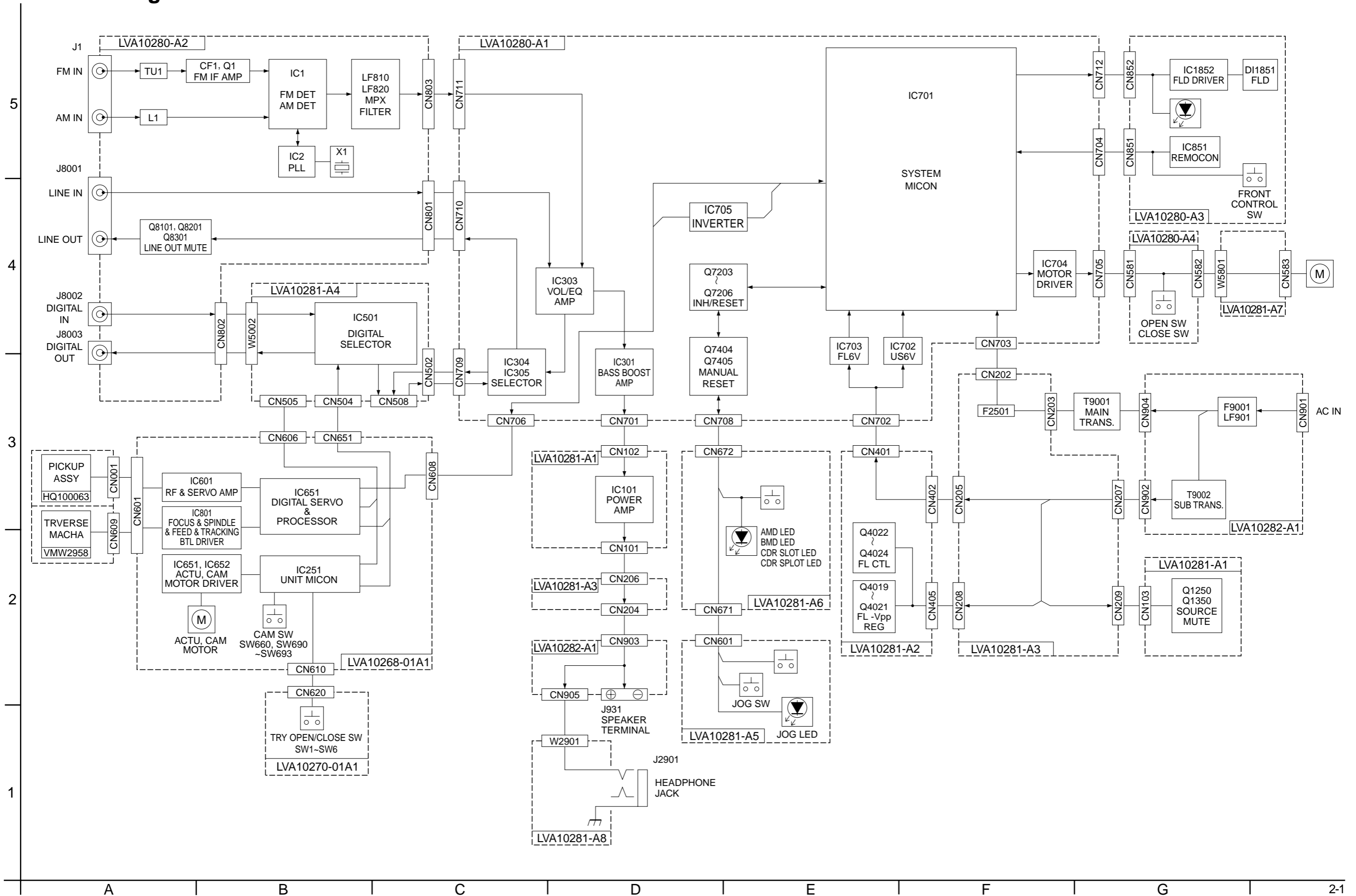


In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (⚡) and ICP (●) or identified by the "△" mark nearby are critical for safety. When replacing them, be sure to use the parts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

5

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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

