C711	D8	C843	C4
C712	C8	C861	I4
C713	D8	C862	J4
C714	D8	C863	I4
C715	B6	C871	N3
C716	B6	GND	K11
C717	C5	IC710	B7
C718	B4	IC730	F7
C719	B4	IC750	J7
C725	D6	IC770	N7
C726	C6	JK700	G2
C727	D5	L710	D9
C728	C4	L711	B4
C729	D4	L712	C4
C730	E7	L721	D4
C731	G8	L722	C4
C732	F8	L730	G9
C733	E8	L731	E4
C734	G8	L732	F4
C735	F6	L741	H4
C736	F6	L742	F4
C737	F5	L750	K8
C738	F4	L761	J4
C739	F4	L762	I4
C745	G6	L770	O9
C746	G6	L771	N4
C747	G5	L781	P4
C748	G4	R711	C8
C749	G4	R712	D8
C750	H7	R713	C8
C751	K8	R714	C8
C752	J8	R715	B5
C753	I8	R716	B5
C754	K8	R717	B4
C755	I6	R718	B4
C756	J6	R725	C5
C765	J6	R726	C5
C766	K6	R727	C4
C767	I5	R728	D4
C768	I4	R731	G8
C769	J4	R732	G8
C770	M7	R733	G8
C771	O8	R734	G8
C772	O8	R735	E5
C773	M8	R736	E5
C774	P8	R737	F4
C775	N6	R738	F4
C776	N6	R745	G5
C777	O4	R746	G5
C778	N5	R747	G4
C779	N4	R748	G4
C785	O6	R750	J9
C786	O6	R751	K8
C788	O3	R752	K8
C789	O4	R753	J8
C790	F2	R754	J8
C791	F2	R765	I5
C792	F2	R766	I5
C793	F2	R767	I4
C794	F2	R768	J4
C795	F2	R771	O8
C796	G2	R772	O8
C797	G2	R774	O8
C798	J2	R775	N4
C799	J2	R776	N4
C79A	J2	R777	N4
C79B	J2	R778	N4
C811	B4	R779	N4
C812	C4	R787	O4
C813	B4	R788	O4
C821	C4	R789	O4
C822	D4	R790	L9
C823	C4	R791	L9
C831	E4	R792	J9
C832	F4	R793	J9
C833	F4	R794	M5
C841	G4	R795	M5
R797	P5	R796	O5

'02.06.11 SI3410
DA-3620/5620

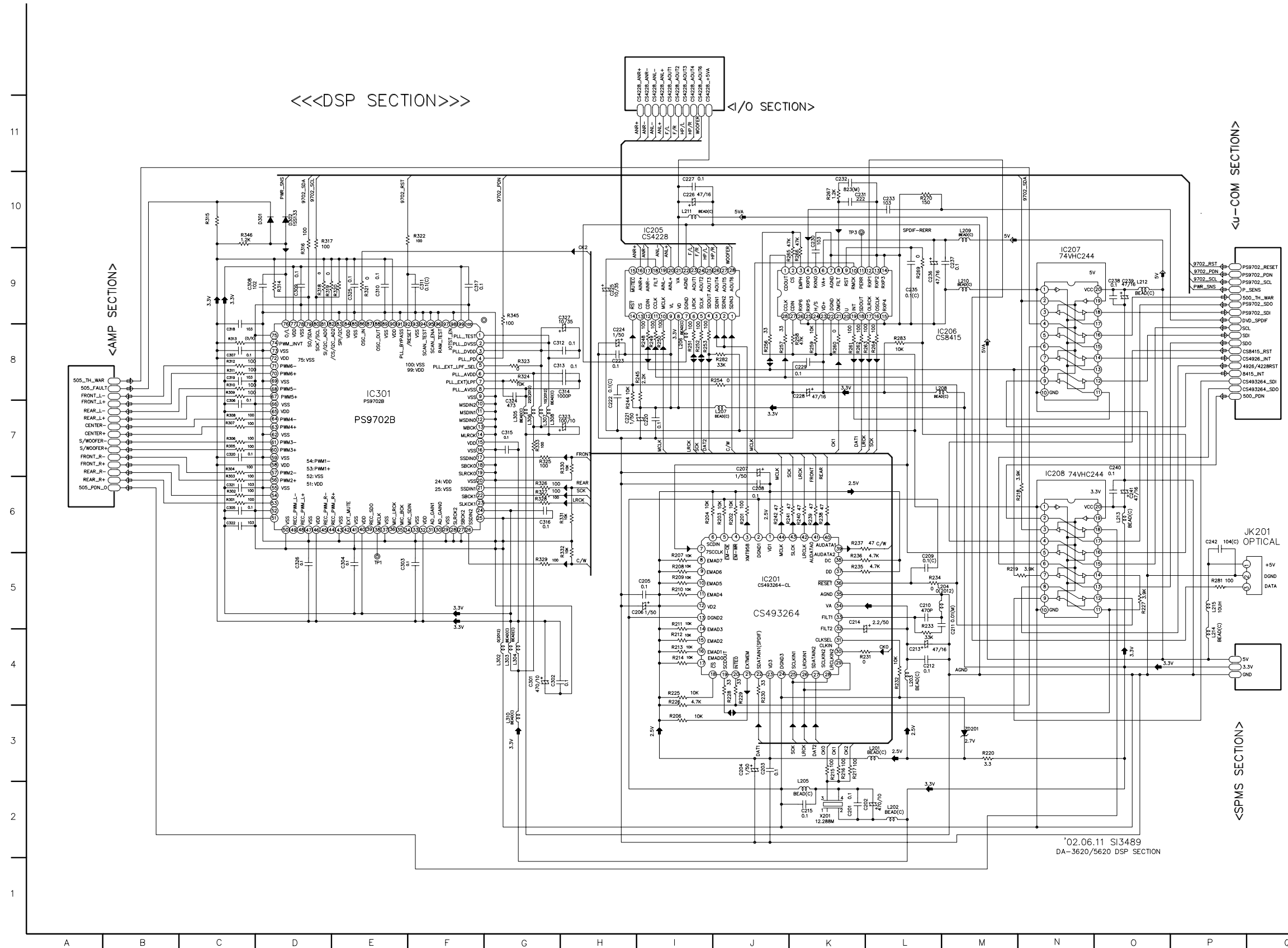
I/O SCHEMATIC DIAGRAM



LOCATION GUIDE

CS01	E11	FB502	C10	R570	O11
CS02	E10	FB503	C10	R571	N11
CS03	E9	FB504	C9	R572	M11
CS04	E9	FB505	C9	R573	N11
CS05	F10	FB506	C8	R574	L11
CS06	F10	FB507	C8	R575	L11
CS07	F10	FB508	J4	R576	L11
CS08	F10	FB509	J3	R577	K11
CS09	F9	FB601	C6	R578	K11
CS10	F8	FB602	C5	R579	K11
CS11	G9	FB603	C4	R580	K4
CS12	G8	FB604	D4	R581	K2
CS13	D9	FB605	C3	R582	K3
CS14	O10	FB606	D3	R583	K3
CS15	O9	FB607	C5	R584	K4
CS16	K9	FB608	C6	R585	K2
CS17	K9	FB609	C6	R586	K4
CS18	K8	IC501	H10	R587	L2
CS19	K9	IC502	G9	R588	N3
CS20	K8	IC503	L9	R589	N3
CS21	L10	IC504	L9	R603	E5
CS22	K7	IC505	K6	R604	D4
CS23	L10	IC506	L6	R605	D4
CS24	L8	IC507	M11	R606	E3
CS25	M10	IC508	K3	R607	D3
CS26	M8	JK601	B11	R608	F5
CS27	M9	JK602	B7	R609	G5
CS28	M8	L601	G4	R610	G5
CS29	M9	L602	G3	R611	G5
CS30	M8	Q501	E7	R612	H4
CS31	L9	Q502	D9	R613	B4
CS32	L8	O503	D8	R614	F7
CS33	M9	Q504	K11	ZD601	G4
CS34	M8	Q505	K11		
CS35	N7	Q507	J4		
CS36	N5	Q508	J3		
CS37	M6	R500	L3		
CS38	M5	R501	D11		
CS39	M7	R502	D10		
CS40	M5	R503	D11		
CS41	M6	R504	D10		
CS42	M5	R505	D10		
CS43	L7	R506	D9		
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CS46	L5	R509	E9		
CS47	K7	R510	E8		
CS48	K5	R511	F9		
CS49	K6	R512	F9		
CS50	K5	R513	F9		
CS51	N6	R514	F8		
CS52	N6	R515	F8		
CS53	O6	R516	F8		
CS54	O6	R517	F9		
CS55	O11	R518	F8		
CS56	N11	R519	G9		
CS57	N11	R520	G8		
CS58	N11	R521	H9		
CS59	M11	R522	H8		
CS60	M11	R523	J3		
CS61	M10	R524	J3		
CS62	M11	R525	L3		
CS63	L11	R526	I8		
CS64	L11	R527	I8		
CS65	L10	R528	I8		
CS66	L11	R529	J9		
CS67	E11	R530	I8		
CS68	E11	R531	K9		
CS69	F9	R532	K8		
CS70	F8	R533	K10		
CS71	F9	R534	K8		
CS72	F8	R535	L9		
CS73	K4	R536	L8		
CS74	K2	R537	L8		
CS75	K4	R538	L9		
CS76	K2	R539	M10		
CS77	D9	R540	M8		
CS78	D8	R541	M9		
CS79	L4	R542	M8		
CS80	L3	R543	M9		
CS81	L3	R544	M8		
CS82	L3	R545	O6		
CS83	L2	R546	O5		
CS84	L4	R547	N5		
CS85	L3	R548	N5		
CS86	L3	R549	N7		
CS87	M3	R550	N5		
CS88	M3	R551	M7		
CS89	M3	R552	M5		
CS90	M3	R553	L7		
CS91	H6	R554	L4		
CS92	H6	R555	M7		
CS93	E5	R556	M5		
CS94	E4	R557	L6		
CS95	E4	R558	L5		
CS96	D4	R559	K6		
CS97	D3	R560	K5		
CS98	E5	R561	O11		
CS99	E5	R562	O11		
CS100	E5	R563	O11		
CS101	E5	R564	O11		
CS102	E5	R565	O11		
CS103	E5	R566	O11		
CS104	E5	R567	O11		
CS105	E5	R568	O11		
CS106	E5	R569	O11		

