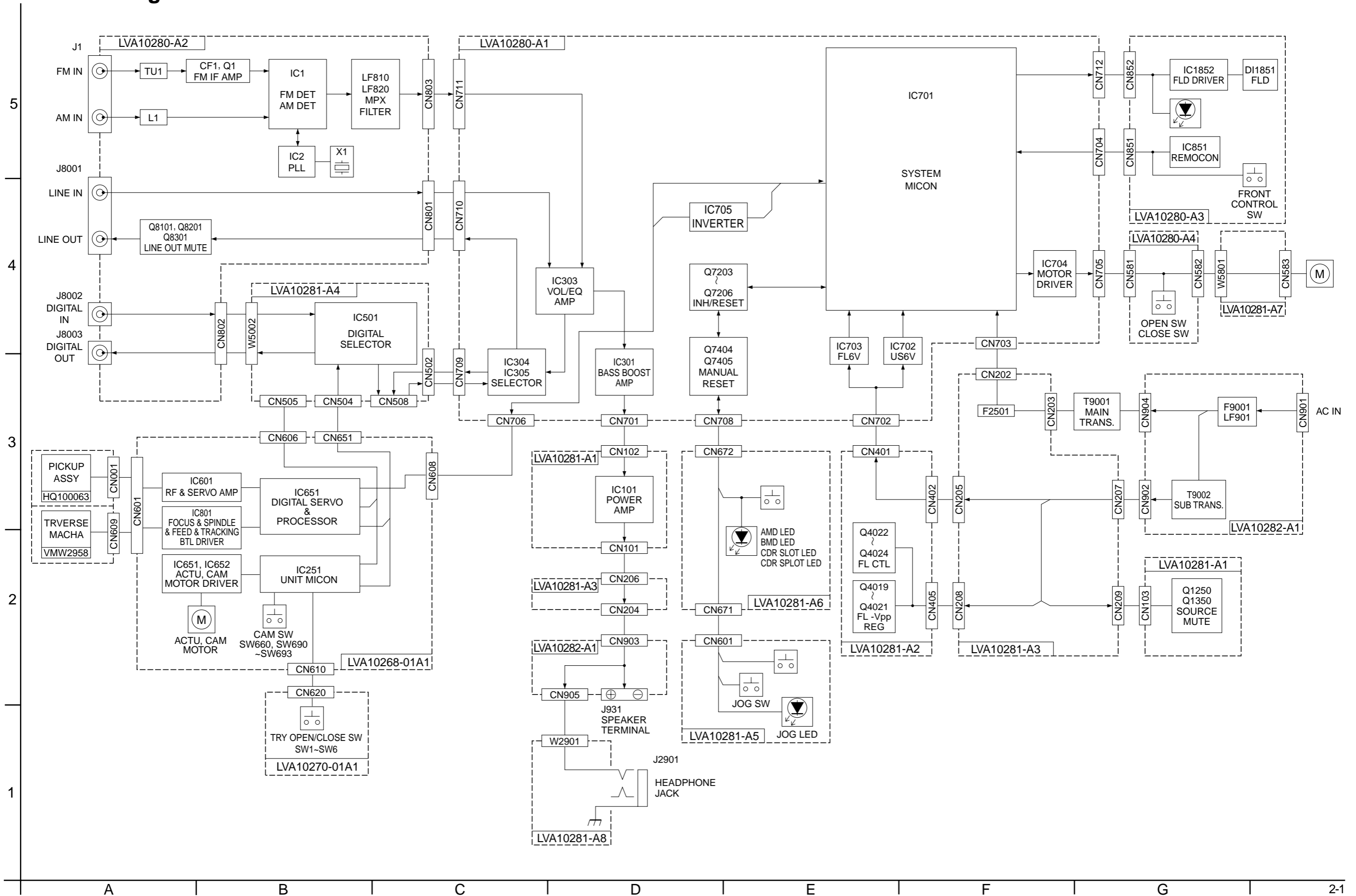


In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (⚡) and ICP (●) or identified by the "△" mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the J and C version)

Block diagram



Standard schematic diagrams

System control section

To E-2 on page 2-5

To F-2 on page 2-5

TO TUNER-I/O PWB

TO CN801 OF LVA10280-A2

TO CN803 OF LVA10280-A2

LVA10280-A1 MAIN PWB

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To D-7 on page 2-6

To H-6 on page 2-6

To C-7 on page 2-6

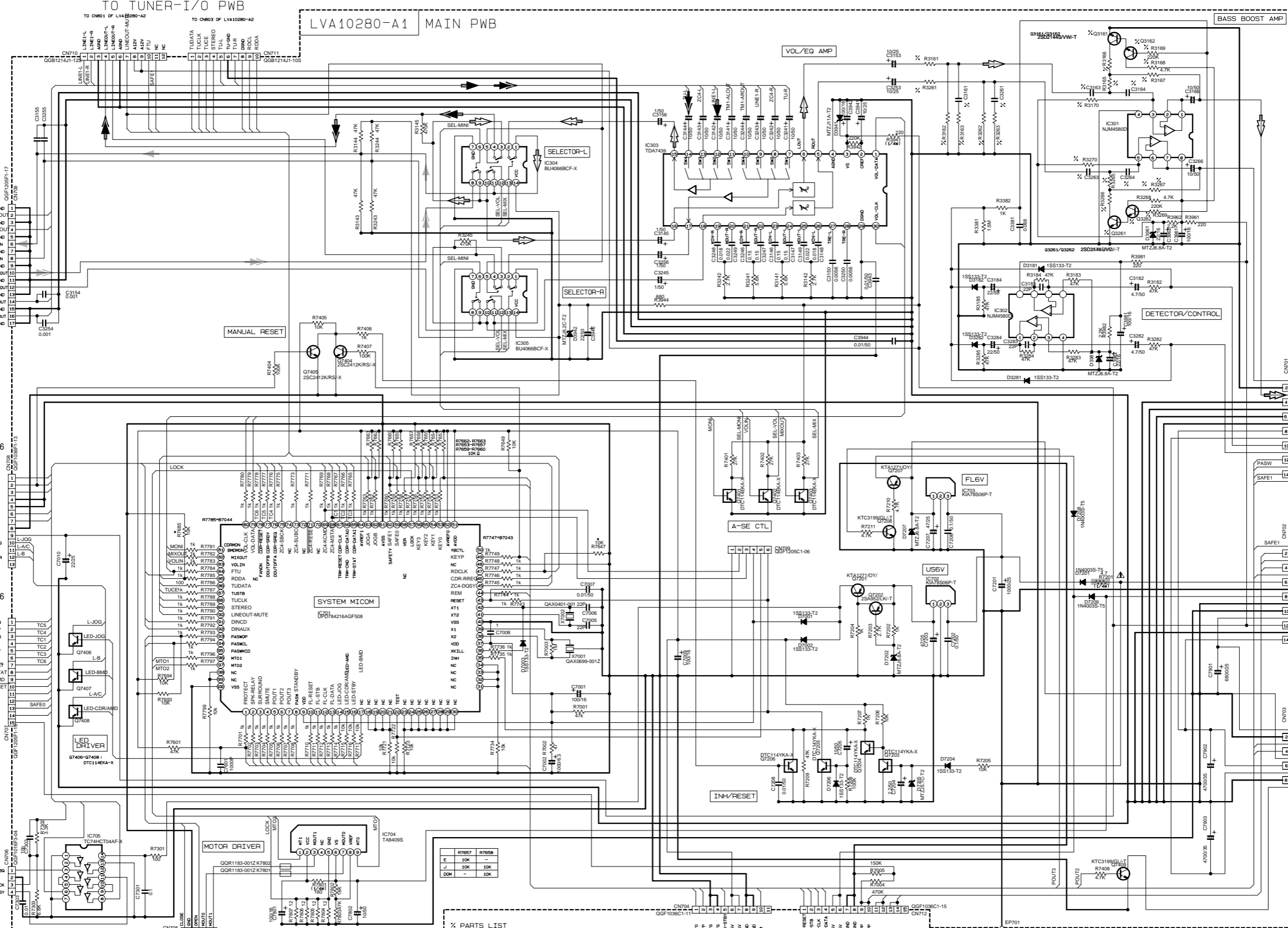
To H-3 on page 2-7

TO CONNECT PWB

TO KEY PWB

TO CONNECT PWB

TO H-3 on page 2-7



To A-6 on page 2-8

To A-3 on page 2-8

To A-5 on page 2-9

TO REAR PWB

% PARTS LIST

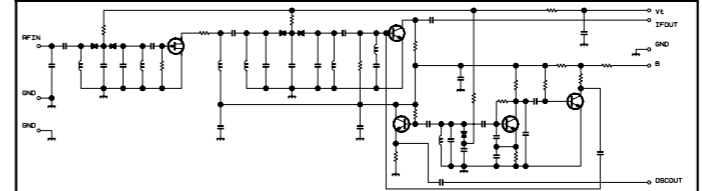
REF	QTY	PART NO.	VALUE	REF	QTY	PART NO.	VALUE
R705	1	R705	4.7K	R706	1	R706	2.7K
R707	1	R707	2K	R708	1	R708	270
R709	1	R709	33K	R710	1	R710	13K
R711	1	R711	4.7K	R712	1	R712	220K
R713	1	R713	360K				
R714	1	R714	10/25	R715	1	R715	2502144S

- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION — CD STOP MODE.
 - UNLESS OTHERWISE SPECIFIED, ALL RESISTANCE VALUES ARE IN OHMS (Ω). ALL CAPACITANCE VALUES ARE IN PICO-FARADS (pF). ALL CAPACITANCE VALUES ARE IN MICRO-FARADS (μF) UNLESS OTHERWISE SPECIFIED. ALL INDUCTANCE VALUES ARE IN MILLI-HENRIES (mH). UNLESS OTHERWISE SPECIFIED, ALL CAPACITORS ARE ROV CERAMIC CAPACITORS.

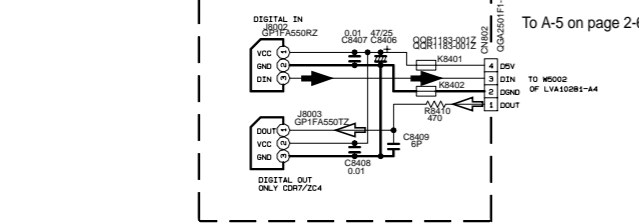
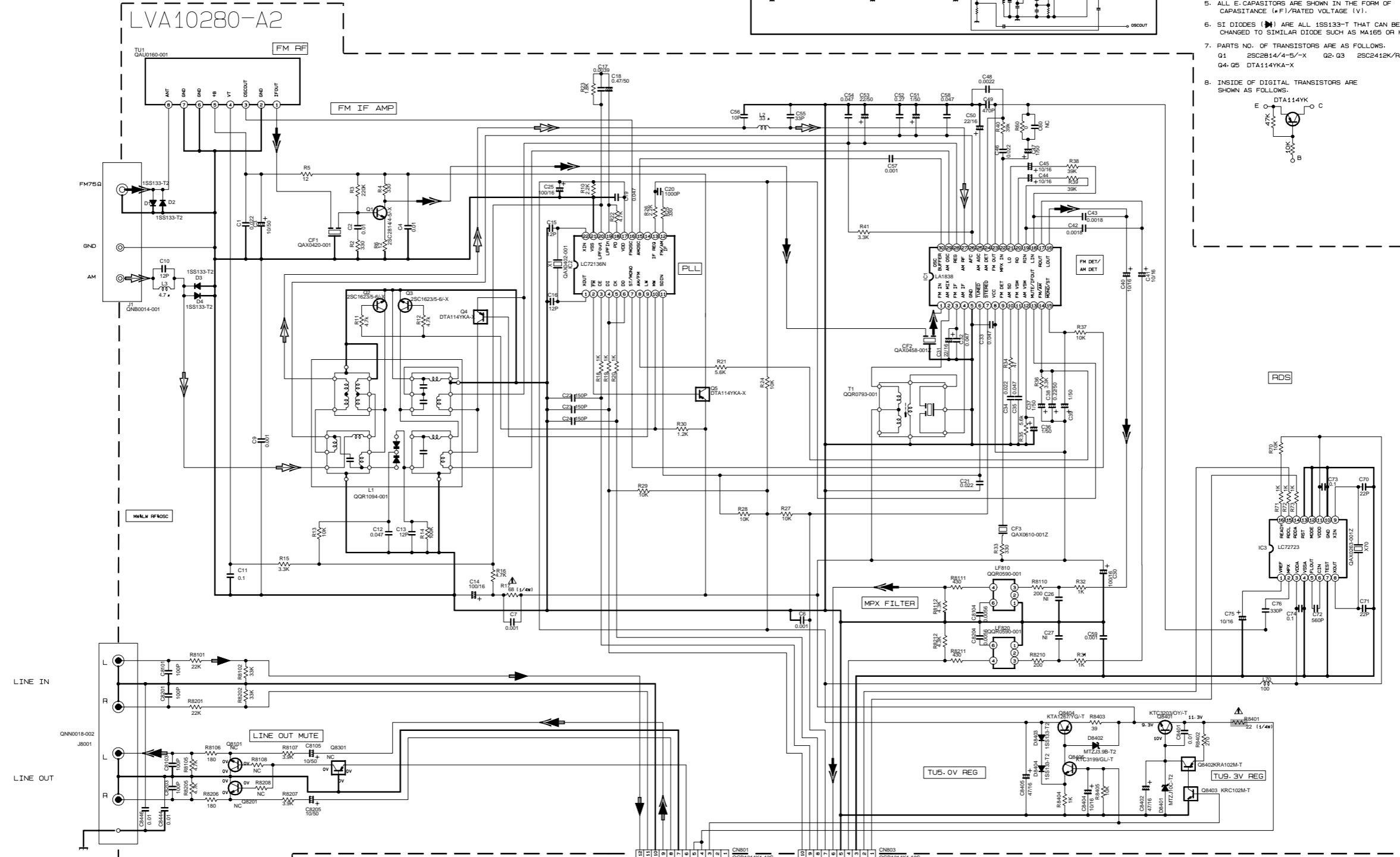
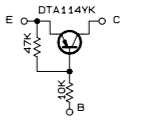
- Main signal
- Tuner signal
- Line signal
- TLine out signal
- CDR input signal
- CDR output signal
- Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

Tuner section

CONDITION	PIN NO.	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	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	4.3	3.4	2.8	3.4	0	0	3.6	3.6	3.6	2.7		
	FM 60KB STEREO	3.6	8.9	3.6	3.6	0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	4.3	3.4	2.8	3.4	0	0	3.6	3.6	3.6	2.7		
	AM NO SIGNAL	3.5	9.0	3.5	3.5	0	5.0	5.1	9.0	2.6	1.3	0	0	0.9	4.7	5.5	4.3	4.3	4.3	4.3	3.3	2.8	3.4	0	0.7	3.6	3.6	3.6	2.1		
IC2	FM NO SIGNAL	2.5	0	0	5.0	4.9	5.0	7.9	7.8	3.6	6.1	5.1	0	0	0	2.5	5.1	0.9	0.9	3.8	0	2.3									



- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
 - ALL RESISTORS ARE 1/8W ±5% METAL GLAZE RESISTOR.
 - ALL RESISTANCE VALUES ARE IN OHM(Ω).
 - ALL CAPACITANCE VALUES ARE IN P(F/P/PF).
 - ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (×F)/RATED VOLTAGE (V).
 - SI DIODES (D) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
 - PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
Q1 2SC2814/4-5/-X Q2-Q3 2SC2412K/R/-X
Q4-Q5 DTA114YK-A-X
 - INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.