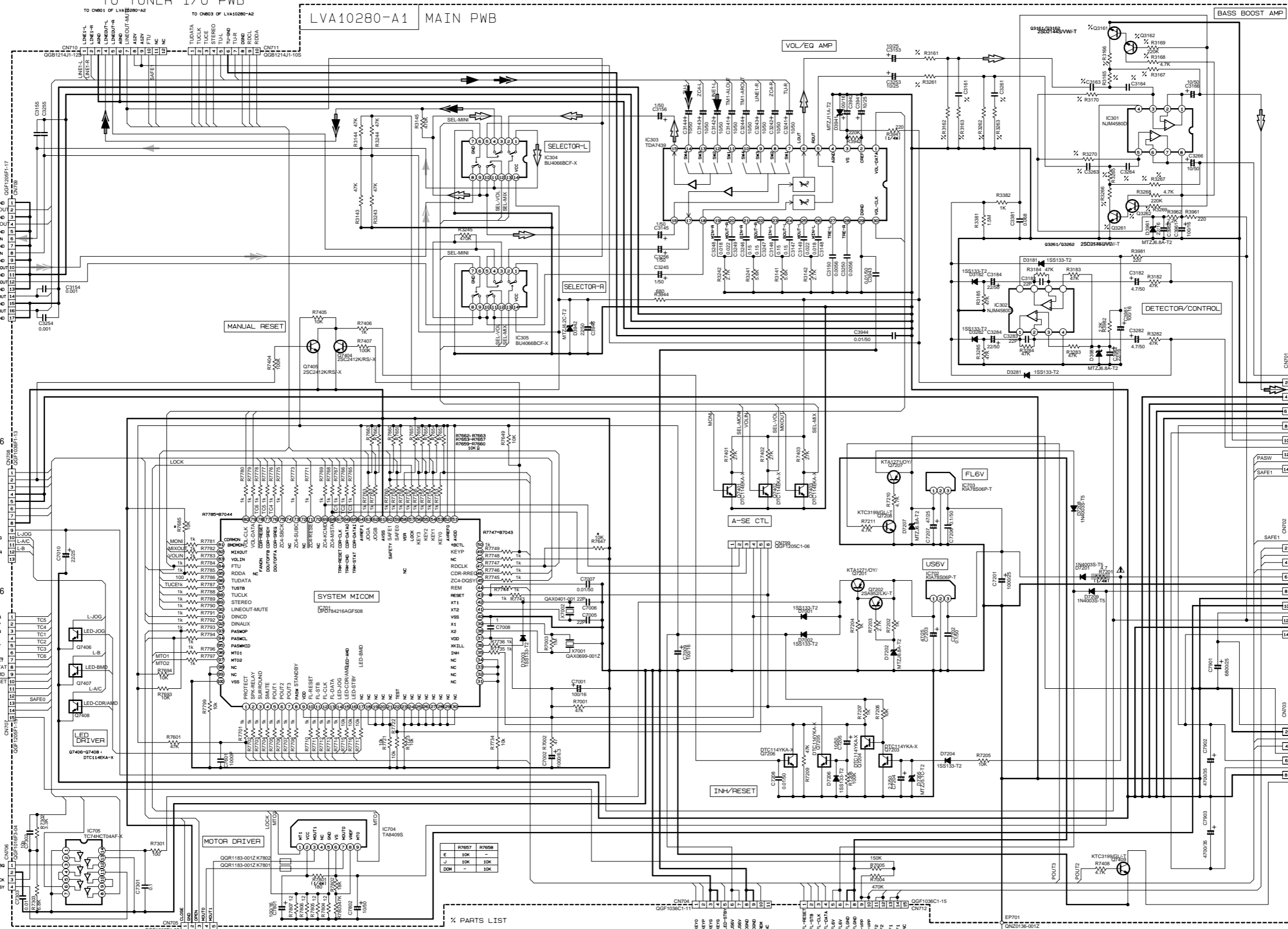
To H-3 on page 2-7

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 POWER-AMP PWB

TO REG PWB

TO REAR PWB

**% PARTS LIST**

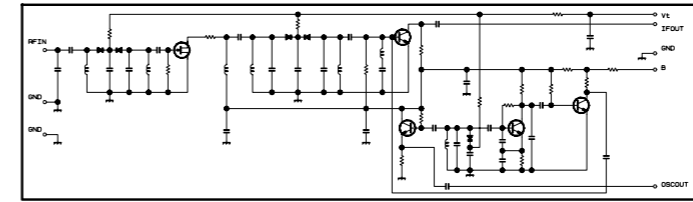
| REF   | QTY | PART NO. | VALUE | REF   | QTY | PART NO. | VALUE |
|-------|-----|----------|-------|-------|-----|----------|-------|
| R7057 | 1   | R7058    | 10K   | R7059 | 1   | R7060    | 10K   |
| R7061 | 1   | R7062    | 10K   | R7063 | 1   | R7064    | 10K   |
| R7065 | 1   | R7066    | 10K   | R7067 | 1   | R7068    | 10K   |
| R7069 | 1   | R7070    | 10K   | R7071 | 1   | R7072    | 10K   |
| R7073 | 1   | R7074    | 10K   | R7075 | 1   | R7076    | 10K   |
| R7077 | 1   | R7078    | 10K   | R7079 | 1   | R7080    | 10K   |
| R7081 | 1   | R7082    | 10K   | R7083 | 1   | R7084    | 10K   |
| R7085 | 1   | R7086    | 10K   | R7087 | 1   | R7088    | 10K   |
| R7089 | 1   | R7090    | 10K   | R7091 | 1   | R7092    | 10K   |
| R7093 | 1   | R7094    | 10K   | R7095 | 1   | R7096    | 10K   |
| R7097 | 1   | R7098    | 10K   | R7099 | 1   | R7100    | 10K   |
| R7101 | 1   | R7102    | 10K   | R7103 | 1   | R7104    | 10K   |
| R7105 | 1   | R7106    | 10K   | R7107 | 1   | R7108    | 10K   |
| R7109 | 1   | R7110    | 10K   | R7111 | 1   | R7112    | 10K   |
| R7113 | 1   | R7114    | 10K   | R7115 | 1   | R7116    | 10K   |
| R7117 | 1   | R7118    | 10K   | R7119 | 1   | R7120    | 10K   |
| R7121 | 1   | R7122    | 10K   | R7123 | 1   | R7124    | 10K   |
| R7125 | 1   | R7126    | 10K   | R7127 | 1   | R7128    | 10K   |
| R7129 | 1   | R7130    | 10K   | R7131 | 1   | R7132    | 10K   |
| R7133 | 1   | R7134    | 10K   | R7135 | 1   | R7136    | 10K   |
| R7137 | 1   | R7138    | 10K   | R7139 | 1   | R7140    | 10K   |
| R7141 | 1   | R7142    | 10K   | R7143 | 1   | R7144    | 10K   |
| R7145 | 1   | R7146    | 10K   | R7147 | 1   | R7148    | 10K   |
| R7149 | 1   | R7150    | 10K   | R7151 | 1   | R7152    | 10K   |
| R7153 | 1   | R7154    | 10K   | R7155 | 1   | R7156    | 10K   |
| R7157 | 1   | R7158    | 10K   | R7159 | 1   | R7160    | 10K   |
| R7161 | 1   | R7162    | 10K   | R7163 | 1   | R7164    | 10K   |
| R7165 | 1   | R7166    | 10K   | R7167 | 1   | R7168    | 10K   |
| R7169 | 1   | R7170    | 10K   | R7171 | 1   | R7172    | 10K   |
| R7173 | 1   | R7174    | 10K   | R7175 | 1   | R7176    | 10K   |
| R7177 | 1   | R7178    | 10K   | R7179 | 1   | R7180    | 10K   |
| R7181 | 1   | R7182    | 10K   | R7183 | 1   | R7184    | 10K   |
| R7185 | 1   | R7186    | 10K   | R7187 | 1   | R7188    | 10K   |
| R7189 | 1   | R7190    | 10K   | R7191 | 1   | R7192    | 10K   |
| R7193 | 1   | R7194    | 10K   | R7195 | 1   | R7196    | 10K   |
| R7197 | 1   | R7198    | 10K   | R7199 | 1   | R7200    | 10K   |
| R7201 | 1   | R7202    | 10K   | R7203 | 1   | R7204    | 10K   |
| R7205 | 1   | R7206    | 10K   | R7207 | 1   | R7208    | 10K   |
| R7209 | 1   | R7210    | 10K   | R7211 | 1   | R7212    | 10K   |
| R7213 | 1   | R7214    | 10K   | R7215 | 1   | R7216    | 10K   |
| R7217 | 1   | R7218    | 10K   | R7219 | 1   | R7220    | 10K   |
| R7221 | 1   | R7222    | 10K   | R7223 | 1   | R7224    | 10K   |
| R7225 | 1   | R7226    | 10K   | R7227 | 1   | R7228    | 10K   |
| R7229 | 1   | R7230    | 10K   | R7231 | 1   | R7232    | 10K   |
| R7233 | 1   | R7234    | 10K   | R7235 | 1   | R7236    | 10K   |
| R7237 | 1   | R7238    | 10K   | R7239 | 1   | R7240    | 10K   |
| R7241 | 1   | R7242    | 10K   | R7243 | 1   | R7244    | 10K   |
| R7245 | 1   | R7246    | 10K   | R7247 | 1   | R7248    | 10K   |
| R7249 | 1   | R7250    | 10K   | R7251 | 1   | R7252    | 10K   |
| R7253 | 1   | R7254    | 10K   | R7255 | 1   | R7256    | 10K   |
| R7257 | 1   | R7258    | 10K   | R7259 | 1   | R7260    | 10K   |
| R7261 | 1   | R7262    | 10K   | R7263 | 1   | R7264    | 10K   |
| R7265 | 1   | R7266    | 10K   | R7267 | 1   | R7268    | 10K   |
| R7269 | 1   | R7270    | 10K   | R7271 | 1   | R7272    | 10K   |