• DSP(DIGITAL AUDIO PROCESSING) SCHEMATIC DIAGRAM

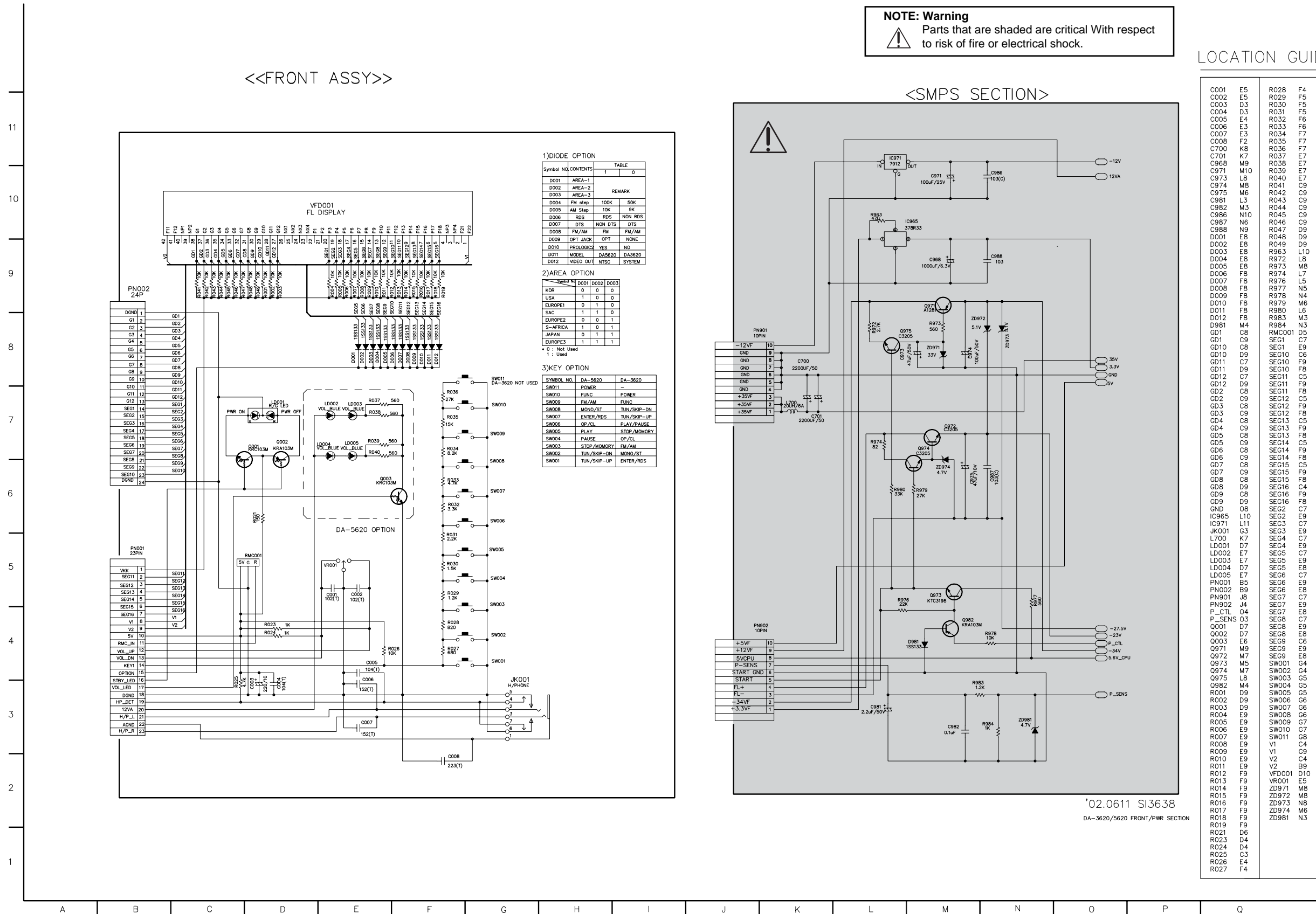


LOCATION GUIDE

C201	K2	R201	J6
C202	L2	R202	J6
C203	J3	R203	J6
C204	J3	R204	J6
C205	I5	R205	I3
C206	H5	R206	I5
C207	J7	R207	I5
C208	J6	R208	I5
C209	L5	R209	I5
C210	L5	R210	I5
C211	M4	R211	I5
C212	L4	R212	I4
C213	L4	R213	I4
C214	K5	R214	I4
C215	K2	R215	K3
C216	K2	R216	K3
C217	K7	R217	K3
C218	H7	R218	M5
C219	H7	R219	M5
C220	H8	R220	M3
C221	H8	R221	M3
C222	H8	R222	M3
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C316	H8	R316	M3
C317	H8	R317	M3
C318	H8	R318	M3
C319	H8	R319	M3
C320	H8	R320	M3
C321	H8	R321	M3
C322	H8	R322	M3
C323	H8	R323	M3
C324	H8	R324	M3
C325	H8	R325	M3
C326	H8	R326	M3
C327	H8	R327	M3
C328	H8	R328	M3
C329	H8	R329	M3
C330	H8	R330	M3
C331	H8	R331	M3
C332	H8	R332	M3
C333	H8	R333	M3
C334	H8	R334	M3
C335	H8	R335	M3
C336	H8	R336	M3
C337	H8	R337	M3
C338	H8	R338	M3
C339	H8	R339	M3
C340	H8	R340	M3
C341	H8	R341	M3
C342	H8	R342	M3
C343	H8	R343	M3
C344	H8	R344	M3
C345	H8	R345	M3
C346	H8	R346	M3
C347	H8	R347	M3
C348	H8	R348	M3
C349	H8	R349	M3
C350	H8	R350	M3
C351	H8	R351	M3
C352	H8	R352	M3
C353	H8	R353	M3
C354	H8	R354	M3
C355	H8	R355	M3
C356	H8	R356	M3
C357	H8	R357	M3
C358	H8	R358	M3
C359	H8	R359	M3
C360	H8	R360	M3
C361	H8	R361	M3
C362	H8	R362	M3
C363	H8	R363	M3
C364	H8	R364	M3
C365	H8	R365	M3
C366	H8	R366	M3
C367	H8	R367	M3
C368	H8	R368	M3
C369	H8	R369	M3
C370	H8	R370	M3
C371	H8	R371	M3
C372	H8	R372	M3
C373	H8	R373	M3
C374	H8	R374	M3
C375	H8	R375	M3
C376	H8	R376	M3
C377	H8	R377	M3
C378	H8	R378	M3
C379	H8	R379	M3
C380	H8	R380	M3
C381	H8	R381	M3
C382	H8	R382	M3
C383	H8	R383	M3
C384	H8	R384	M3
C385	H8	R385	M3
C386	H8	R386	M3
C387	H8	R387	M3
C388	H8	R388	M3
C389	H8	R389	M3
C390	H8	R390	M3
C391	H8	R391	M3
C392	H8	R392	M3
C393	H8	R393	M3
C394	H8	R394	M3
C395	H8	R395	M3
C396	H8	R396	M3
C397	H8	R397	M3
C398	H8	R398	M3
C399	H8	R399	M3
C400	H8	R400	M3

'02.06.11 SI3489
DA-3620/5620 DSP SECTION


• FRONT & POWER SCHEMATIC DIAGRAM



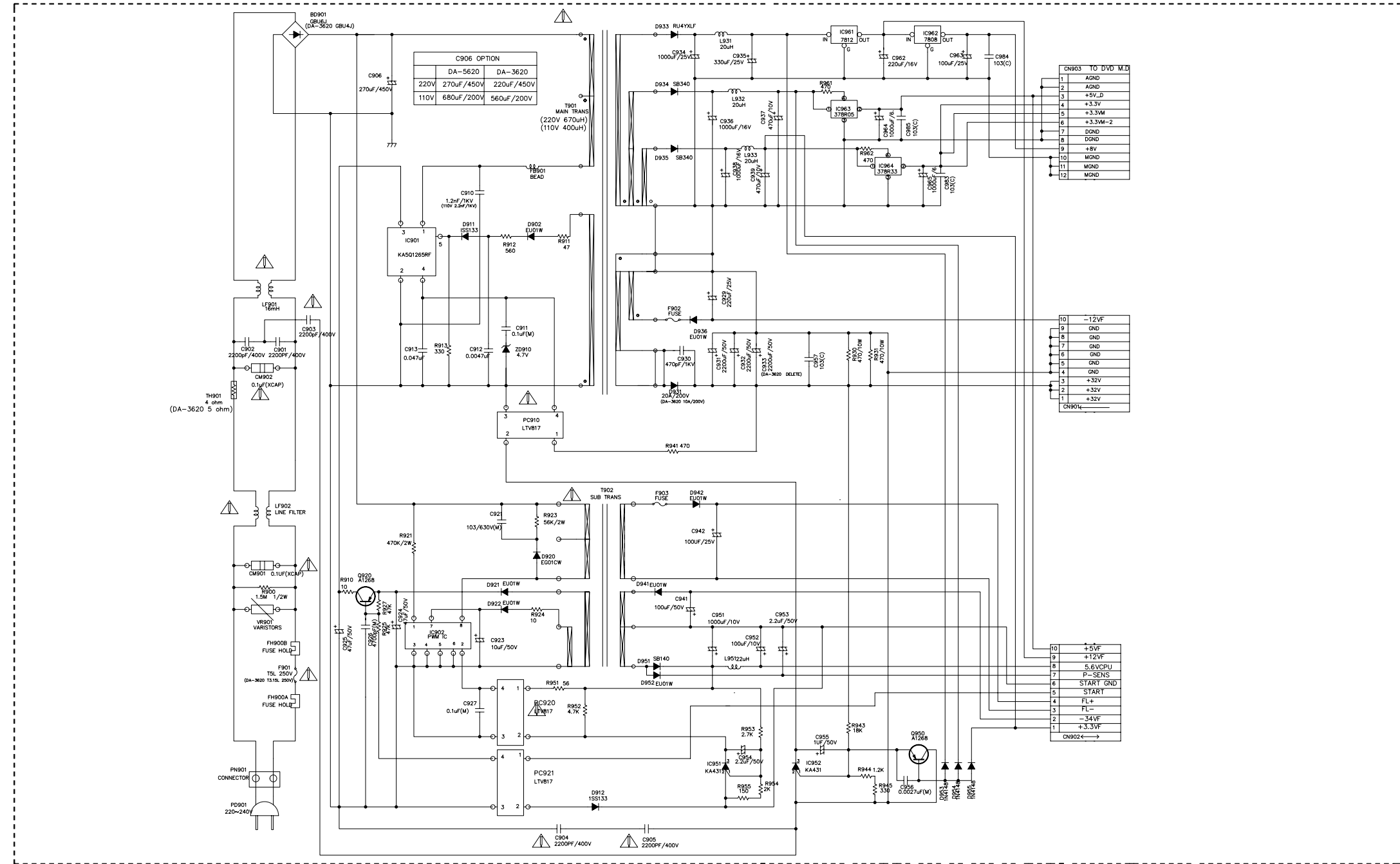
LOCATION GUIDE

C001	E5	R028	F4
C002	E5	R029	F5
C003	D3	R030	F5
C004	D3	R031	F5
C005	E4	R032	F6
C006	E3	R033	F6
C007	E3	R034	F7
C008	F2	R035	F7
C700	K8	R036	F7
C701	K7	R037	E7
C968	M9	R038	E7
C971	M10	R039	E7
C973	L8	R040	E7
C974	M8	R041	C9
C975	M6	R042	C9
C981	L3	R043	C9
C982	M3	R044	C9
C986	N10	R045	C9
C987	N6	R046	C9
C988	N9	R047	D9
D001	E8	R048	D9
D002	E8	R049	D9
D003	E8	R050	L10
D004	E8	R972	L8
D005	E8	R973	M8
D006	F8	R974	L7
D007	F8	R976	L5
D008	F8	R977	N5
D009	F8	R978	N4
D010	F8	R979	M6
D011	F8	R980	L6
D012	F8	R983	M3
D981	M4	R984	N3
GD1	C8	RMCO01	D5
GD10	C8	SEG1	C7
GD10	D9	SEG1	E9
GD10	D9	SEG10	C6
GD11	C7	SEG10	F9
GD11	D9	SEG10	F8
GD12	C7	SEG11	C5
GD12	D9	SEG11	F9
GD2	C8	SEG11	F8
GD2	C9	SEG12	C5
GD3	C8	SEG12	F9
GD3	C9	SEG12	F8
GD4	C8	SEG13	C5
GD4	C9	SEG13	F9
GD5	C8	SEG13	F8
GD5	C9	SEG14	C5
GD6	C8	SEG14	F9
GD6	C9	SEG14	F8
GD7	C8	SEG15	C5
GD7	C9	SEG15	F9
GD8	D9	SEG16	C4
GD9	C8	SEG16	F9
GD9	D9	SEG16	F8
GND	OB	SEG2	C7
IC965	L10	SEG2	E9
IC971	L11	SEG3	C7
JK001	G3	SEG3	E9
L700	K7	SEG4	C7
LD001	D7	SEG4	E9
LD002	E7	SEG5	C7
LD003	E7	SEG5	E9
LD004	D7	SEG5	E8
LD005	D7	SEG6	C7
PN001	B5	SEG6	E9
PN002	B9	SEG6	E8
PN901	J8	SEG7	C7
PN902	J4	SEG7	E9
P_CTL	O4	SEG7	E8
P_SENS	O3	SEG8	C7
Q001	D7	SEG8	E9
Q002	D7	SEG8	E8
Q003	E6	SEG9	C6
Q971	M9	SEG9	E9
Q972	M7	SEG9	E8
Q973	M5	SW001	G4
Q974	M7	SW002	G4
Q975	L8	SW003	G5
Q982	M4	SW004	G5
R001	D9	SW005	G5
R002	D9	SW006	G6
R003	D9	SW007	G6
R004	D9	SW008	G6
R005	E9	SW009	G7
R006	E9	SW010	G7
R007	E9	SW011	G8
R008	E9	V1	C4
R009	E9	V1	G9
R010	E9	V2	C4
R011	E9	V2	B9
R012	F9	VFD001	D10
R013	F9	VR001	E5
R014	F9	ZD971	M8
R015	F9	ZD972	M8
R016	F9	ZD973	N8
R017	F9	ZD974	M6
R018	F9	ZD981	N3
R019	F9		
R021	D6		
R023	D4		
R024	D4		
R025	C3		
R026	E4		
R027	F4		

• SMPS SCHEMATIC DIAGRAM

NOTE: Warning
 Parts that are shaded are critical With respect to risk of fire or electrical shock.