To A-5 on page 2-6

Tr. NO.	Q1	Q5
PIN NO.	E C B E C B	E C B
FM 87.5MHz NO SIGNAL	0 7.1 0.85 8.9 8.8 0	
AM 52KHz NO SIGNAL	0 0 0 9.0 0 8.9	

To B-7 on page 2-4

Tr. NO.	Q2	Q3	Q4
PIN NO.	E C B E C B E C B		
AM 52KHz NO SIGNAL	0 0 0.7 0 0 0.7 0 3.6 0.7		
AM 144KHz NO SIGNAL	0 0 0.3 0 0.3 0.3 3.6 3.6 3.6		

- Digital in signal
- Digital out signal
- FM/Tuner signal
- AM signal
- Line in signal
- Line out signal

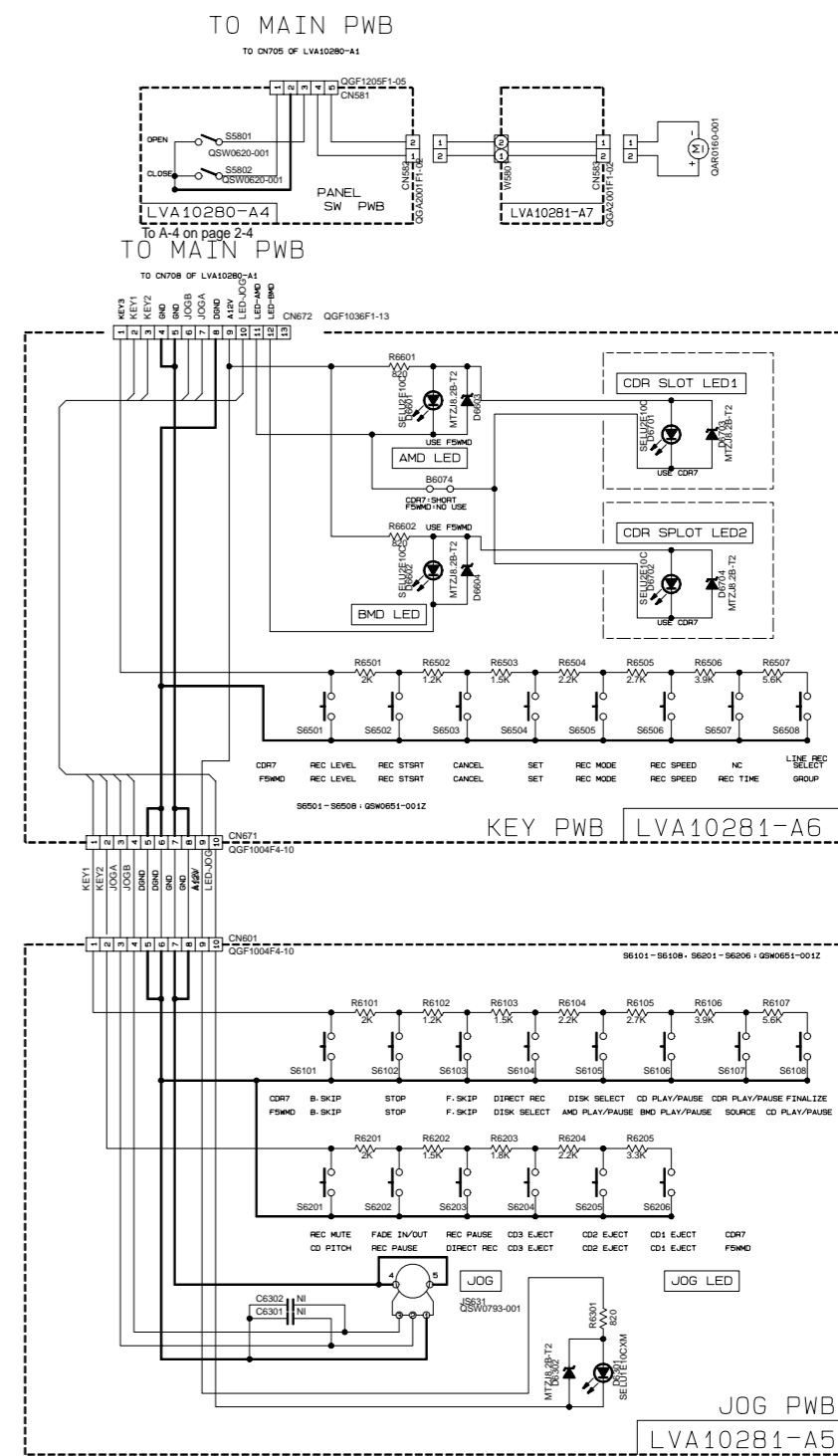
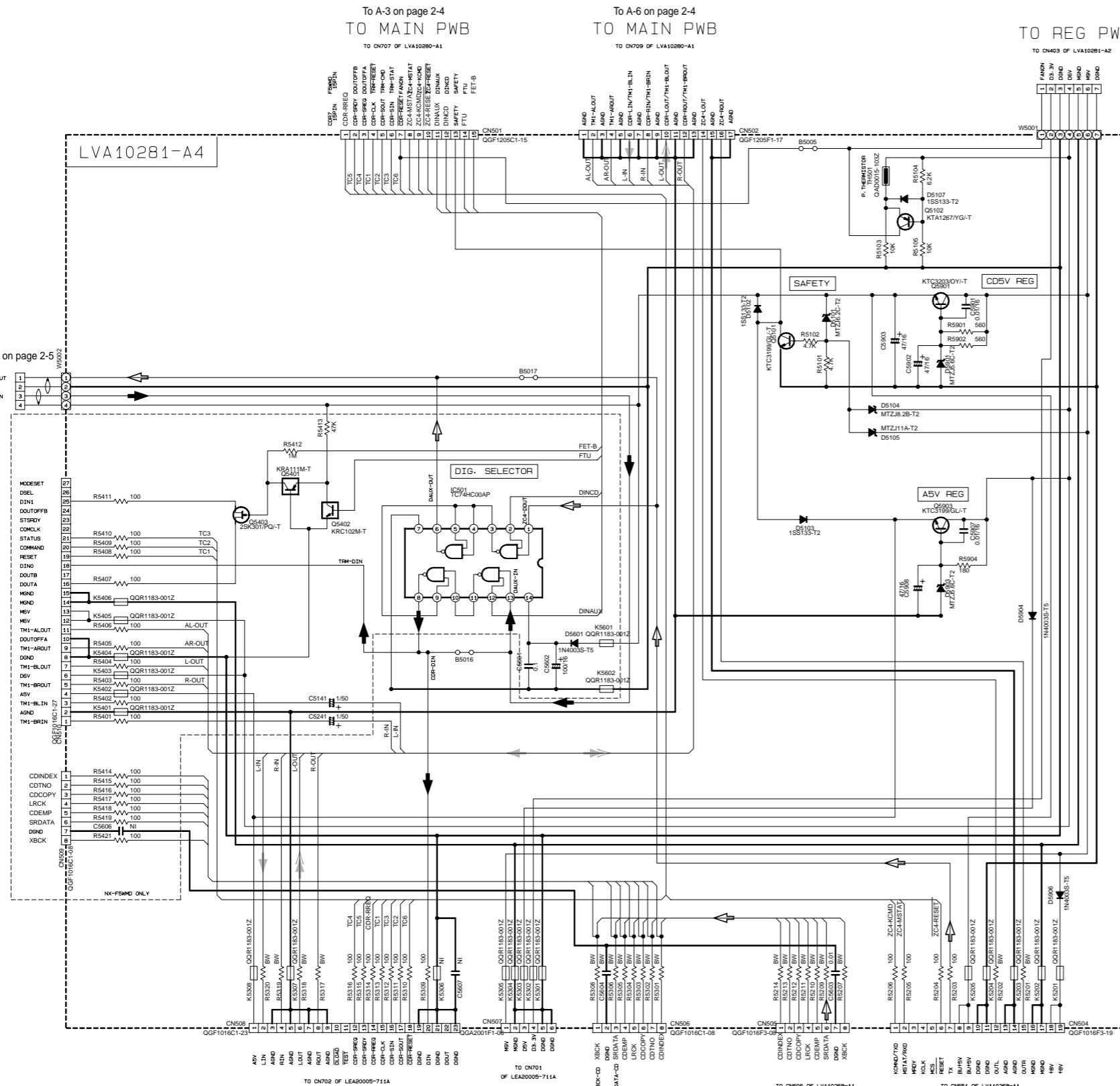
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

5
4
3
2
1

Key input section

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4
3
2
1

TO TUNER-I/O PWB
TO FMU-TRM-1



- ➔ CDR input signal
- ➔ CDR output signal
- ➔ Digital in signal
- ➔ Digital out signal