| R7273 | 1   | R7274    | 10K   | R7275 | 1   | R7276    | 10K   |
| R7277 | 1   | R7278    | 10K   | R7279 | 1   | R7280    | 10K   |
| R7281 | 1   | R7282    | 10K   | R7283 | 1   | R7284    | 10K   |
| R7285 | 1   | R7286    | 10K   | R7287 | 1   | R7288    | 10K   |
| R7289 | 1   | R7290    | 10K   | R7291 | 1   | R7292    | 10K   |
| R7293 | 1   | R7294    | 10K   | R7295 | 1   | R7296    | 10K   |
| R7297 | 1   | R7298    | 10K   | R7299 | 1   | R7300    | 10K   |
| R7301 | 1   | R7302    | 10K   | R7303 | 1   | R7304    | 10K   |
| R7305 | 1   | R7306    | 10K   | R7307 | 1   | R7308    | 10K   |
| R7309 | 1   | R7310    | 10K   | R7311 | 1   | R7312    | 10K   |
| R7313 | 1   | R7314    | 10K   | R7315 | 1   | R7316    | 10K   |
| R7317 | 1   | R7318    | 10K   | R7319 | 1   | R7320    | 10K   |
| R7321 | 1   | R7322    | 10K   | R7323 | 1   | R7324    | 10K   |
| R7325 | 1   | R7326    | 10K   | R7327 | 1   | R7328    | 10K   |
| R7329 | 1   | R7330    | 10K   | R7331 | 1   | R7332    | 10K   |
| R7333 | 1   | R7334    | 10K   | R7335 | 1   | R7336    | 10K   |
| R7337 | 1   | R7338    | 10K   | R7339 | 1   | R7340    | 10K   |
| R7341 | 1   | R7342    | 10K   | R7343 | 1   | R7344    | 10K   |
| R7345 | 1   | R7346    | 10K   | R7347 | 1   | R7348    | 10K   |
| R7349 | 1   | R7350    | 10K   | R7351 | 1   | R7352    | 10K   |
| R7353 | 1   | R7354    | 10K   | R7355 | 1   | R7356    | 10K   |
| R7357 | 1   | R7358    | 10K   | R7359 | 1   | R7360    | 10K   |
| R7361 | 1   | R7362    | 10K   | R7363 | 1   | R7364    | 10K   |
| R7365 | 1   | R7366    | 10K   | R7367 | 1   | R7368    | 10K   |
| R7369 | 1   | R7370    | 10K   | R7371 | 1   | R7372    | 10K   |
| R7373 | 1   | R7374    | 10K   | R7375 | 1   | R7376    | 10K   |
| R7377 | 1   | R7378    | 10K   | R7379 | 1   | R7380    | 10K   |
| R7381 | 1   | R7382    | 10K   | R7383 | 1   | R7384    | 10K   |
| R7385 | 1   | R7386    | 10K   | R7387 | 1   | R7388    | 10K   |
| R7389 | 1   | R7390    | 10K   | R7391 | 1   | R7392    | 10K   |
| R7393 | 1   | R7394    | 10K   | R7395 | 1   | R7396    | 10K   |
| R7397 | 1   | R7398    | 10K   | R7399 | 1   | R7400    | 10K   |
| R7401 | 1   | R7402    | 10K   | R7403 | 1   | R7404    | 10K   |
| R7405 | 1   | R7406    | 10K   | R7407 | 1   | R7408    | 10K   |
| R7409 | 1   | R7410    | 10K   | R7411 | 1   | R7412    | 10K   |
| R7413 | 1   | R7414    | 10K   | R7415 | 1   | R7416    | 10K   |
| R7417 | 1   | R7418    | 10K   | R7419 | 1   | R7420    | 10K   |
| R7421 | 1   | R7422    | 10K   | R7423 | 1   | R7424    | 10K   |
| R7425 | 1   | R7426    | 10K   | R7427 | 1   | R7428    | 10K   |
| R7429 | 1   | R7430    | 10K   | R7431 | 1   | R7432    | 10K   |
| R7433 | 1   | R7434    | 10K   | R7435 | 1   | R7436    | 10K   |
| R7437 | 1   | R7438    | 10K   | R7439 | 1   | R7440    | 10K   |
| R7441 | 1   | R7442    | 10K   | R7443 | 1   | R7444    | 10K   |
| R7445 | 1   | R7446    | 10K   | R7447 | 1   | R7448    | 10K   |
| R7449 | 1   | R7450    | 10K   | R7451 | 1   | R7452    | 10K   |
| R7453 | 1   | R7454    | 10K   | R7455 | 1   | R7456    | 10K   |
| R7457 | 1   | R7458    | 10K   | R7459 | 1   | R7460    | 10K   |
| R7461 | 1   | R7462    | 10K   | R7463 | 1   | R7464    | 10K   |
| R7465 | 1   | R7466    | 10K   | R7467 | 1   | R7468    | 10K   |
| R7469 | 1   | R7470    | 10K   | R7471 | 1   | R7472    | 10K   |
| R7473 | 1   | R7474    | 10K   | R7475 | 1   | R7476    | 10K   |
| R7477 | 1   | R7478    | 10K   | R7479 | 1   | R7480    | 10K   |
| R7481 | 1   | R7482    | 10K   | R7483 | 1   | R7484    | 10K   |
| R7485 | 1   | R7486    | 10K   | R7487 | 1   | R7488    | 10K   |
| R7489 | 1   | R7490    | 10K   | R7491 | 1   | R7492    | 10K   |
| R7493 | 1   | R7494    | 10K   | R7495 | 1   | R7496    | 10K   |
| R7497 | 1   | R7498    | 10K   | R7499 | 1   | R7500    | 10K   |

- 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 ROY CERAMIC CAPACITORS.