11
10
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C906 OPTION		
DA-5620	DA-3620	
220V	270uF/450V	220uF/450V
110V	680uF/200V	560uF/200V

LOCATION GUIDE

BD901	D11	D942	I6
C901	D8	D951	H4
C902	D8	D952	H4
C903	D8	D953	L2
C904	G2	D954	L2
C905	H2	D955	L2
C906	E11	F901	D4
C910	F9	F902	I8
C911	G8	F903	H6
C912	F8	F9001	C10
C913	F8	FH900A	D4
C921	G6	FH900B	D4
C923	G4	IC901	F9
C924	F5	IC902	F4
C925	E4	IC951	I3
C926	E4	IC952	J3
C927	F4	IC961	K11
C929	I8	IC962	K11
C930	I7	IC963	J10
C931	I7	IC964	K10
C932	I7	L931	I11
C933	J7	L932	I10
C934	I11	L933	I10
C935	I11	L951	I4
C936	I10	LF901	D8
C937	J10	LF902	D6
C938	I10	PC910	G7
C939	J10	PC920	G4
C941	I5	PC921	G3
C942	I6	PD901	D2
C951	I5	PN901	D3
C952	I4	Q920	E5
C953	J5	Q950	K3
C954	I3	R900	D5
C955	J3	R910	E5
C956	K3	R911	G9
C957	J7	R912	G9
C962	K11	R913	F8
C963	L11	R921	E5
C964	K10	R923	G6
C965	L9	R924	G5
C983	L9	R925	E4
C984	L11	R927	E5
C985	K10	R930	K7
CM901	D5	R931	K7
CM902	D7	R941	I6
CN901	M7	R943	K3
CN902	M3	R944	K3
CN903	M11	R945	K3
D902	G9	R951	G4
D911	F9	R952	G4
D912	H3	R953	I3
D920	G5	R954	J3
D921	F5	R955	I3
D922	F5	R961	J11
D931	I7	R962	K10
D933	H11	T901	G10
D934	H11	T902	H6
D935	H10	TH901	C7
D936	I8	VR901	D4
D941	H5	ZD910	G8

CN903 TO DVD M.I	
1	AGND
2	AGND
3	+5V_D
4	+3.3V
5	+3.3V
6	+3.3V-2
7	DND
8	DND
9	+8V
10	MGN
11	MGN
12	MGN

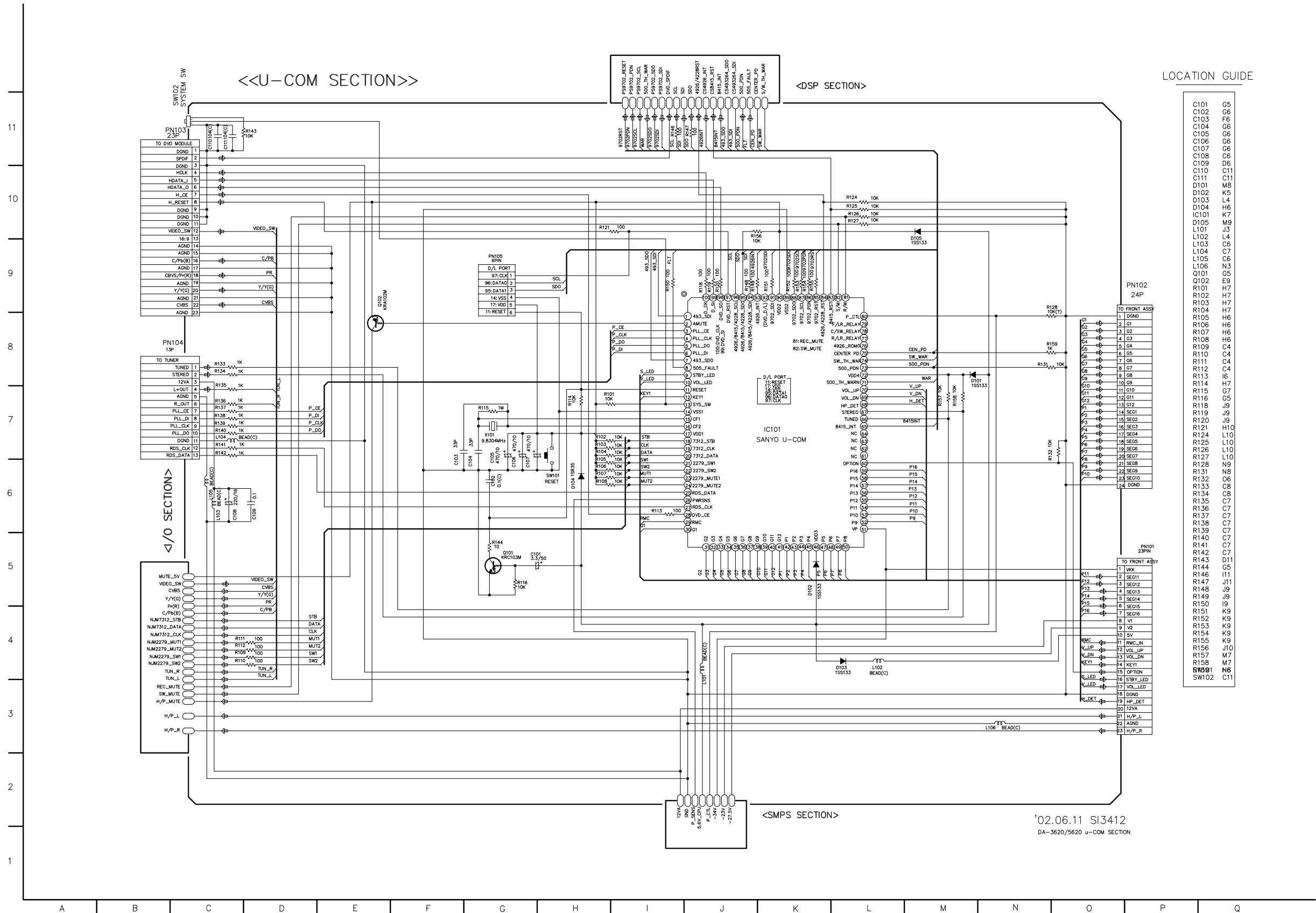
10	-12V
9	GND
8	GND
7	GND
6	GND
5	GND
4	GND
3	GND
2	+32V
1	+32V

10	+5V
9	+12V
8	5.6V_CPU
7	P-SENS
6	START_GND
5	START
4	FL+
3	FL-
2	-34V
1	+3.3V

'02.06.11 SI3545
DA-5620/3620

A B C D E F G H I J K L M N O P Q

• μ-COM SCHEMATIC DIAGRAM



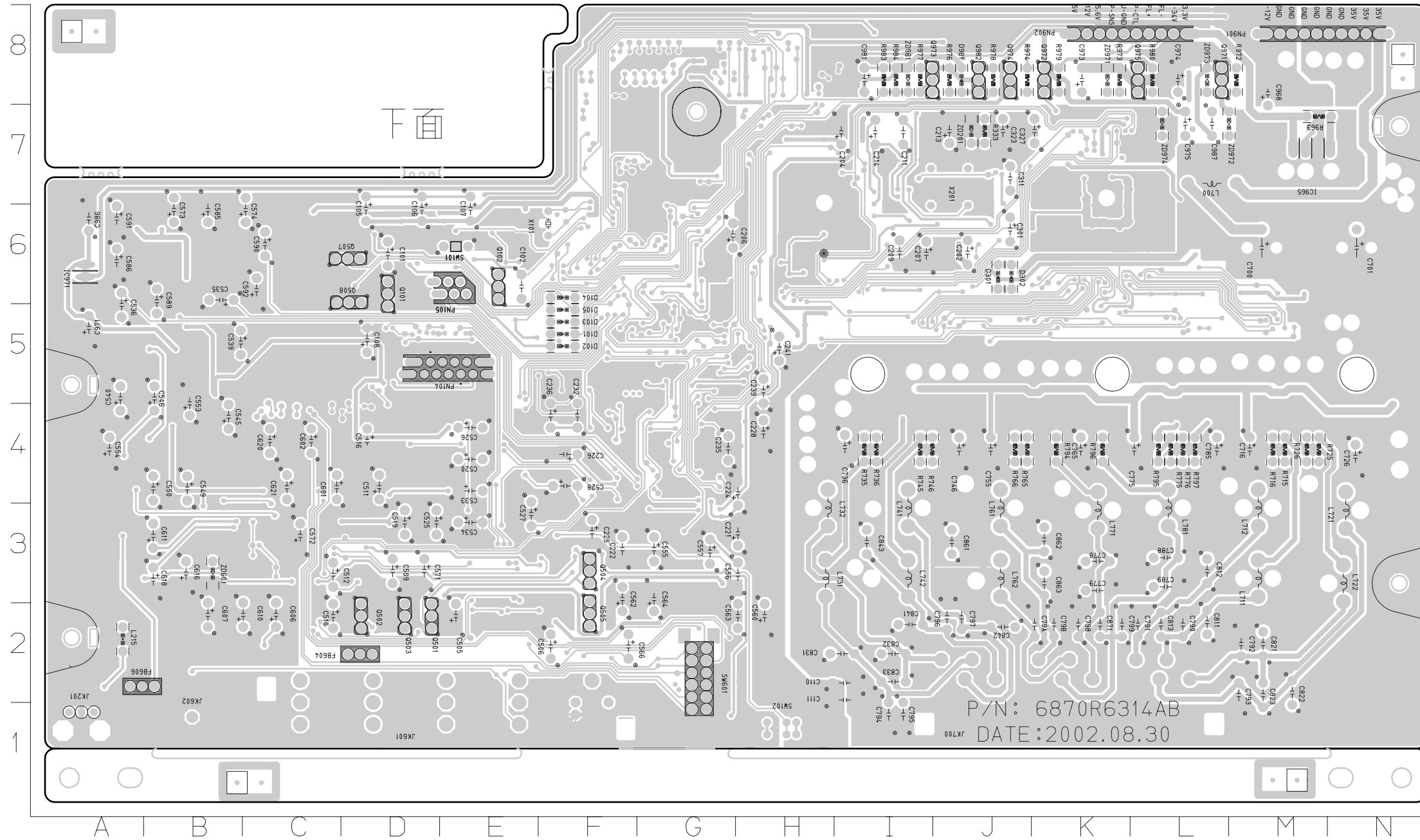
LOCATION GUIDE

C101	G5
C102	G6
C103	F6
C104	G6
C105	G6
C106	G6
C107	G6
C108	C6
C109	D6
C110	C11
C111	C11
D101	M8
D102	K5
D103	L4
D104	H6
IC101	K7
D105	M9
L101	J3
L102	L4
L103	C6
L104	C7
L105	C6
L106	N3
Q101	G5
Q102	E9
R101	H7
R102	H7
R103	H7
R104	H7
R105	H6
R106	H6
R107	H6
R108	H6
R109	C4
R110	C4
R111	C4
R112	C4
R113	I6
R114	H7
R115	G7
R116	G5
R117	G5
R118	J9
R119	J9
R120	J9
R121	H10
R122	L10
R123	L10
R124	L10
R125	L10
R126	L10
R127	L10
R128	N9
R129	N8
R130	N8
R131	N8
R132	O6
R133	O8
R134	O8
R135	C7
R136	C7
R137	C7
R138	C7
R139	C7
R140	C7
R141	C7
R142	C7
R143	D11
R144	G5
R145	I11
R146	I11
R147	J11
R148	J9
R149	J9
R150	I9
R151	K9
R152	K9
R153	K9
R154	K9
R155	K9
R156	J10
R157	M7
R158	M7
SWB1	N8
SW102	C11