3CD Changer mechanism CD servo section

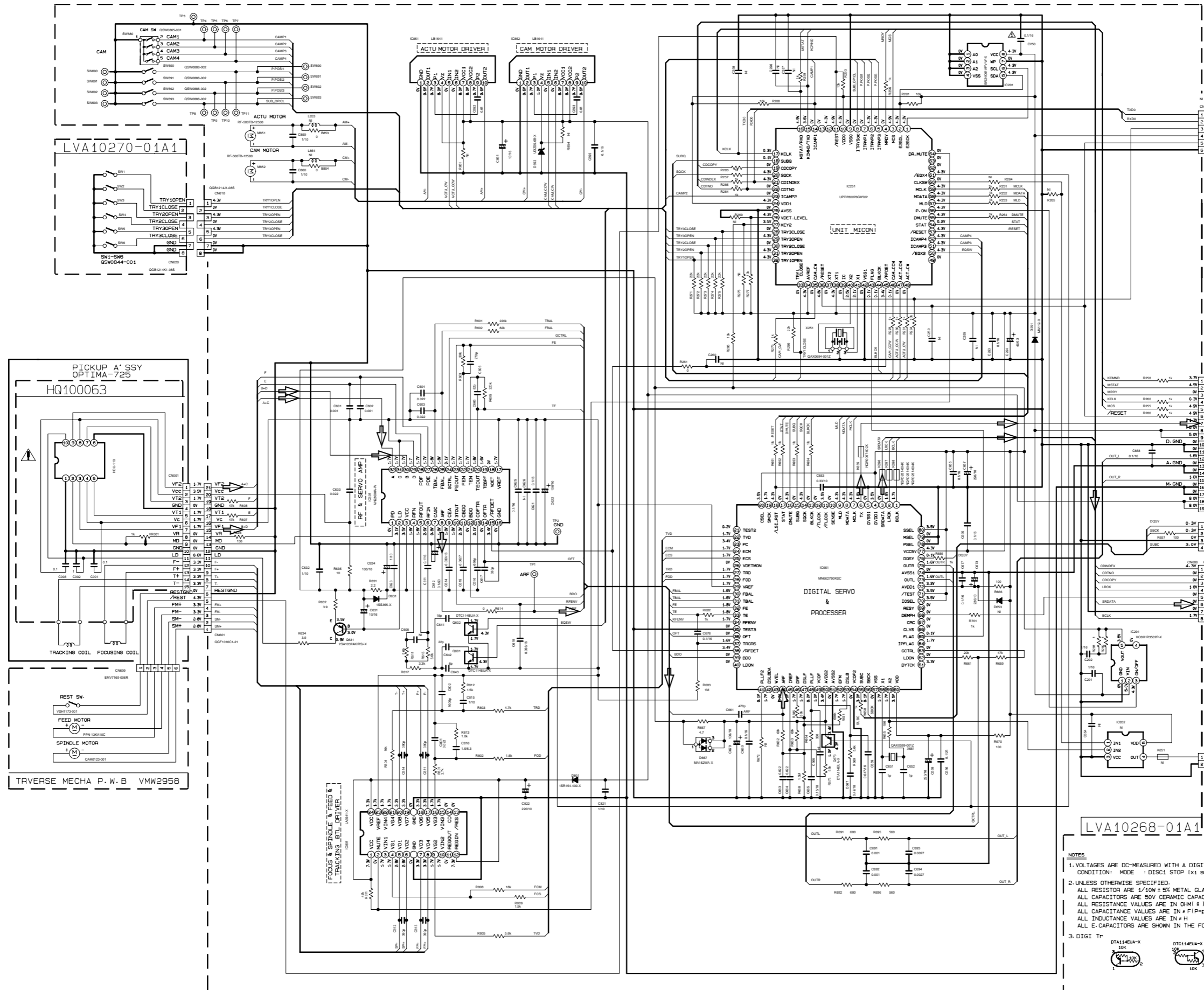
5

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FOR FLASH MICON

To F-2 on page 2-6 TO CN504

To A-2 on page 2-4 To E-2 on page 2-6 TO CN505

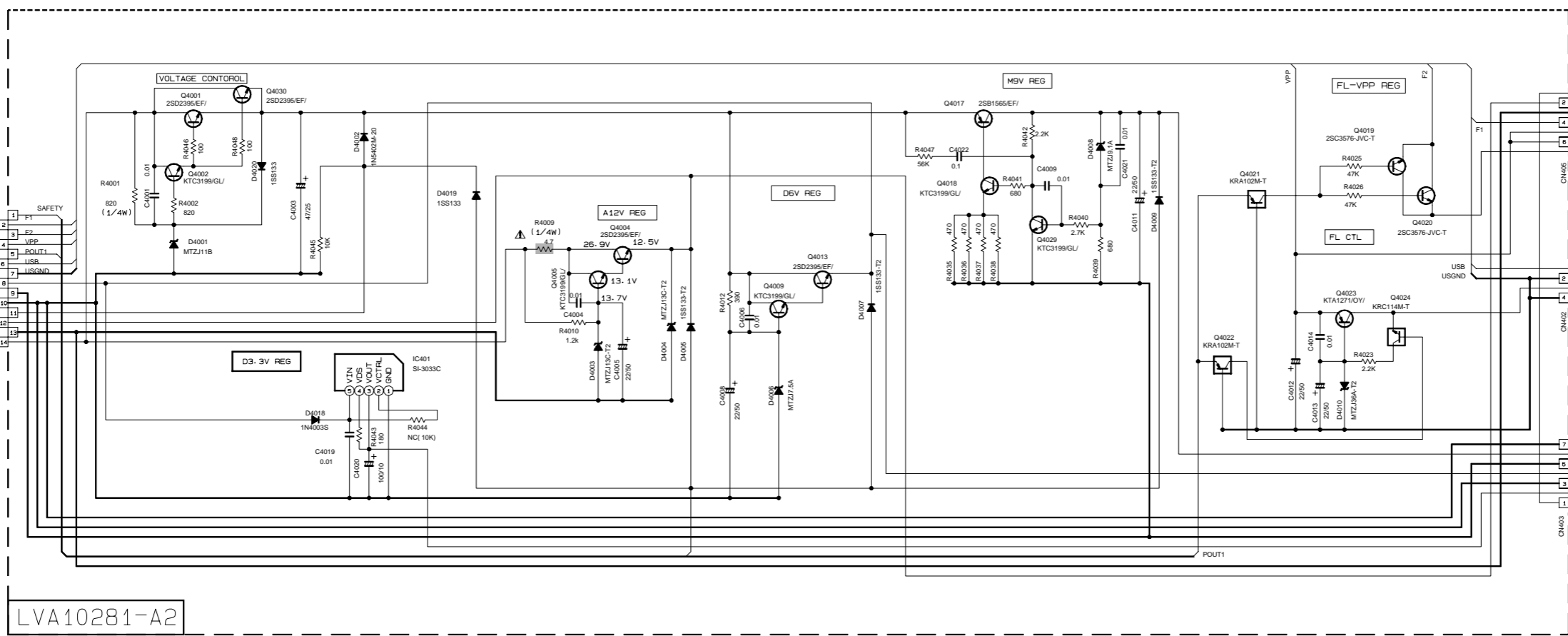
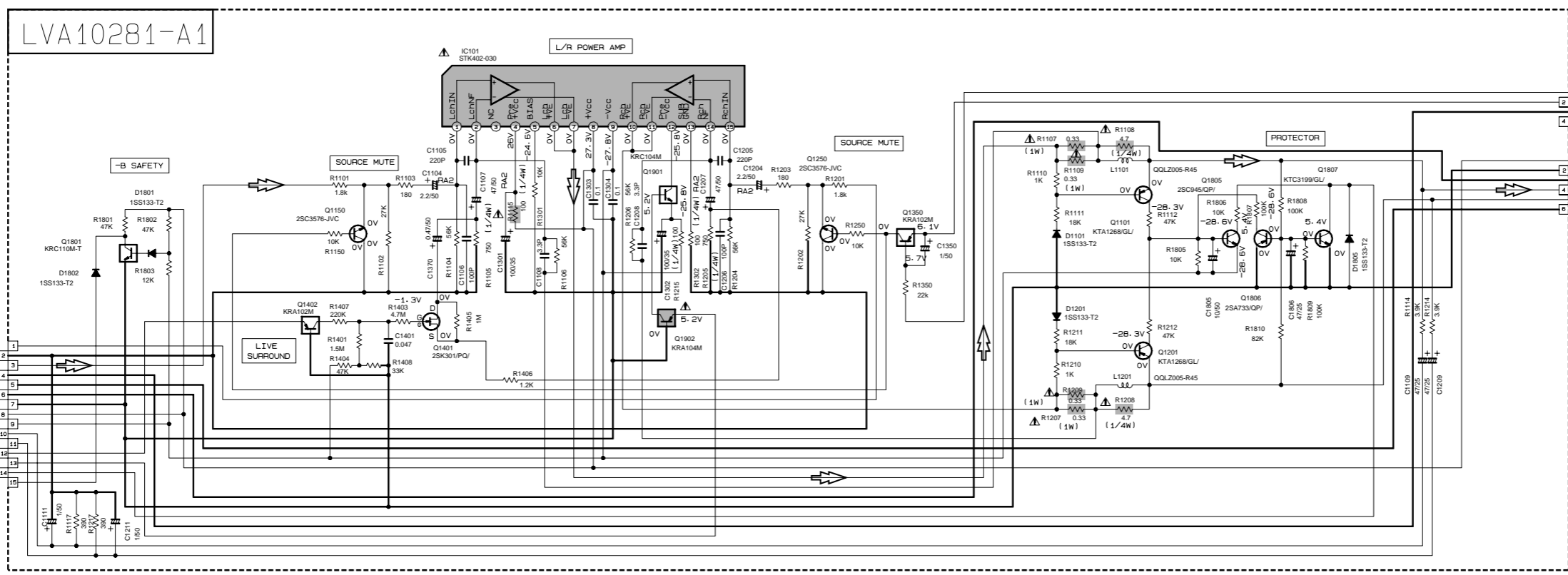
3CD Digital signal

- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
CONDITION: MODE : DISC1 STOP (x1 SPEED MODE)
 2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTOR ARE 1/10W ± 5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM (Ω).
ALL CAPACITANCE VALUES ARE IN nF (pF).
ALL INDUCTANCE VALUES ARE IN μH.
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
 3. DIGI Tr



MODEL FMU-ZC4-1

Power amplifier section



LVA10281-A1

LVA10281-A2

To I-5 on page 2-4

TO CN701 OF LVA1028B-A1

CN102
QGB2510K2-15

1 SIGR
2 AGND
3 SIGL
4 HPGND
5 LGND
6 PAMPND
7 A+B
8 A-B
9 AHL
10 AHR
11 SURROUND
12 STANDBY
13 PROTECT
14 SAFETY

To I-4 on page 2-4

TO CN702 OF LVA1028B-A1

CN401
QGB2510K2-14

1 SAFETY
2 F1
3 F2
4 -VPP
5 VPP
6 POUT1
7 US+H
8 US-ND
9 D5V
10 DGND
11 D+B
12 A+12V
13 AGND
14 A+H

CN103
QGB2024J1-045

1 MUTE
2 FL5V
3 HPGND
4 NC

To A-6 on page 2-9

CN209
OF LVA1028B1-A3

1 A+H
2 PRTGND
3 LGND
4 SP-L
5 SP-R
6 FGND

To A-5 on page 2-9

CN101
QGB2510K2-06

OF LVA1028B1-A3

CN405
QGB2024J1-075

1 FAN TEST
2 FAN+B
3 FANGND
4 F1
5 -VPP
6 VPP
7 F2

To B-7 on page 2-9

CN406
OF LVA1028B1-A3

CN402
QGB2510K2-04

1 US+H
2 DGND
3 FL+H
4 FL-ND
5 DGND

To C-7 on page 2-9

CN403
QGB2510K2-07

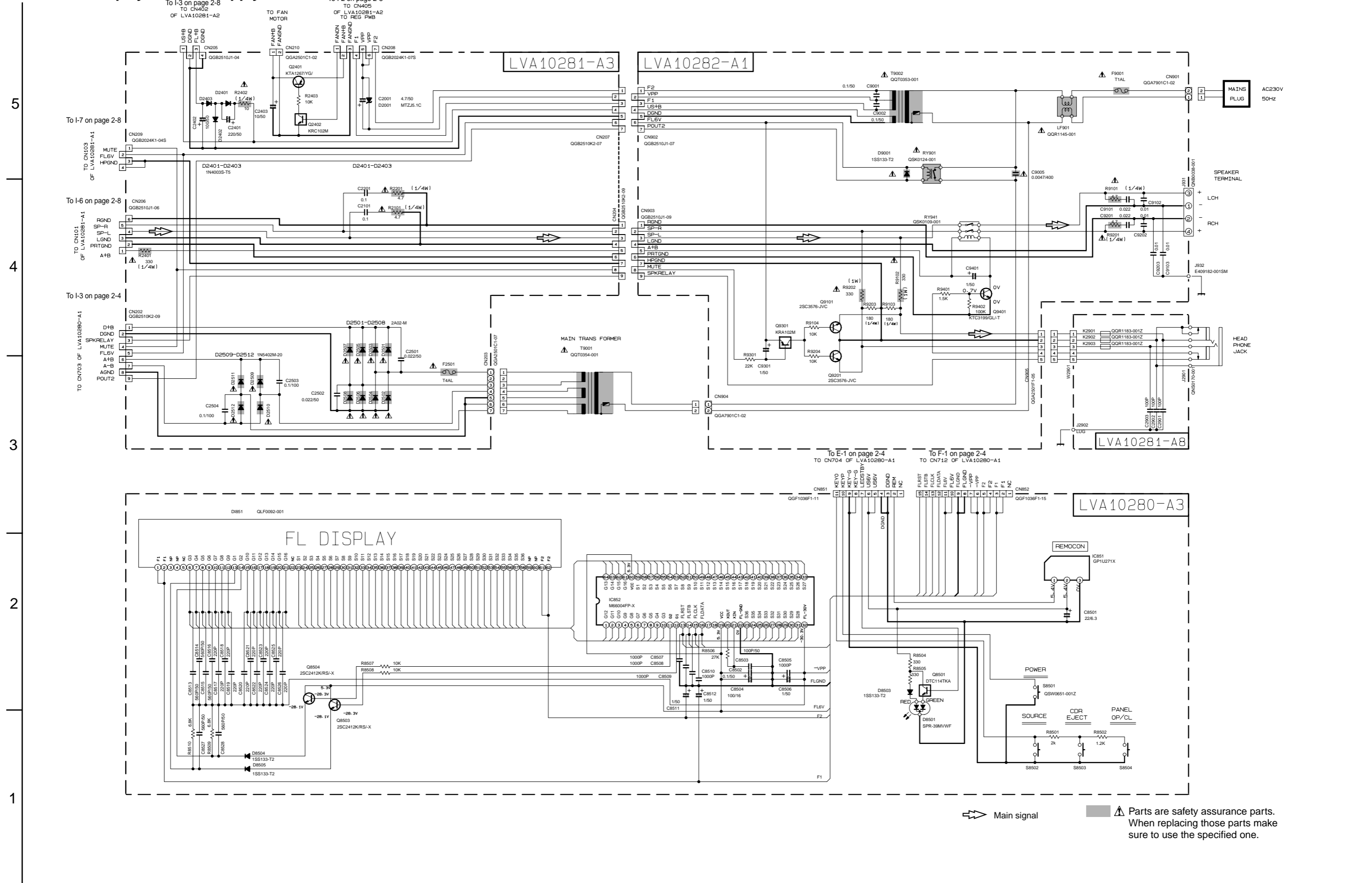
7 DGND
6 MSV (MSV-F5WMD)
5 MGND
4 D5V
3 DGND
2 THERMO
1 FANON