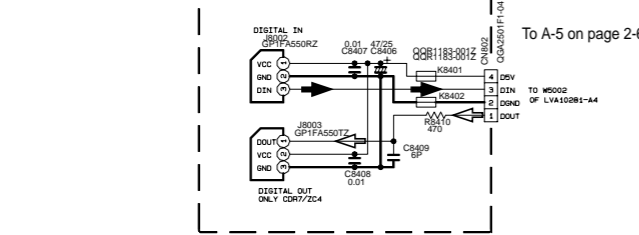
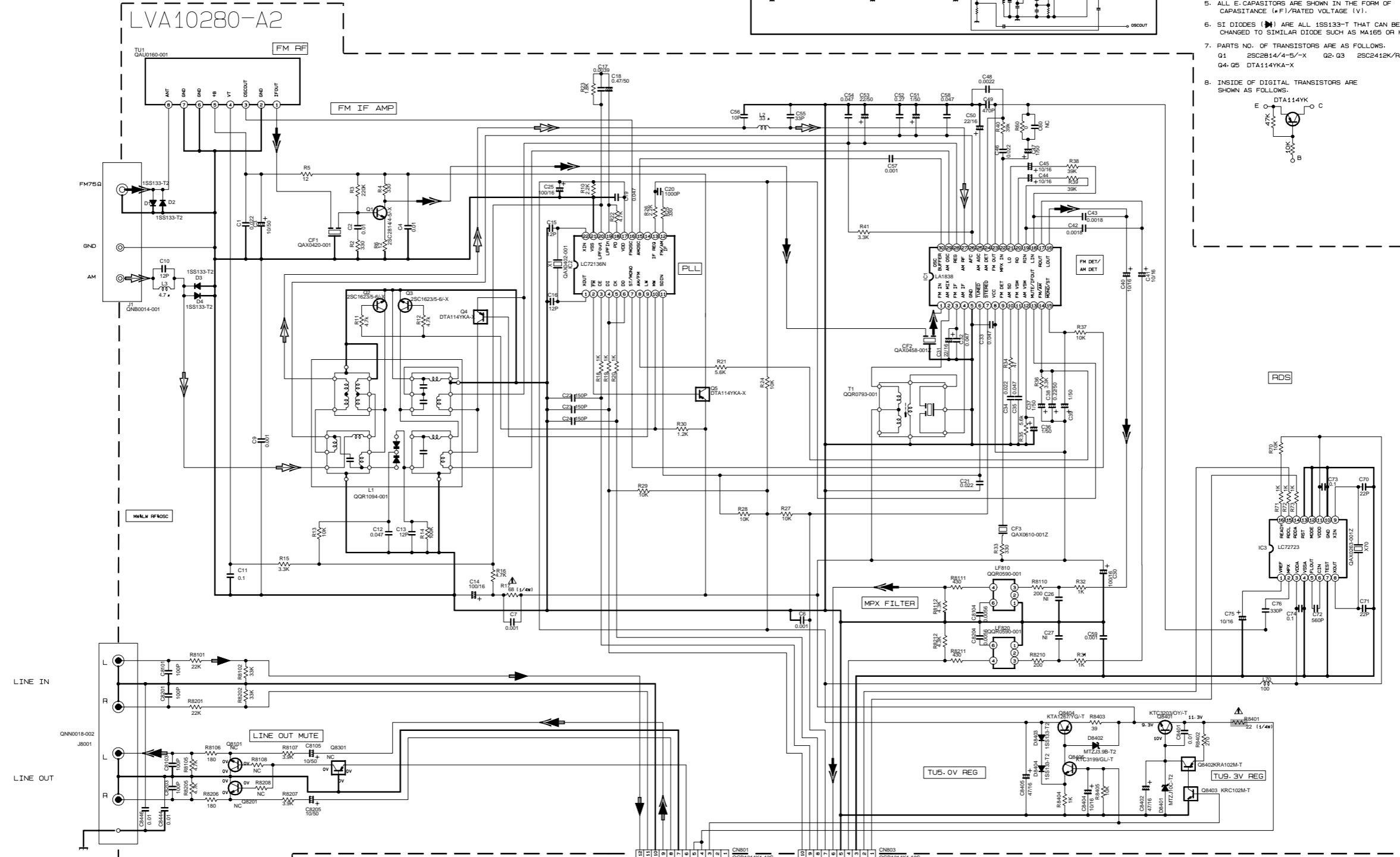
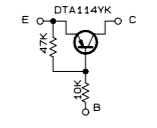
- Main signal
- Tuner signal
- Line signal
- TLine out signal
- CDR input signal
- CDR output signal
- Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

**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 | 2.8 | 0.7 | 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 (μF)/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 |    |    |