'02.06.11 SI3412
DA-3620/5620 u-COM SECTION

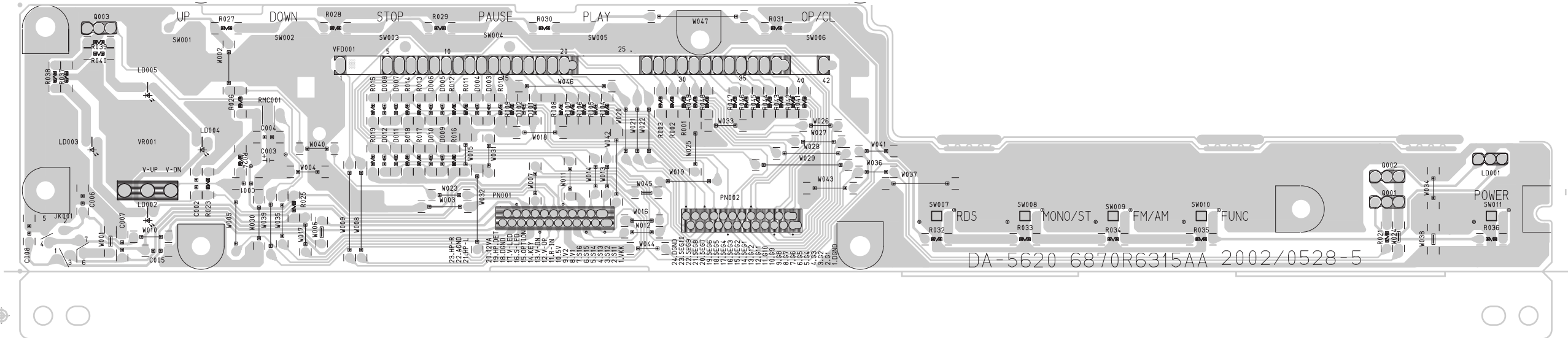
PRINTED CIRCUIT DIAGRAMS

• MAIN P.C. BOARD(SOLDER SIDE)

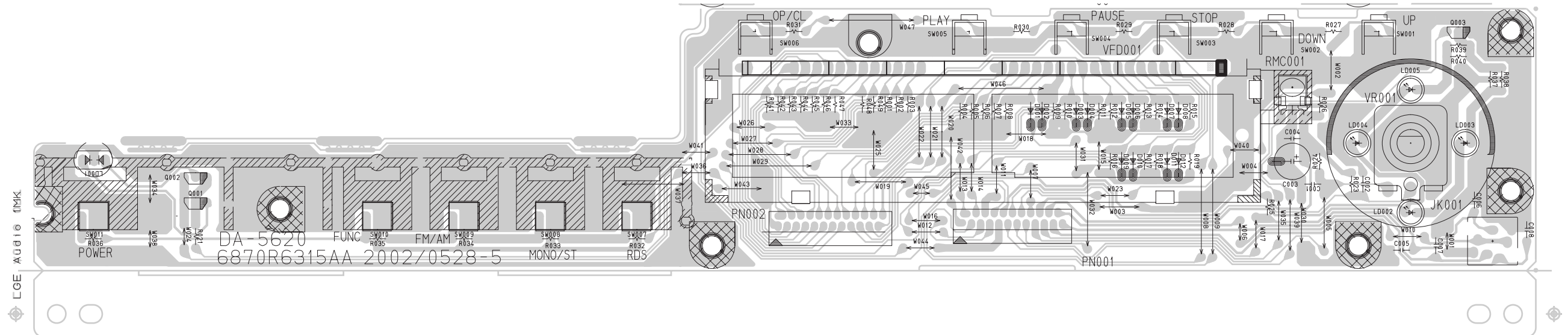


ICT110	E3	ICT259	D5	ICT478	G5
ICT111	E2	ICT262	D5	ICT480	G6
ICT185	E3	ICT263	D5	ICT481	G6
ICT186	D3	ICT270	F5	ICT482	M5
ICT200	G2	ICT274	F6	ICT483	M6
ICT221	F7	ICT277	G6	ICT484	J5
ICT222	F8	ICT284	D5	ICT486	G6
ICT223	F8	ICT286	D5	ICT488	J5
ICT224	F8	ICT289	G6	ICT489	K5
ICT225	F7	ICT292	G6	ICT49	L5
ICT226	F7	ICT296	G7	ICT492	F4
ICT227	F7	ICT300	F6	ICT50	L5
ICT228	F8	ICT301	F6	ICT501	G5
ICT229	F8	ICT304	H7	ICT502	F6
ICT230	F8	ICT307	F6	ICT503	G5
ICT231	F8	ICT322	G5	ICT508	M5
ICT232	F8	ICT326	G5	ICT509	M5
ICT233	F8	ICT327	H6	ICT510	I8
ICT234	G8	ICT330	I7	ICT511	D6
ICT235	G8	ICT331	I7	ICT512	H8
ICT236	G8	ICT355	K6	ICT513	C3
ICT237	G8	ICT364	J7	ICT517	F7
ICT238	G8	ICT371	G5	ICT518	F7
ICT239	G8	ICT387	K7	ICT519	F6
ICT240	G8	ICT391	K7	ICT520	K7
ICT241	G8	ICT399	H7	ICT521	H6
ICT242	G8	ICT400	H7	ICT524	G5
ICT243	G8	ICT401	G4	ICT528	J5
ICT244	G8	ICT402	G4	ICT529	M5
ICT245	G8	ICT404	K7	ICT530	L6
ICT246	G8	ICT406	K7	ICT533	K6
ICT247	G8	ICT415	H5	ICT534	L5
ICT248	H8	ICT419	G4	ICT535	H5
ICT249	F7	ICT424	F4	ICT536	G5
ICT250	G6	ICT425	D3	ICT538	F5
ICT251	H8	ICT449	G5	ICT540	G6
ICT252	H8	ICT450	G4	ICT541	E5
ICT253	G7	ICT465	N8	ICT542	E5
ICT254	H8	ICT472	H8	ICT543	A6
ICT255	H8	ICT473	L7	ICT544	C4
ICT256	H8	ICT474	G8	ICT82	C3
ICT258	D5	ICT476	H5	ICT97	H7


• MAIN/FRONT P.C. BOARD(SOLDER SIDE)

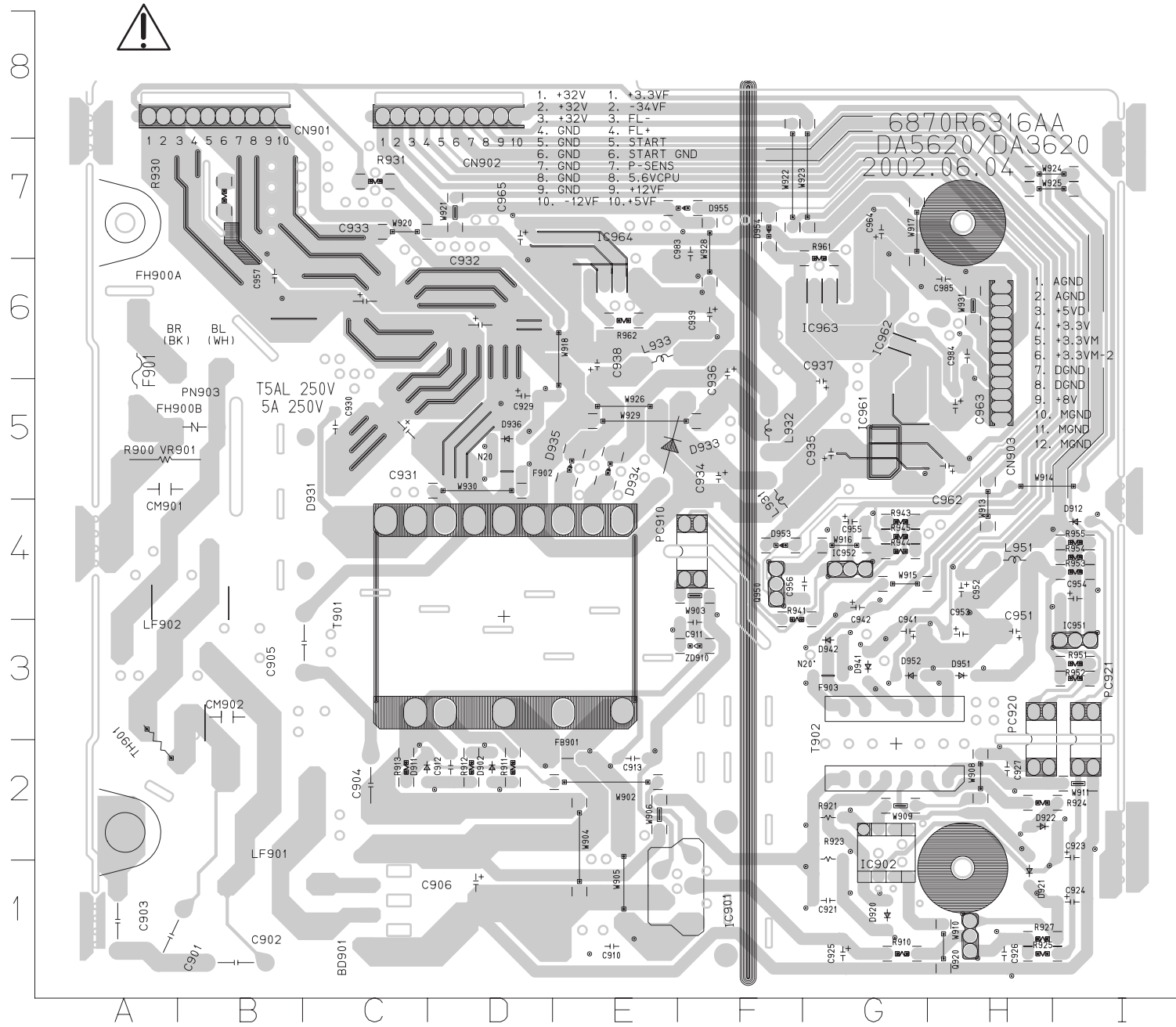


• MAIN/FRONT P.C. BOARD(COMPONENT SIDE)



• POWER P.C. BOARD

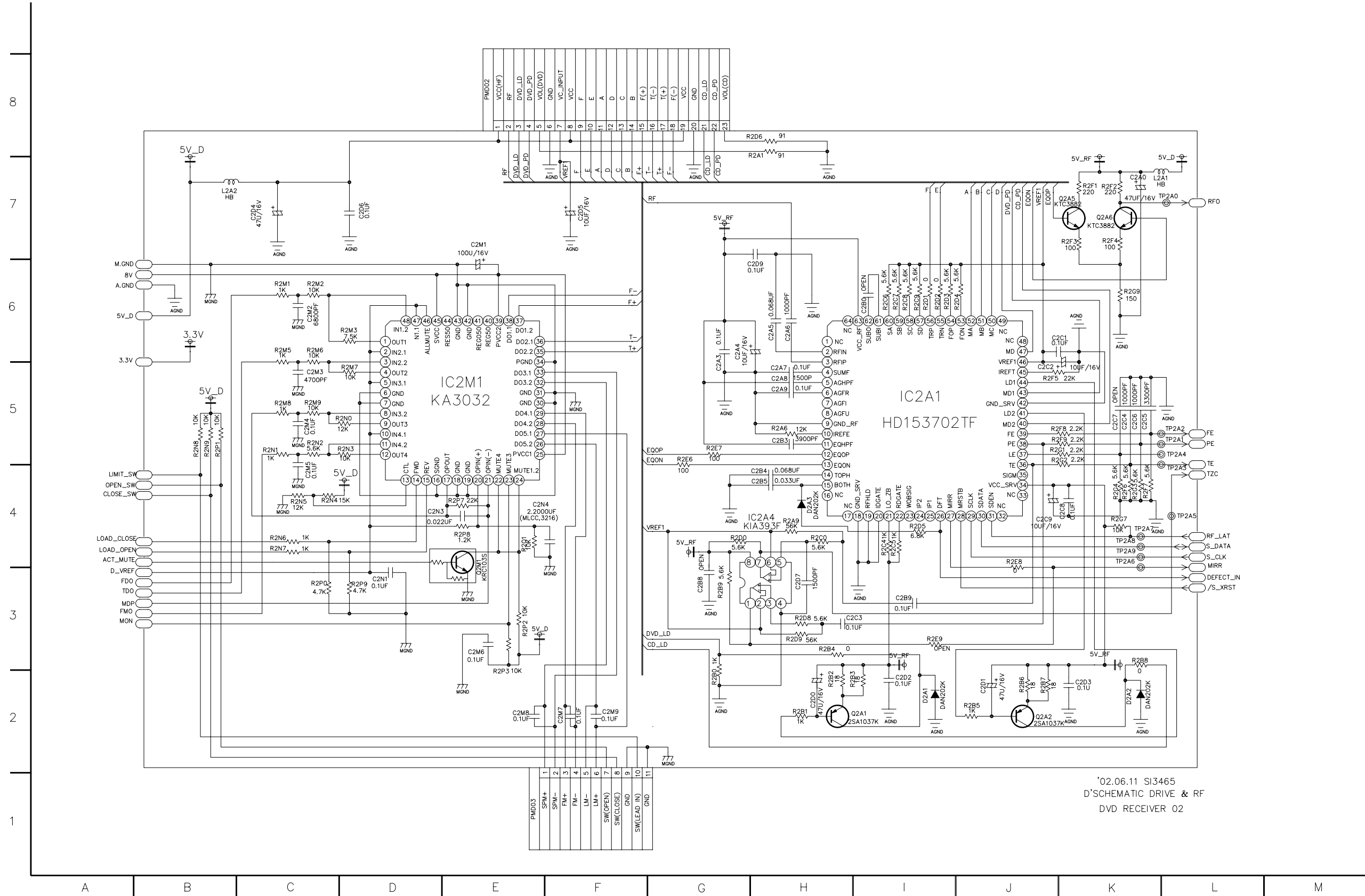
NOTE: Warning
 Parts that are shaded are critical With respect to risk of fire or electrical shock.