To W5001
OF LVA1028B1-A4

➡ Main signal

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

FL display & Power supply section



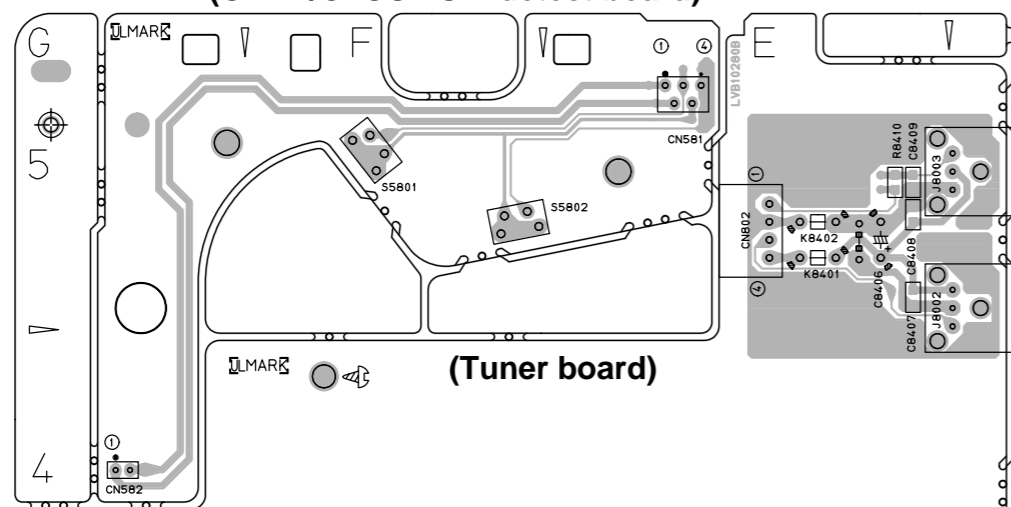
➡ Main signal

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

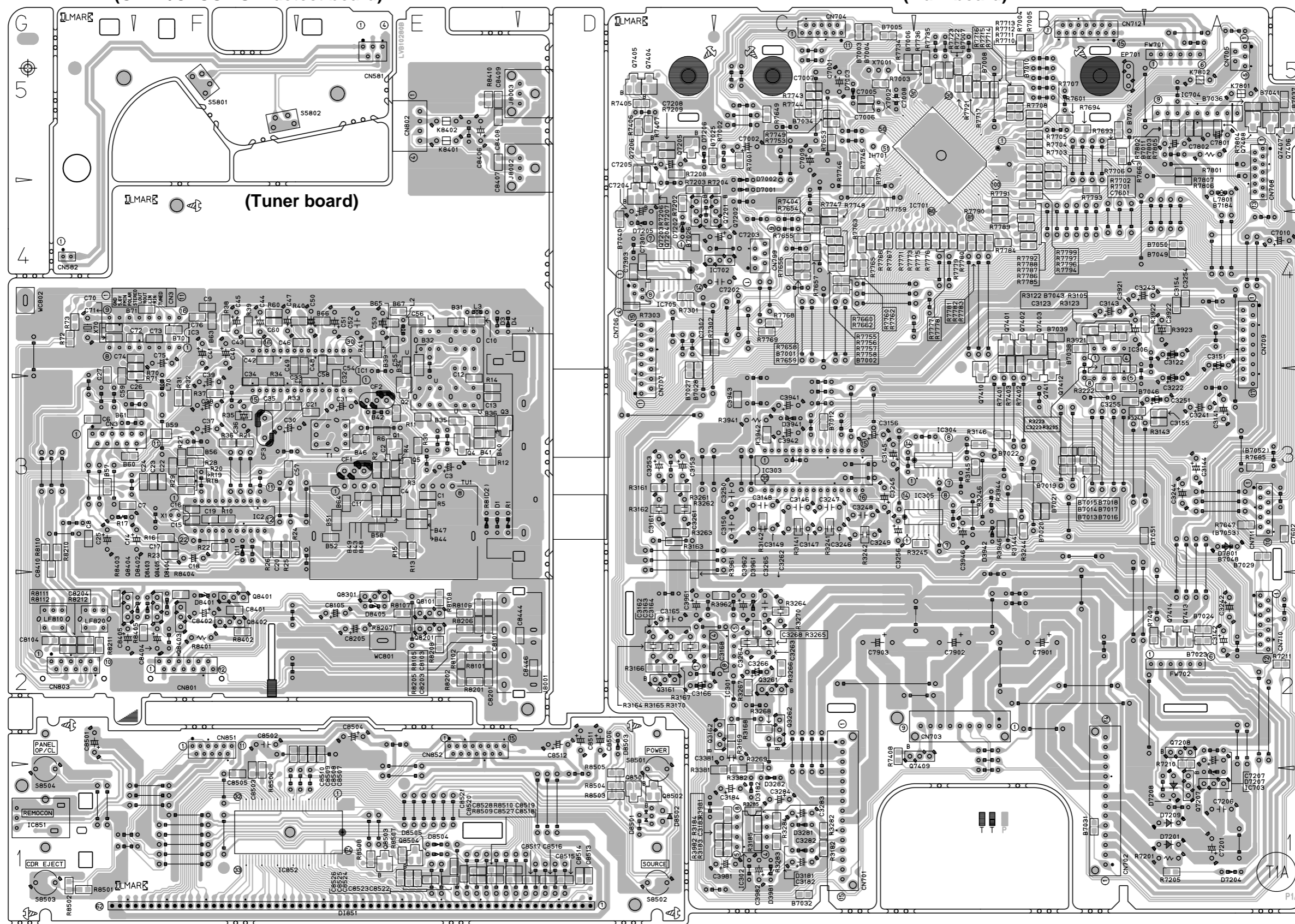
Printed circuit boards

■ Main section

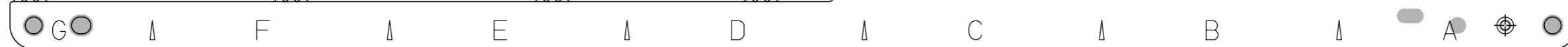
(OPEN/CLOSE SW detect board)



(Main board)



(LCD board)



5
4
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A B C D E F G H

■ Amp section

(Power board)

(Function swith board)

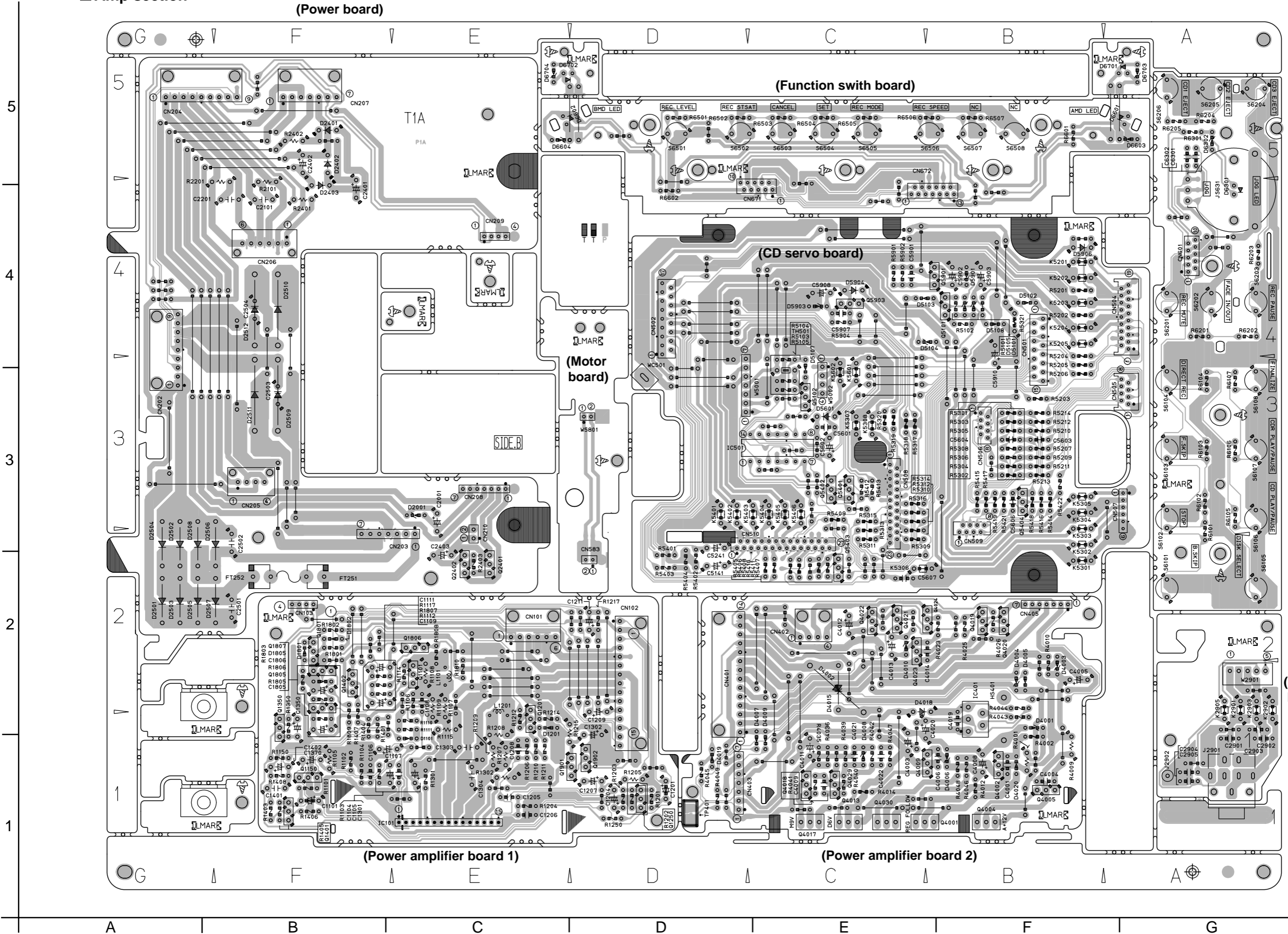
(CD servo board)