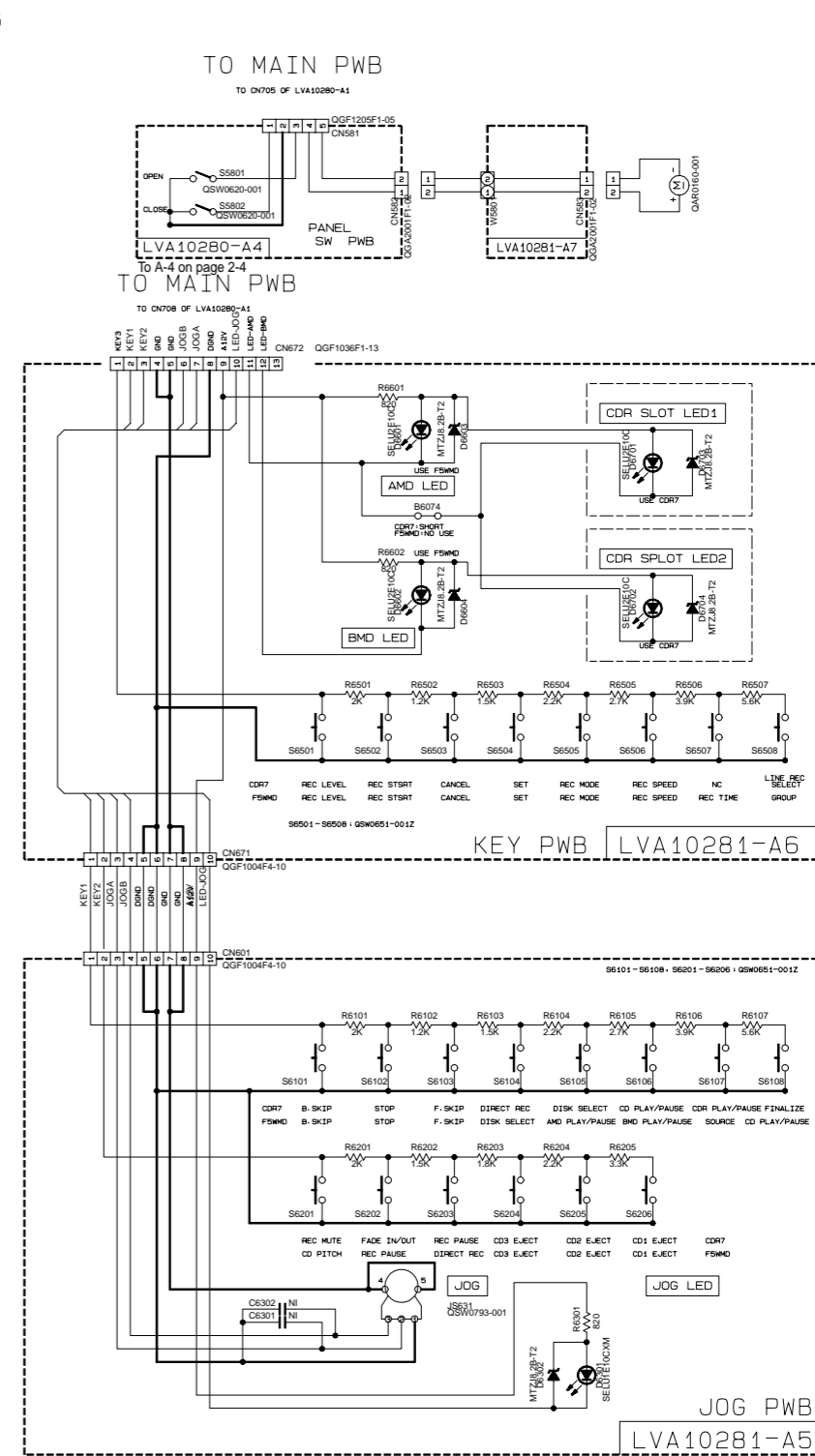
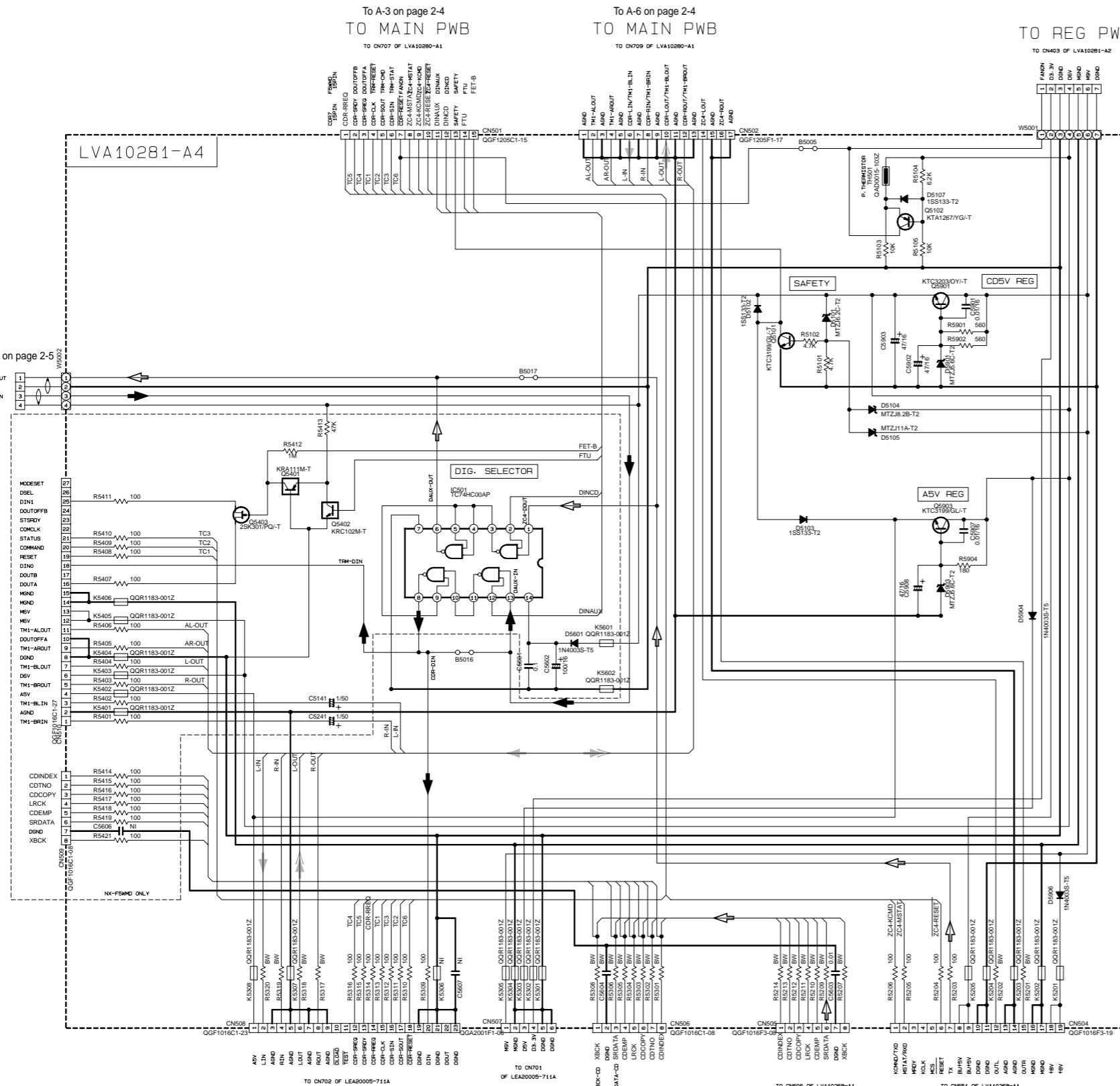
- Digital in signal
  - Digital out signal
  - FM/Tuner signal
  - AM signal
  - Line in signal
  - Line out signal
- Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