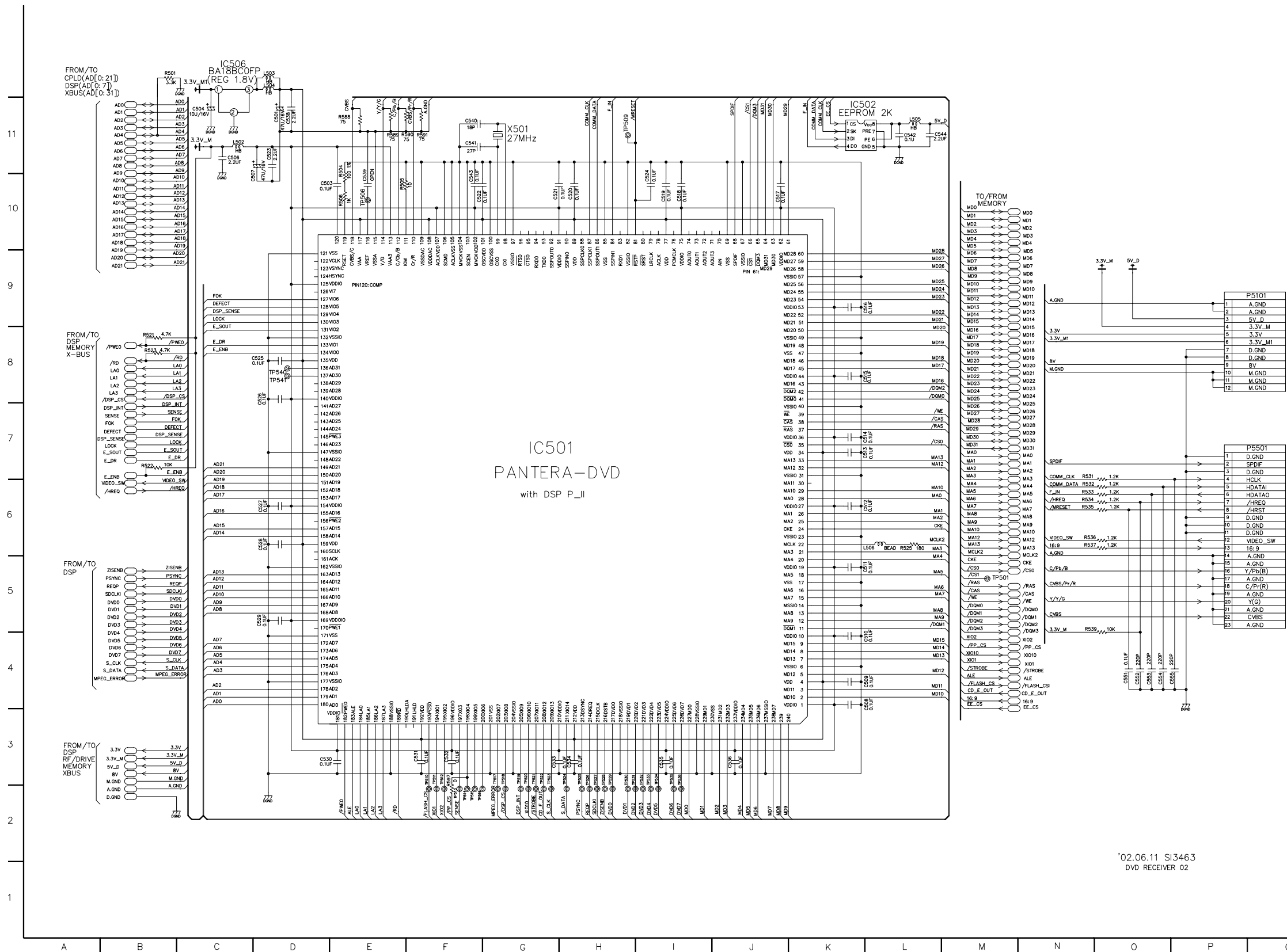
BD901	C1	D941	G3
C901	A1	D942	G3
C902	B1	D951	H3
C903	A1	D952	G3
C904	C2	D953	F4
C905	C3	D954	F7
C906	D1	D955	F7
C910	E1	F902	D5
C911	F3	F903	G3
C912	D2	FB901	E2
C913	E2	FH900A	A6
C921	G1	FH900B	A5
C923	I2	IC901	F1
C924	I1	IC902	G2
C925	G1	IC951	I3
C926	H1	IC952	G4
C927	H2	IC961	G5
C929	D5	IC962	G6
C930	C5	IC963	G6
C931	C5	IC964	E6
C932	D6	L931	F5
C933	C6	L932	F5
C934	F5	L933	E6
C935	G5	L951	H4
C936	F6	LF901	B2
C937	G5	LF902	A4
C938	E6	PC910	F4
C939	F6	PC920	H3
C941	G3	PC921	I3
C942	G4	PN903	B6
C951	H3	Q920	H1
C952	H4	Q950	F4
C953	H3	R900	A5
C954	I4	R910	G1
C955	G4	R911	D2
C956	G4	R912	D2
C957	B6	R913	C2
C962	H5	R921	G2
C963	H5	R923	G2
C964	G7	R924	H2
C965	D7	R925	H1
C983	F7	R927	H1
C984	H6	R930	B7
C985	H6	R931	C7
CM901	A5	R941	F3
CM902	B3	R943	G4
CN901	B8	R944	G4
CN902	D8	R945	G4
CN903	H6	R951	I3
D902	D2	R952	I3
D911	C2	R953	I4
D912	I4	R954	I4
D920	G1	R955	I4
D921	H1	R961	G6
D922	H2	R962	E6
D931	C4	T901	D4
D933	E5	T902	G2
D934	E5	TH901	A2
D935	E5	VR901	B5
D936	D5	ZD910	F3

SCHEMATIC DIAGRAMS

• DRIVE & RF SCHEMATIC DIAGRAM



• MPEG SCHEMATIC DIAGRAM

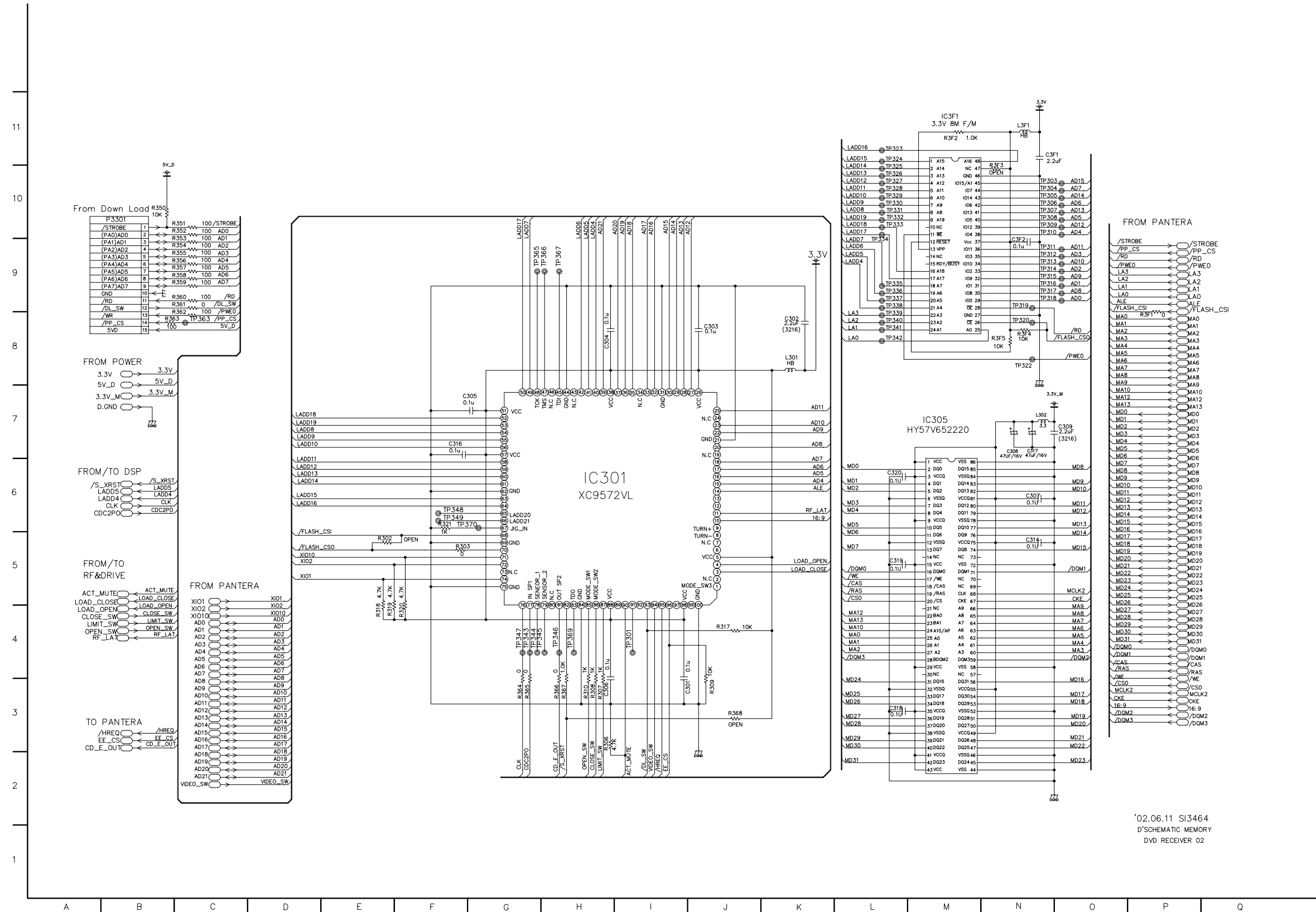


LOCATION GUIDE

C501	D11	TP501	M5
C503	D10	TP506	E10
C504	C11	TP509	H11
C506	C11	TP510	F3
C507	D10	TP511	F3
C508	L3	TP512	F3
C509	L4	TP513	F2
C510	L4	TP514	F2
C511	L5	TP515	F2
C512	L6	TP516	F2
C513	L7	TP517	G3
C514	L7	TP518	G3
C515	L8	TP519	G3
C516	L9	TP520	G3
C517	J0	TP521	G3
C518	H0	TP522	G3
C519	H0	TP523	G3
C520	H10	TP524	H3
C521	G10	TP525	H3
C522	F10	TP526	H3
C523	D11	TP527	H3
C524	H0	TP528	H3
C525	C8	TP529	H3
C526	D7	TP530	H3
C527	D6	TP531	H3
C528	D6	TP532	I3
C529	D5	TP533	I3
C530	D3	TP534	I3
C531	F3	TP535	I3
C532	F3	TP536	I3
C533	G3	TP540	D8
C534	H3	TP541	D8
C535	I3	X501	G11
C536	J3	XIO1	F2
C538	D11	XIO1	M4
C539	E10	XIO1	N4
C540	F11	XIO10	G2
C541	F11	XIO10	M4
C542	L11	XIO10	N4
C543	F10	XIO2	F2
C544	L11	XIO2	M4
C551	O4		
C552	O4		
C553	O4		
C554	O4		
C555	P4		
IC501	G7		
IC502	K11		
IC506	C12		
L502	C11		
L503	D12		
L504	D12		
L505	L11		
R506	B6		
R504	E10		
R505	E10		
R506	E10		
R521	B8		
R522	B7		
R523	B5		
R525	L6		
R531	N7		
R532	N6		
R533	N6		
R534	N6		
R535	N6		
R536	N6		
R537	N6		
R539	N5		
R588	E11		
R589	E11		
R590	E11		
R591	F11		
R597	F2		