(Motor board)

(Phone jack board)

(Power amplifier board 1)

(Power amplifier board 2)



■ CDR connection board

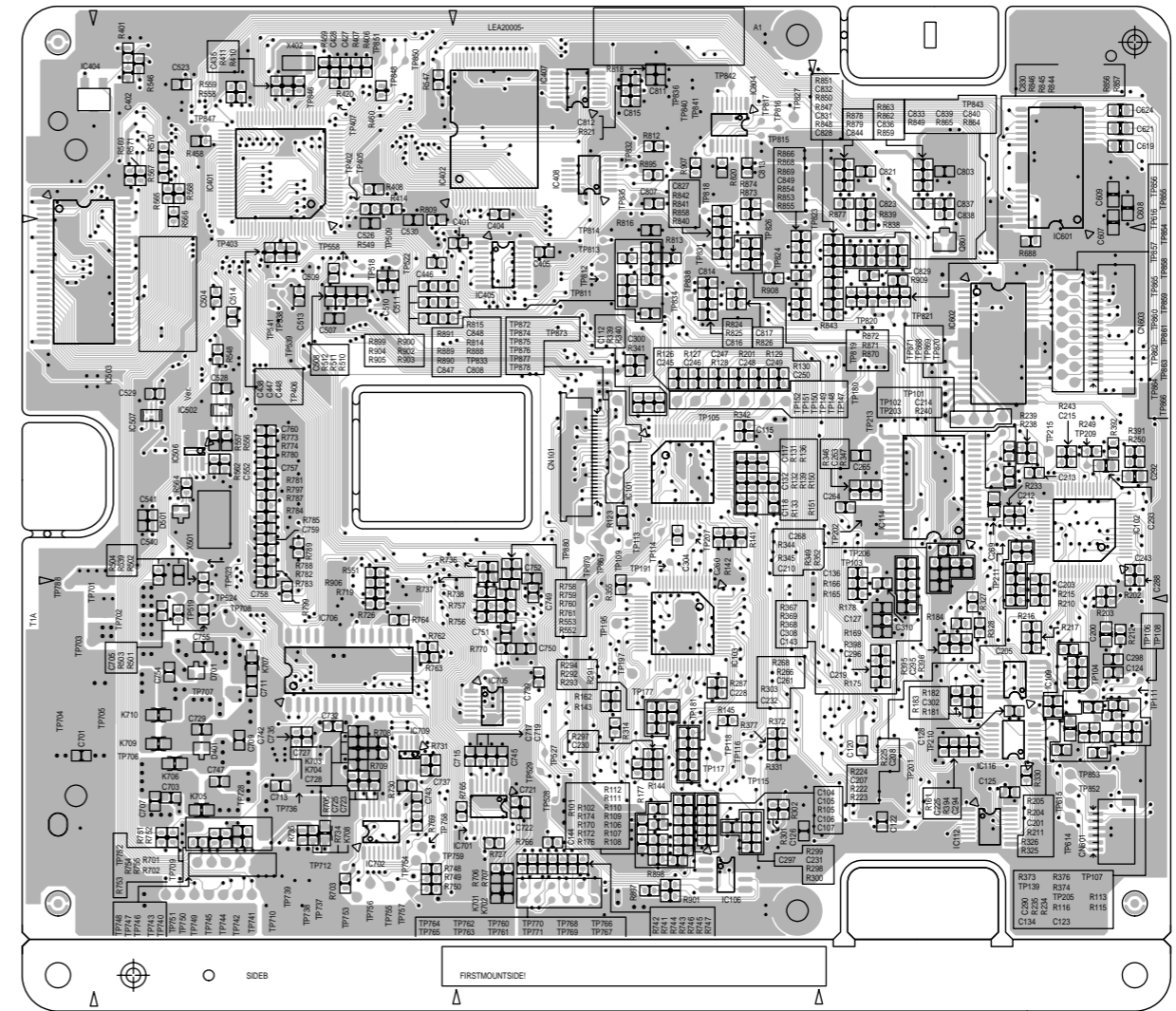
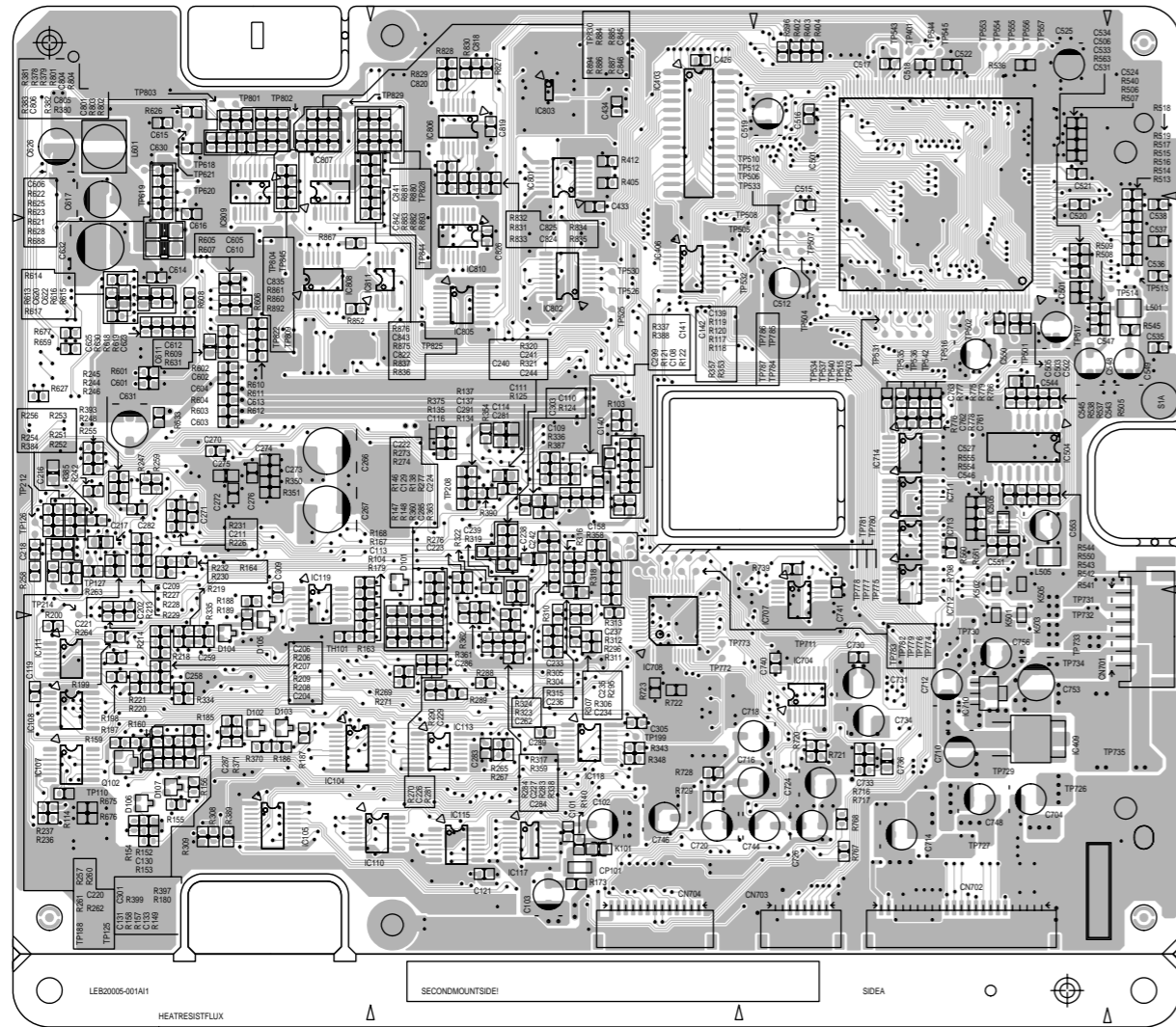
5