5  
4  
3  
2  
1

Key input section

5  
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

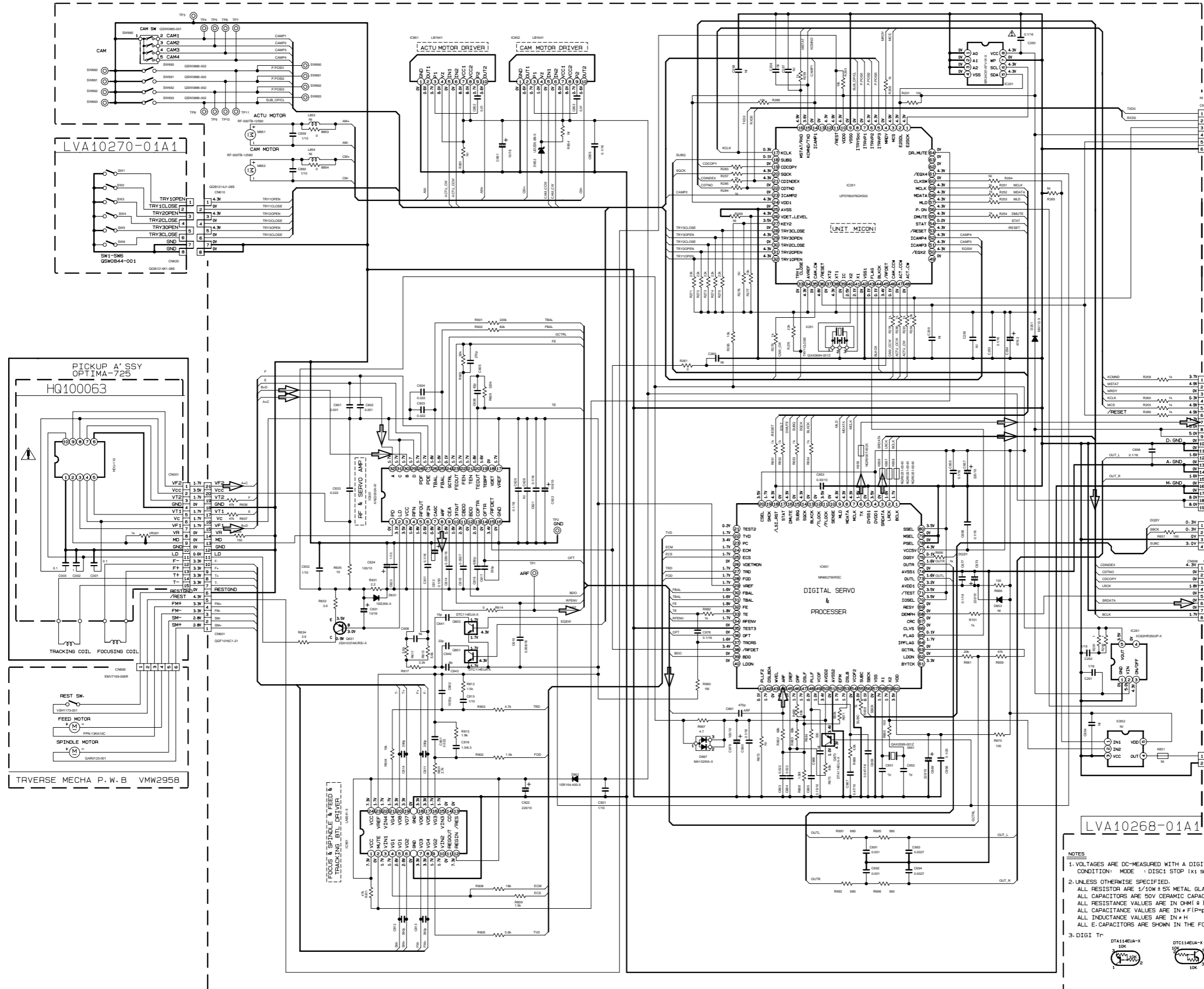
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FOR FLASH MICON

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

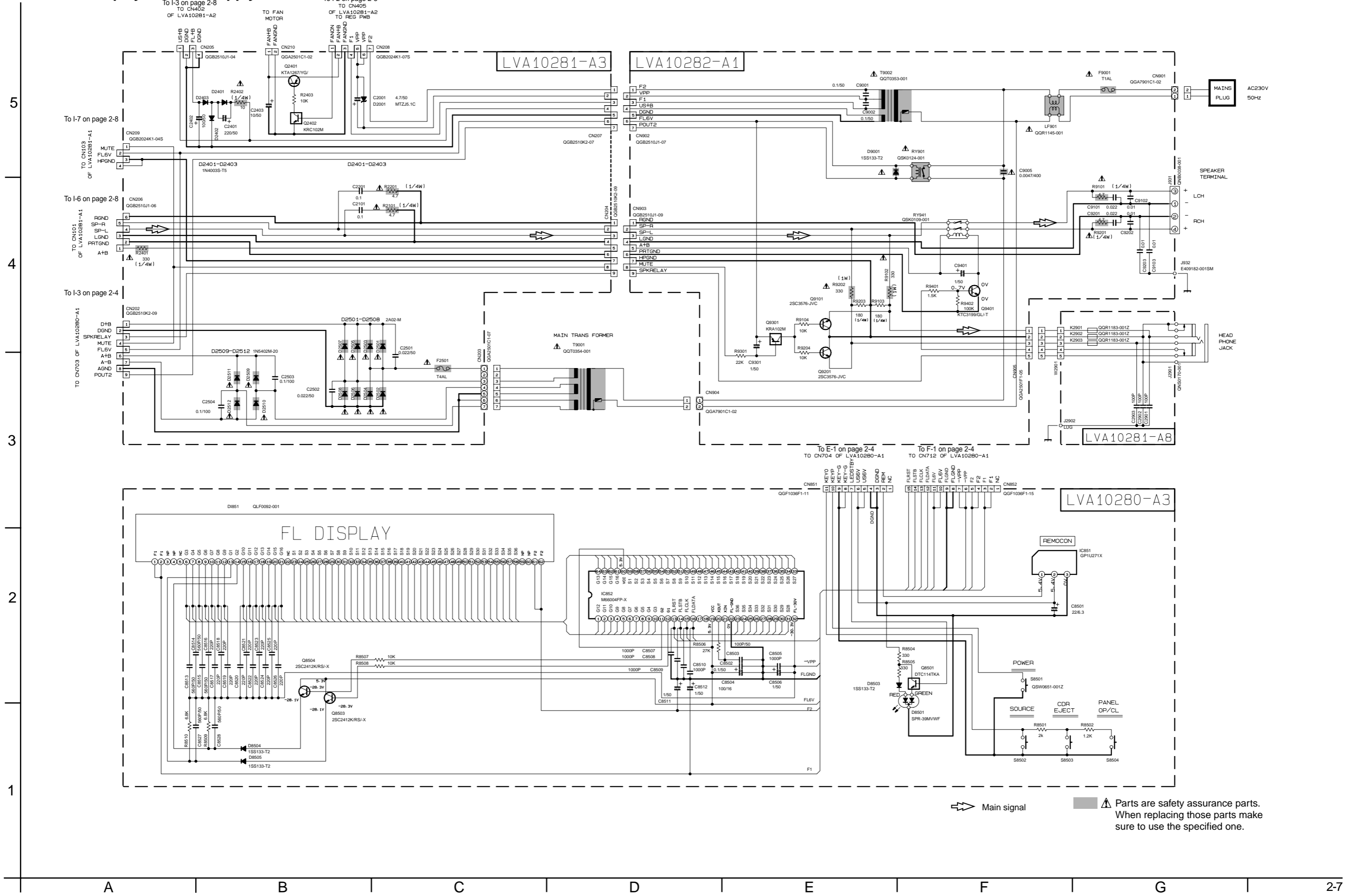
- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER  
CONDITION: MODE : DISC1 STOP (x1 SPEED MODE)
  2. UNLESS OTHERWISE SPECIFIED.  
ALL RESISTOR ARE 1/10W ± 5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM (Ω).  
ALL CAPACITANCE VALUES 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