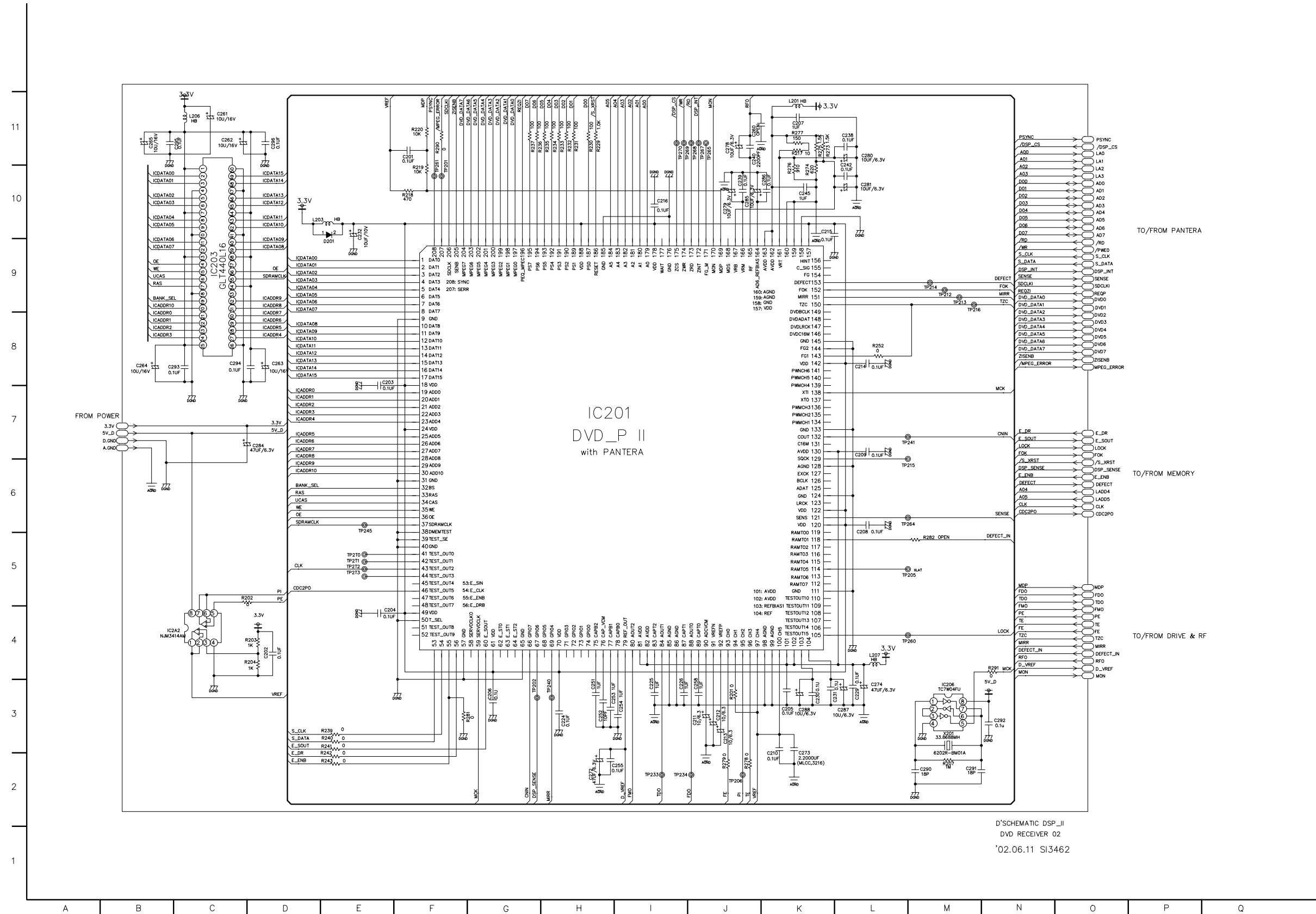
'02.06.11 S13463
DVD RECEIVER 02

• μ-COM SCHEMATIC DIAGRAM



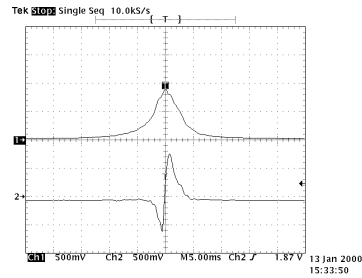
'02.06.11 SI3464
D'SCHEMATIC MEMORY
DVD RECEIVER 02

• DVD DSP(DIGITAL SIGNAL PROCESSING)SCHEMATIC DIAGRAM



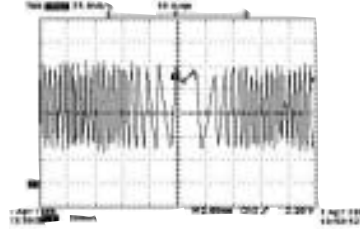
WAVEFORMS

1)



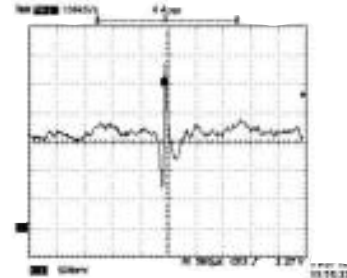
IC2A1 Pin 42, Focus Error
IC2A1 Pin 36, Pi

2)



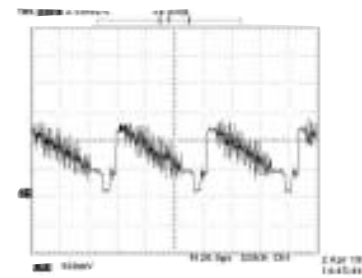
IC2A1 Pin 41
Tracking Error

3)



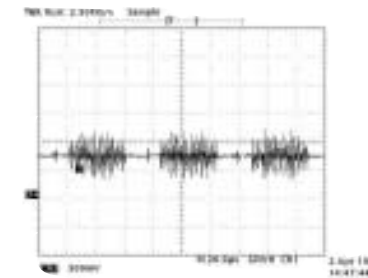
IC2A1 Pin 41
VBR TRACKING Error

1)



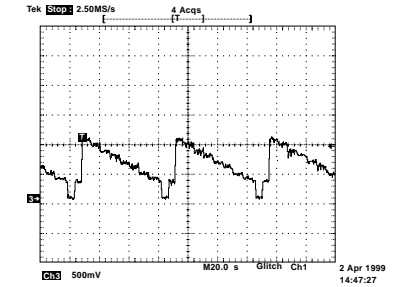
IC501 Pin 118, Composite

2)



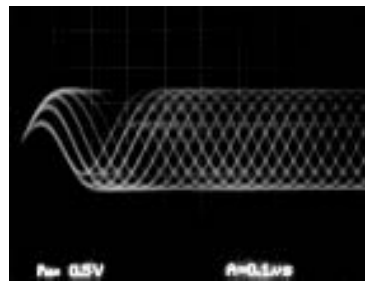
IC501 Pin 112, Chrominance
(Super video out Mode)

3)



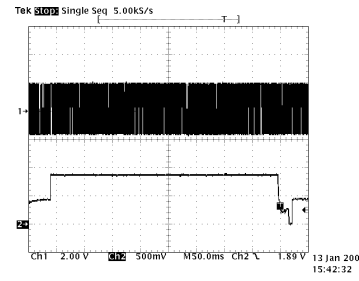
IC501 Pin 114, Luminance
(Super video out Mode)

4)



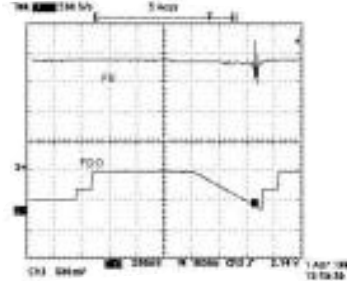
IC2A1 Pin 57
RF

5)



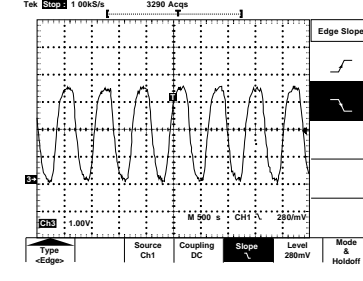
IC201, Pin 88, SLED Drive(FMO)
IC201, Pin 18 SLED FG

6)



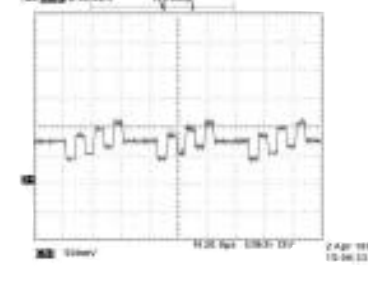
IC2A1 Pin 42, Focus Error(Focus Search)
IC2A1 Pin 83, Focus Drive(FDO)

4)



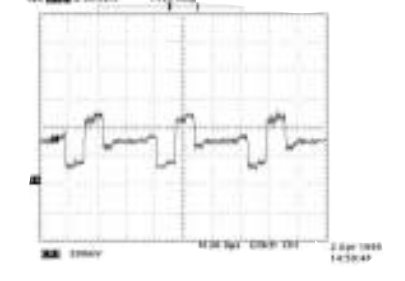
IC501 Pin 98,
MPEG Clock(27MHz)

5)



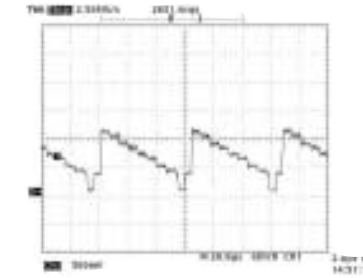
IC501 Pin 114,
Component Pb

6)



IC501 Pin 112,
Component Pr

7)