4

3

2

1



A

B

C

2-10

D

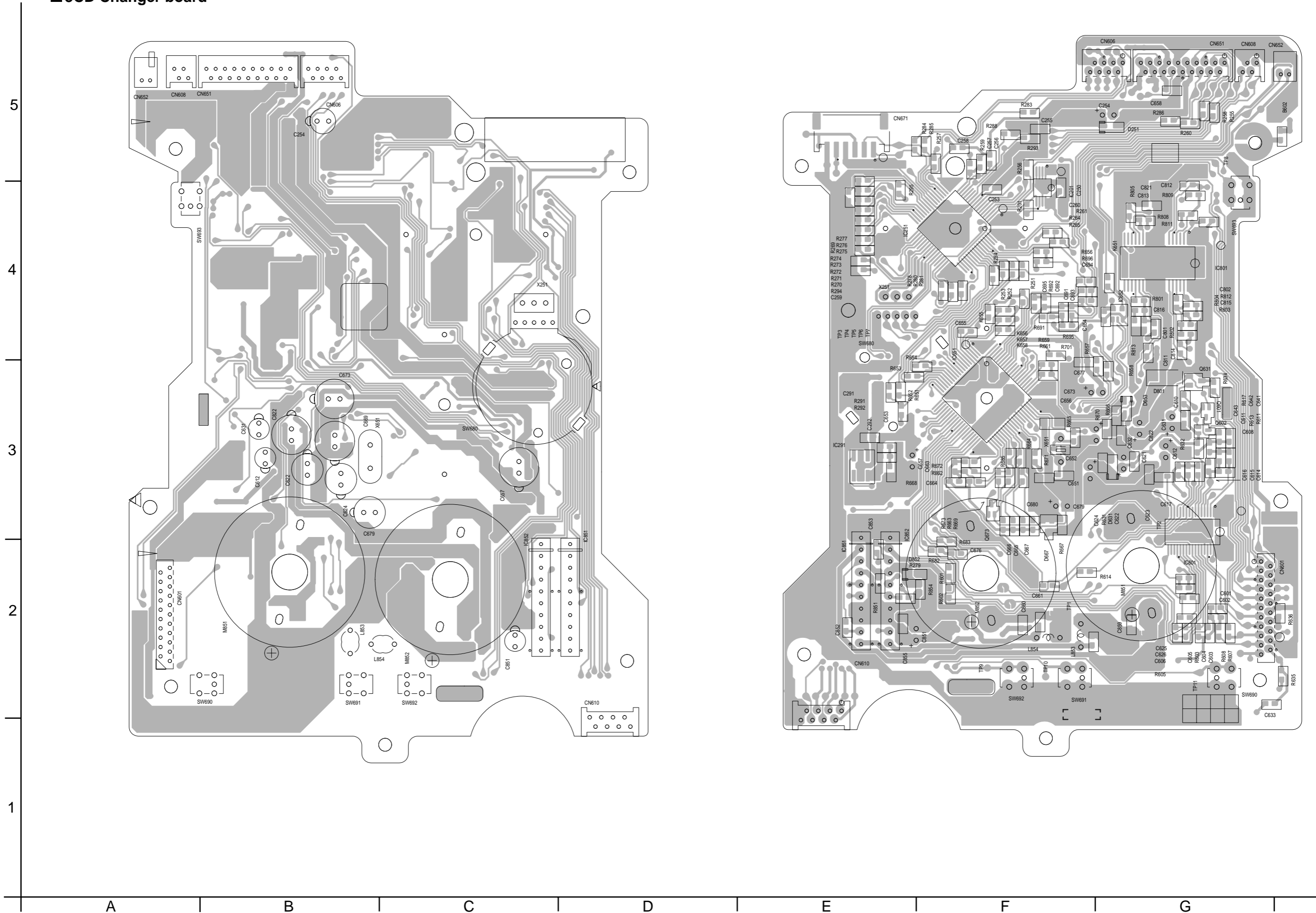
E

F

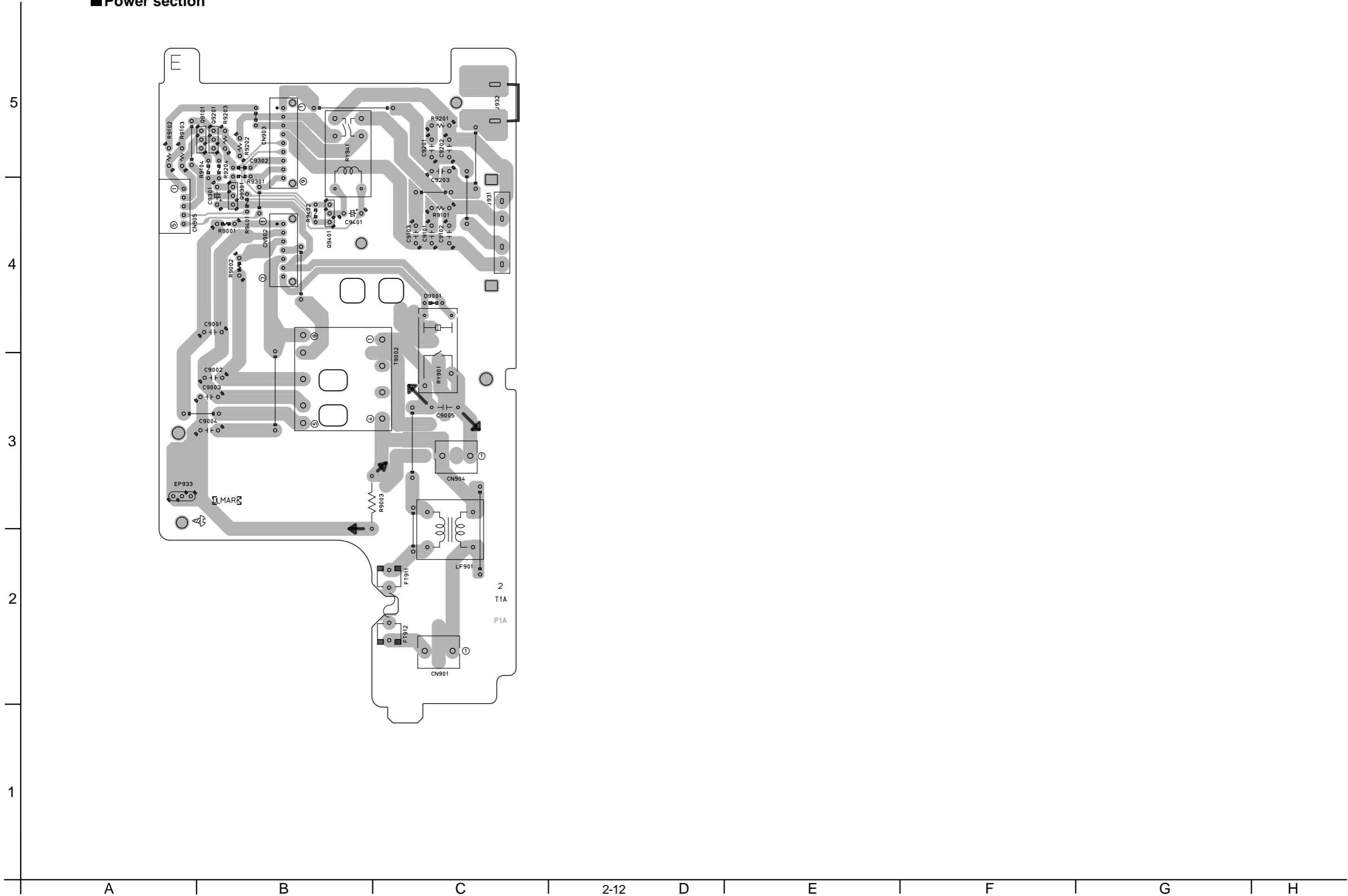
G

H

3CD Changer board



■ Power section



-MEMO-