FL display & Power supply section



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



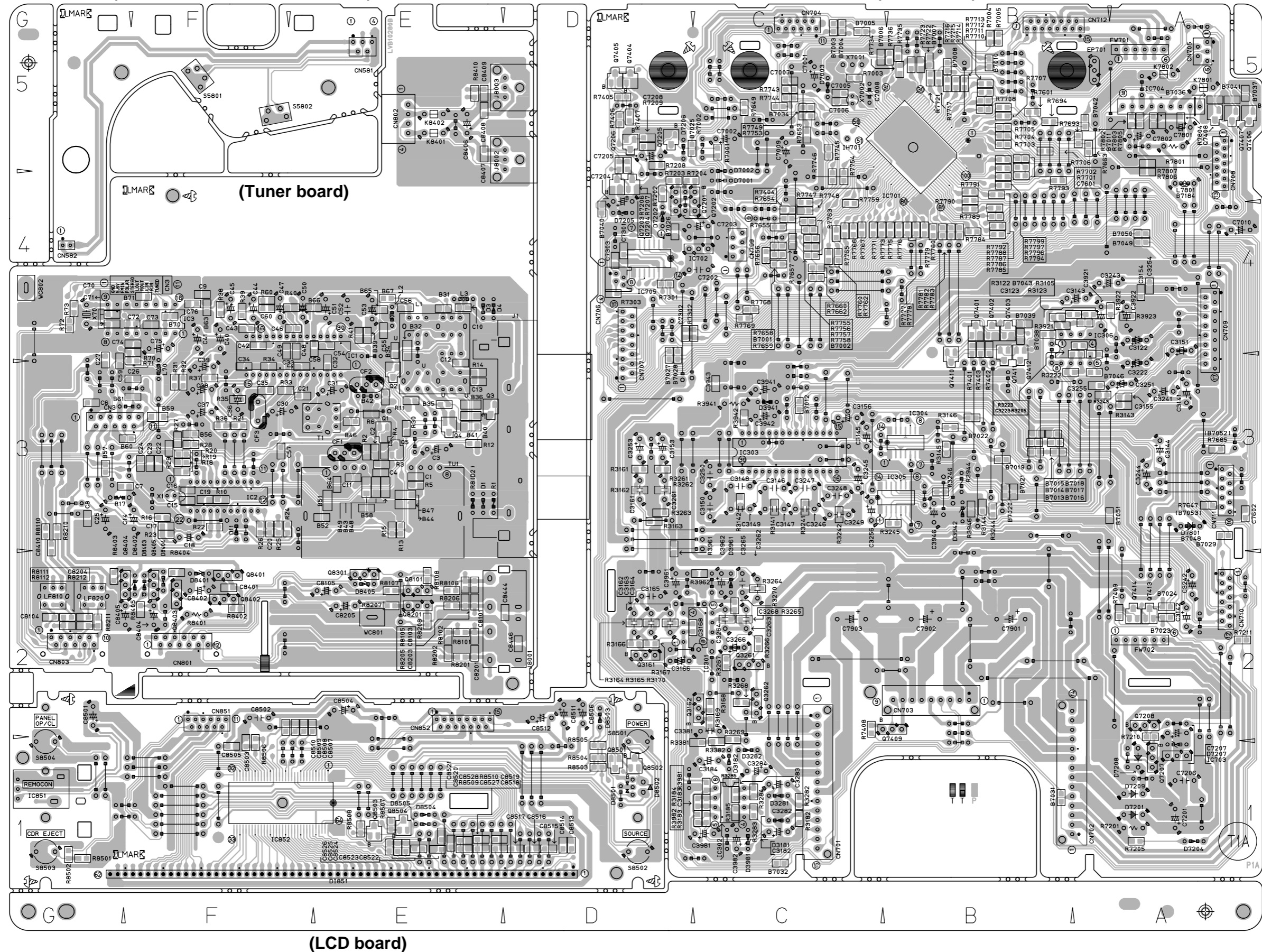
# Printed circuit boards

## Main section

(OPEN/CLOSE SW detect board)

(Tuner board)

(Main board)



(LCD board)

■ Amp section

(Power board)

(Function swith board)