IC501 PIN 118,
COMPONENT Y

	IC901		IC451		IC401		IC454		IC453		IC452		IC402		IC801	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	0	0	0	0	2.98	2.98	5.51	5.51	5.41	5.42	5.49	0	5.47	5.47	1.83	1.81
2	5.1	5.05	3.15	3.15	3.26	3.26	5.51	5.51	5.41	5.42	5.49	5.51	5.47	5.47	0	0
3	0	0	3.15	3.15	0	0	5.51	5.51	5.41	5.41	5.49	5.51	5.47	5.47	1.83	1.81
4	5.14	5.14	3.15	3.14	1.57	0	0	0	0	0	0	0	0	0	0	0
5	0.48	0	3.15	3.15	1.58	1.58	5.51	5.51	5.41	5.41	5.49	5.51	5.47	5.47	0	0
6	0.48	0	3.15	3.15	1.3	0	5.51	5.51	5.41	5.42	5.49	5.51	5.47	5.47	4.59	4.57
7	5.17	5.17	3.15	3.15	0	0	5.51	5.51	5.41	5.41	5.49	0	5.47	5.47	1.84	1.82
8	2.22	2.21	2.43	2.42	3.24	3.24	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	0	0
9	2.35	2.35	2.48	2.46	0	0									1.84	1.82
10	0	0	2.43	2.42	3.2	3.19										
11	2.26	2.24	2.48	0	4.85	4.84										
12	2.46	2.45	0	0	2.31	0										
13	0	0	0	0	2.35	0										
14	5.17	5.16	0	0	2.35	0										
15	5.17	5.16	2.43	2.43	0	0										
16	5.1	5.06	2.47	3.14	0	0										
17	0	0	2.45	0	4.91	0										
18	0	0	0	0	2.34	2.34										
19	5.16	5.16	4.91	4.88	2.34	2.33										
20	5.14	5.14	0	0	0	0										
21	5.01	5.02	0	0												
22	0	0	0	0												
23	0	0	4.91	0												
24	0	0	0	0												
25	2.68	2.68	4.9	4.88												
26	5.17	5.17	0	0												
27	5.17	5.17	0	0												
28	4.77	4.87	0	0												
29	5.07	5.06	0	0												
30	21.58	18	4.91	4.88												
31	23.58	18	0	0												
32	23.6	23	4.91	4.88												
33	27.54	21.21	0	0												
34	23.6	17.18	0.36	0												
35	23.6	22.91	0	0												
36	21.6	19.14	3.24	3.23												
37	21.61	25.01	3.19	3.19												
38	23.65	23.06	2.93	3.92												
39	23.65	23.09	0	0												
40	23.57	23.08	0	0												
41	25.6	23.07	1.3	1.31												
42	25.6	25.03	1.48	1.47												
43	25.6	25.03	1.57	0												
44	25.6	23.07	1.58	1.58												
45	27.6	25.07	0	0												
46	27.6	21.16	3.15	3.15												
47	27.5	25.11	0	0												
48	27.5	24.76	0	0												
49	27.5	27.86	0	0												
50	27.5	26.88	0	0												
51	6.73	6.69	3.15	3.14												
52	25.7	25.13	0	0												
53	25.6	25.08														
54	25.6	25.16														
55	25.6	25.15														
56	25.6	25.08														
57	25.6	25.13														
58	27.7	27.08														
59	5.16	5.15														
60	5.16	5.16														
61	5.16	5.16														
62	5.16	5.16														
63	0	0														
64	0	0														

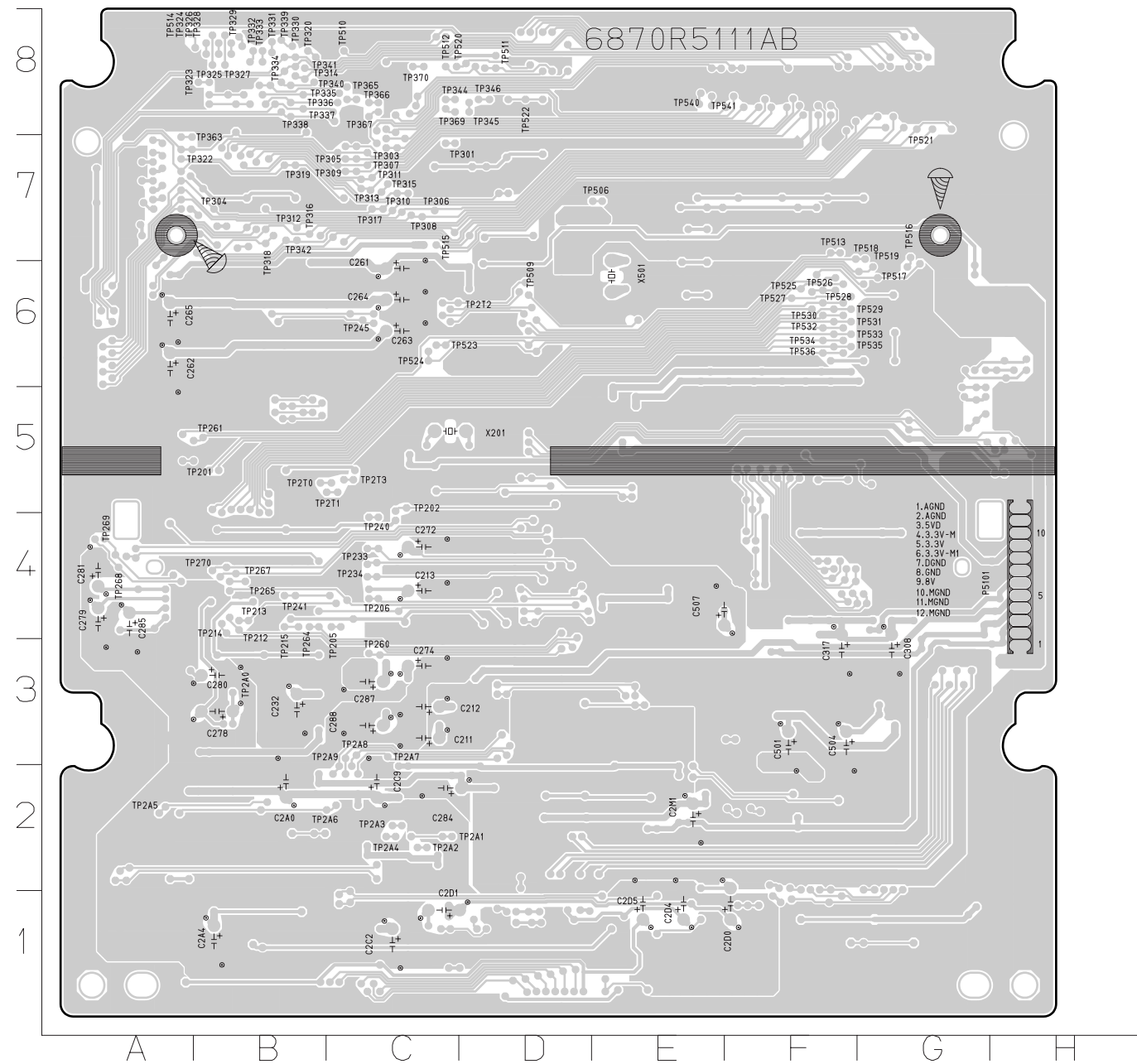
	IC503		IC502		IC2A4		IC2A2		IC206		IC504		IC506	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	0	0	0	0	4.87	4.39	1.57	1.56	2.63	2.64	2.11	2.19	(IN)0	0
2	3.1	3.1	5.03	5.03	2.3	2.31	1.57	1.56	2.74	0	5.05	5.05	(OUT)1.80	0
3	5.03	5.03	0	0	2.29	2.29	1.57	0	2.74	2.76	2.37	2.44		
4	0	0	5.1	5.1	0	0	0	0	0	0	0	0		
5	0	0	0	0	2.29	2.29	1.62	1.62	1.92	1.88				
6	0	0	5.04	5.04	2.3	2.31	1.62	1.62	2.28	0				
7	5.05	5.05	0	0	2.51	2.45	1.62	1.62	2.28	0				
8	0	3.15	5.03	5.04	5.02	5.02	5.04	4.99	5.04	0				
9	0	0												
10	0	0												
11	0	0.46												
12	0	0.15												
13	3.11	3.1												
14	0	0												
15	0	0												
16	0	0												
17	3.09	3.09												
18	5.15	5.14												
19	0	0												
20	5.15	5.15												

	Q2M1		Q2A1		Q2A6		Q2A5		Q2A2	
	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
E	0	0	5.02	0	0	2.41	2.34	2.35	5.02	4.95
B	0	0	0	0	3.62	3.72	3.82	0	0	0
C	0	3.14	0	0	0	3.1	0	0	5.01	4.94

	Q610		Q611		Q609		Q613		Q614		Q612	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
Emitter	0	0	0	0	0	0	0	0	0	0	0	0
Collector	0	0	0	0	0	0	0	0	0	0	0	0
Base	0.77	0.78	0.77	0.77	0.76	0.77	0.76	0.77	0.77	0.77	0.76	0.79

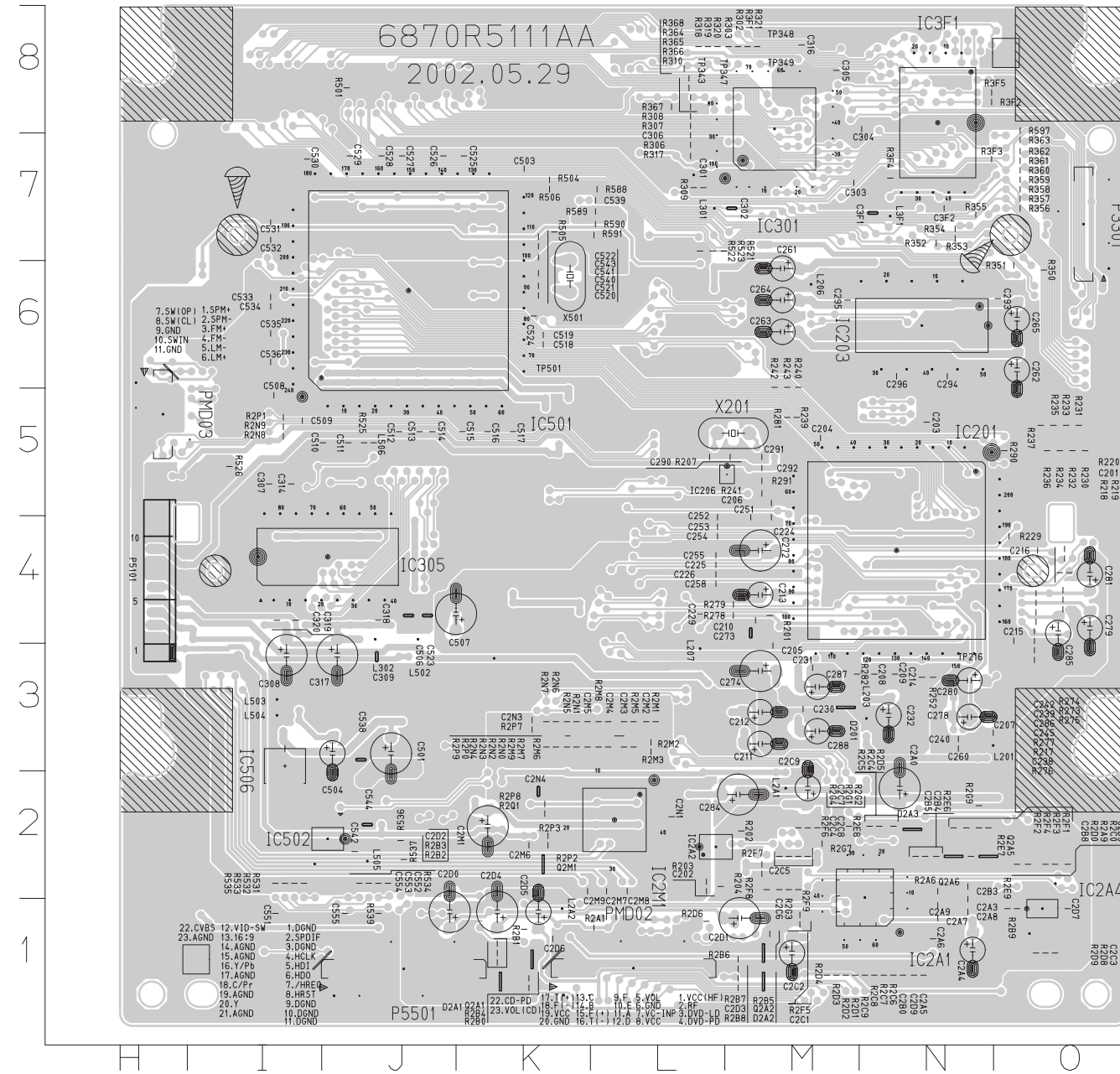
PRINTED CIRCUIT DIAGRAM

• DVD P.C. BOARD(SOLDER SIDE)



TP201	B5	TP306	C7	TP363	A7
TP202	C5	TP307	C7	TP365	C8
TP205	C4	TP308	C7	TP366	C8
TP206	C4	TP309	C7	TP367	C8
TP212	B4	TP310	C7	TP369	C8
TP213	B4	TP311	C7	TP370	C8
TP214	B4	TP312	B7	TP506	E7
TP215	B4	TP313	C7	TP509	D6
TP233	C4	TP314	B8	TP510	C8
TP234	C4	TP315	C7	TP511	D8
TP240	C4	TP316	B7	TP512	C8
TP241	B4	TP317	C7	TP513	F7
TP245	C6	TP318	B7	TP514	B8
TP260	C3	TP319	B7	TP515	C7
TP261	B5	TP320	B8	TP516	G6
TP264	B4	TP322	A7	TP517	G6
TP265	B4	TP323	B8	TP518	G7
TP267	B4	TP324	B8	TP519	G6
TP268	A4	TP325	B8	TP520	C8
TP269	A4	TP326	B8	TP521	G8
TP270	B4	TP327	B8	TP522	D8
TP2A0	B3	TP328	B8	TP523	C6
TP2A1	C2	TP329	B8	TP524	C6
TP2A2	C2	TP330	B8	TP525	F6
TP2A3	C2	TP331	B8	TP526	F6
TP2A4	C2	TP332	B8	TP527	F6
TP2A5	A2	TP333	B8	TP528	F6
TP2A6	C2	TP334	B8	TP529	F6
TP2A7	C3	TP335	B8	TP530	F6
TP2A8	C3	TP336	B8	TP531	F6
TP2A9	C3	TP337	B8	TP532	F6
TP2T0	B5	TP338	B8	TP533	F6
TP2T1	C5	TP339	B8	TP534	F6
TP2T2	C6	TP340	B8	TP535	F6
TP2T3	C5	TP341	B8	TP536	F6
TP301	C7	TP342	B7	TP540	E8
TP303	C7	TP344	C8	TP541	E8
TP304	B7	TP345	D8		
TP305	C7	TP346	D8		

• DVD P.C. BOARD(COMPONENT SIDE)



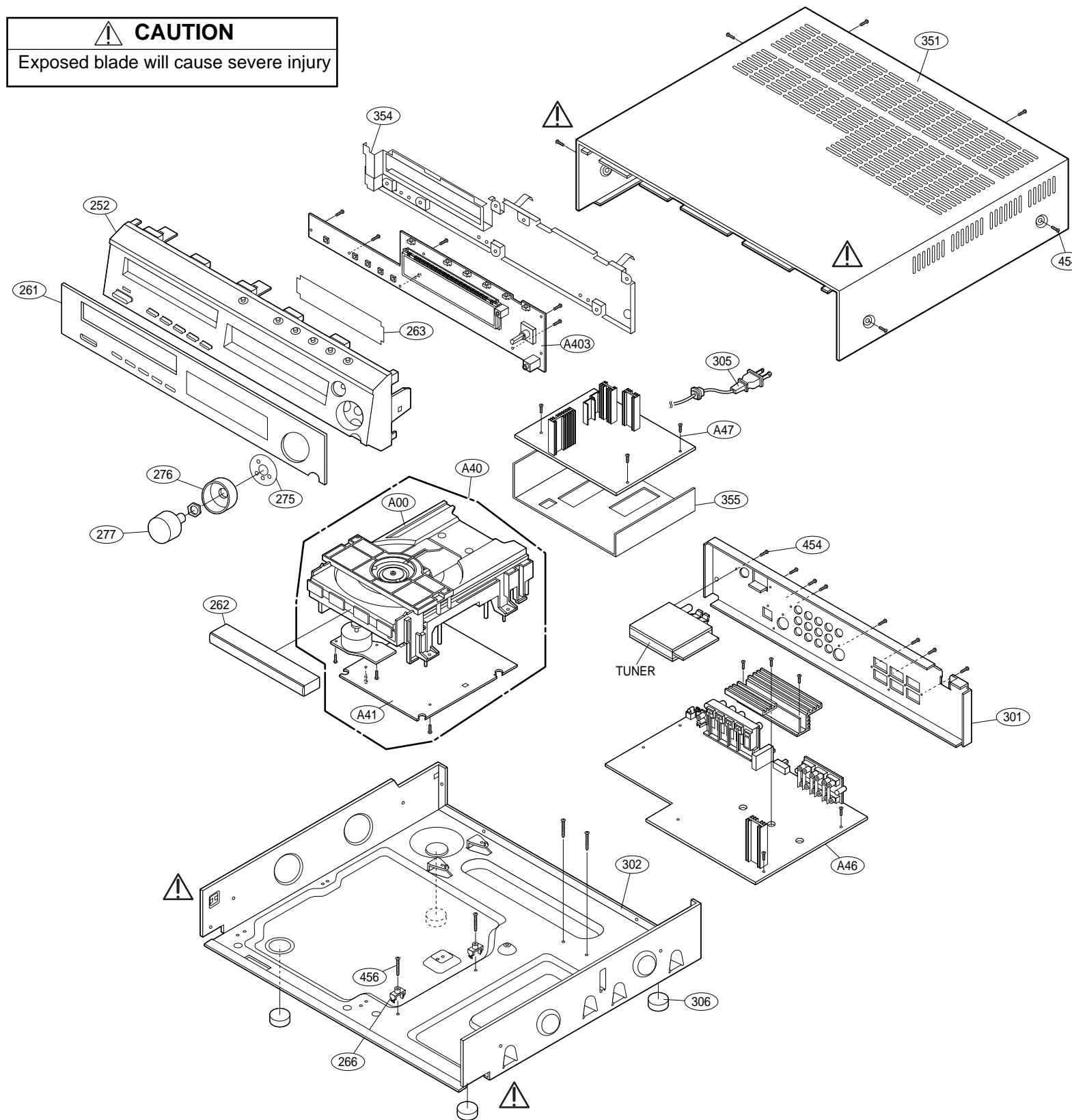
C201	04	C285	04	C2M6	K2	C527	J7	L502	J4	R290	05	R2G7	M2	R358	07
C202	L2	C286	04	C2M7	L2	C528	J7	L503	I3	R291	M5	R2G9	N2	R359	07
C203	N5	C287	M3	C2M8	L2	C529	J7	L504	I3	R2A1	L1	R2M1	L3	R360	07
C204	M5	C288	M3	C2M9	K2	C530	I7	L505	J2	R2A6	N2	R2M2	L3	R361	07
C205	M3	C290	L5	C2N1	L2	C531	I7	L506	J5	R2A9	O2	R2M3	L3	R362	07
C206	M5	C291	M5	C2N3	K3	C532	I7	P3301	O7	R2B0	K1	R2M5	L3	R363	07
C207	N3	C292	M5	C2N4	K2	C533	I6	P5101	H3	R2B1	K1	R2M6	L3	R364	L8
C208	N3	C293	O6	C301	L7	C534	I6	P5501	J1	R2B2	K1	R2M7	L3	R365	L8
C209	N3	C294	N6	C302	M7	C535	I6	PMD02	L1	R2B3	K1	R2M8	L3	R366	L8
C210	M4	C295	M6	C303	M7	C536	I6	PMD03	H5	R2B4	K1	R2M9	L3	R367	L8
C211	M3	C296	N6	C304	N8	C538	J3	Q2A1	K1	R2B5	M1	R2N0	L3	R368	L8
C212	M3	C2A0	N2	C305	M8	C539	L7	Q2A2	M1	R2B6	M1	R2N1	K3	R3F1	M8
C213	M4	C2A3	N1	C306	L7	C540	K6	Q2A5	N2	R2B7	M1	R2N2	K3	R3F2	N8
C214	N3	C2A4	N1	C307	I5	C541	K7	Q2A6	N2	R2B8	M1	R2N3	K3	R3F3	N7
C215	04	C2A5	N1	C308	I3	C542	J2	Q2M1	K2	R2B9	O1	R2N4	K3	R3F4	N7
C216	04	C2A6	N1	C309	J3	C543	K7	R201	M4	R2C0	O2	R2N5	K3	R3F5	N8
C224	M4	C2A7	N1	C314	I5	C544	J2	R202	M2	R2C4	N2	R2N6	K3	R501	J8
C225	L4	C2A8	N1	C316	M8	C551	I1	R203	L2	R2C5	N2	R2N7	K3	R504	K7
C226	L4	C2A9	N1	C317	J3	C552	J2	R204	L2	R2C6	N1	R2N8	I5	R505	K7
C229	L4	C2B0	N1	C318	J4	C553	J2	R207	M5	R2C7	N1	R2N9	I5	R506	K7
C230	M3	C2B3	N2	C319	I4	C554	J2	R217	O4	R2C8	N1	R2P0	K3	R521	L7
C231	M3	C2B4	N2	C320	I4	C555	J1	R218	O4	R2C9	N1	R2P1	I5	R522	L7
C232	N3	C2B5	N2	C3F1	N7	D201	M3	R219	O4	R2D0	O2	R2P2	K2	R523	L7
C238	O3	C2B8	O2	C3F2	N7	D2A1	K1	R220	O4	R2D1	M1	R2P3	K2	R525	J5
C239	04	C2B9	O2	C501	J3	D2A2	M1	R229	O4	R2D2	M1	R2P7	K3	R526	I5
C240	N3	C2C1	M1	C503	K7	D2A3	N2	R230	O5	R2D3	M1	R2P8	K2	R531	I2
C242	04	C2C2	M1	C504	J3	IC201	N4	R231	O5	R2D4	M1	R2P9	K3	R532	I2
C245	04	C2C3	O1	C506	J4	IC203	N6	R232	O5	R2D5	N2	R2Q1	K2	R533	I2
C251	M4	C2C4	M2	C507	J4	IC206	M5	R233	O5	R2D6	L1	R302	M8	R534	J2
C252	L4	C2C5	M2	C508	I5	IC2A1	N2	R234	O5	R2D8	O1	R303	M8	R535	I2
C253	L4	C2C6	M2	C509	I5	IC2A2	L2	R235	O5	R2D9	O1	R306	L7	R536	J2
C254	L4	C2C7	M2	C510	J5	IC2A4	O1	R236	O5	R2E6	N2	R307	L8	R537	J2
C255	L4	C2C8	M2	C511	J5	IC2M1	L2	R237	O5	R2E7	N2	R308	L8	R539	J1
C258	L4	C2C9	M2	C512	J5	IC301	M8	R239	M5	R2E8	M2	R309	L7	R588	L7
C260	N3	C2D0	J1	C513	J5	IC305	J4	R240	M6	R2E9	O1	R310	L8	R589	L7
C261	M6	C2D1	M1	C514	J5	IC3F1	N8	R241	M5	R2F1	N2	R317	L7	R590	L7
C262	O6	C2D2	K1	C515	K5	IC501	J6	R242	M6	R2F2	N2	R318	L8	R591	L7
C263	M6	C2D3	M1	C516	K5	IC502	J2	R243	M6	R2F3	N2	R319	L8	R597	O8
C264	M6	C2D4	K1	C517	K5	IC506	I3	R252	N3	R2F4	N2	R320	L8	TP216	N3
C265	O6	C2D5	K1	C518	K6	L201	N3	R273	O4	R2F5	M1	R321	M8	TP343	L8
C272	M4	C2D6	K1	C519	K6	L203	N3	R274	O4	R2F6	M2	R350	O6	TP347	L8
C273	M4	C2D7	O1	C520	K6	L206	M6	R275	O4	R2F7	M2	R351	O6	TP348	M8
C274	M3	C2D9	N1	C521	K6	L207	L3	R276	O3	R2F8	M2	R352	N7	TP349	M8
C278	N3	C2M1	K2	C522	K7	L2A1	M2	R277	O4	R2F9	M2	R353	N7	TP501	K6
C279	04	C2M2	L3	C523	J4	L2A2	K1	R278	M4	R2G1	M2	R354	N7	X201	M5
C280	N3	C2M3	L3	C524	K6	L301	L7	R279	M4	R2G2	M2	R355	N7	X501	K6
C281	04	C2M4	L3	C525	K7	L302	J4	R281	M5	R2G3	M2	R356	O7		
C284	M2	C2M5	K3	C526	J7	L3F1	N7	R282	M3	R2G4	M2	R357	O7		

SECTION 5. EXPLODED VIEWS

• CABINET AND MAIN FRAME SECTION

NOTE) Refer to "SECTION 7 REPLACEMENT PARTS LIST" in order to look for the part number of each part.

CAUTION
Exposed blade will cause severe injury



• Deck Mechanism Exploded View