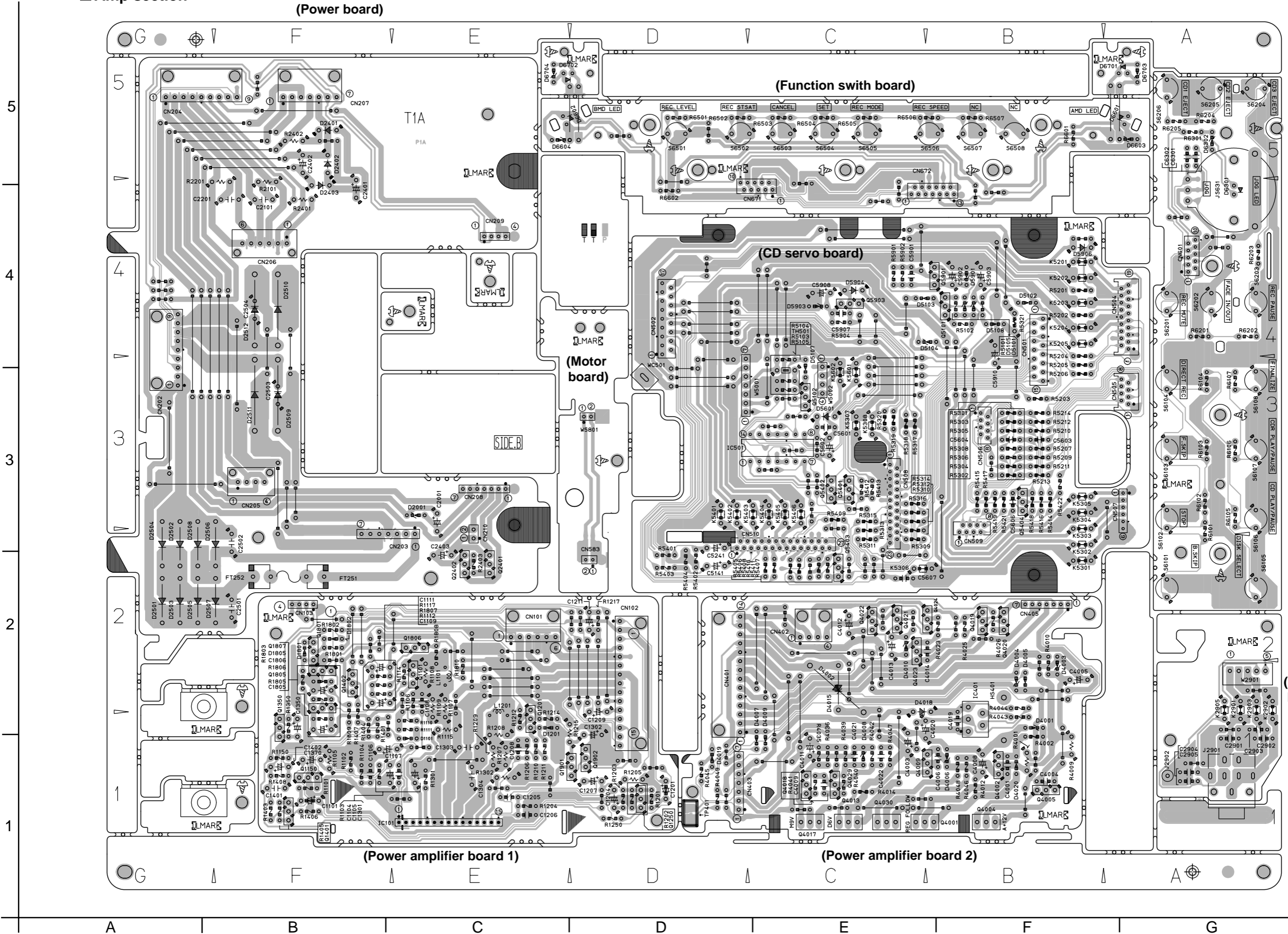
(CD servo board)

(Motor board)

(Phone jack board)

(Power amplifier board 1)

(Power amplifier board 2)



■ CDR connection board

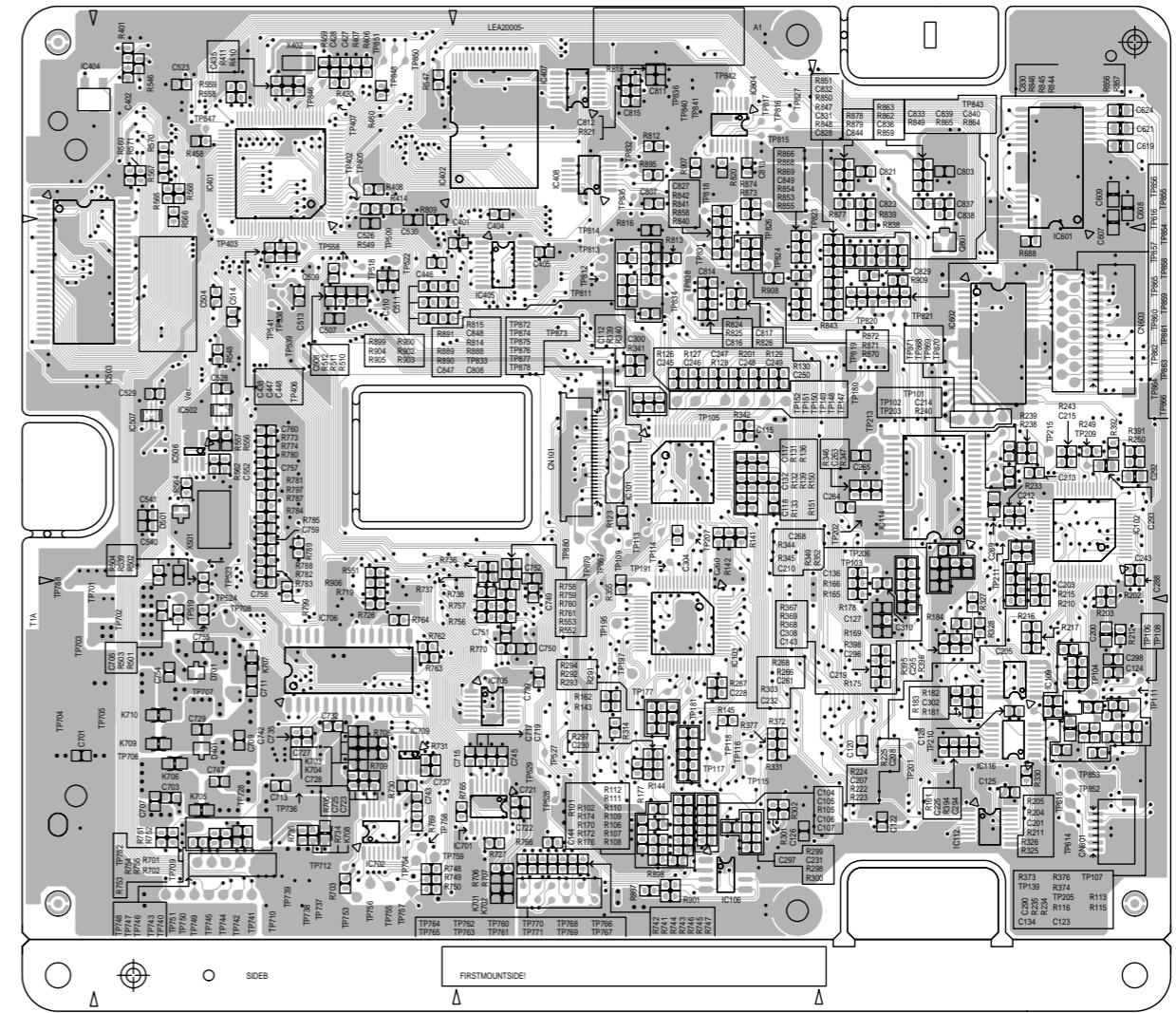
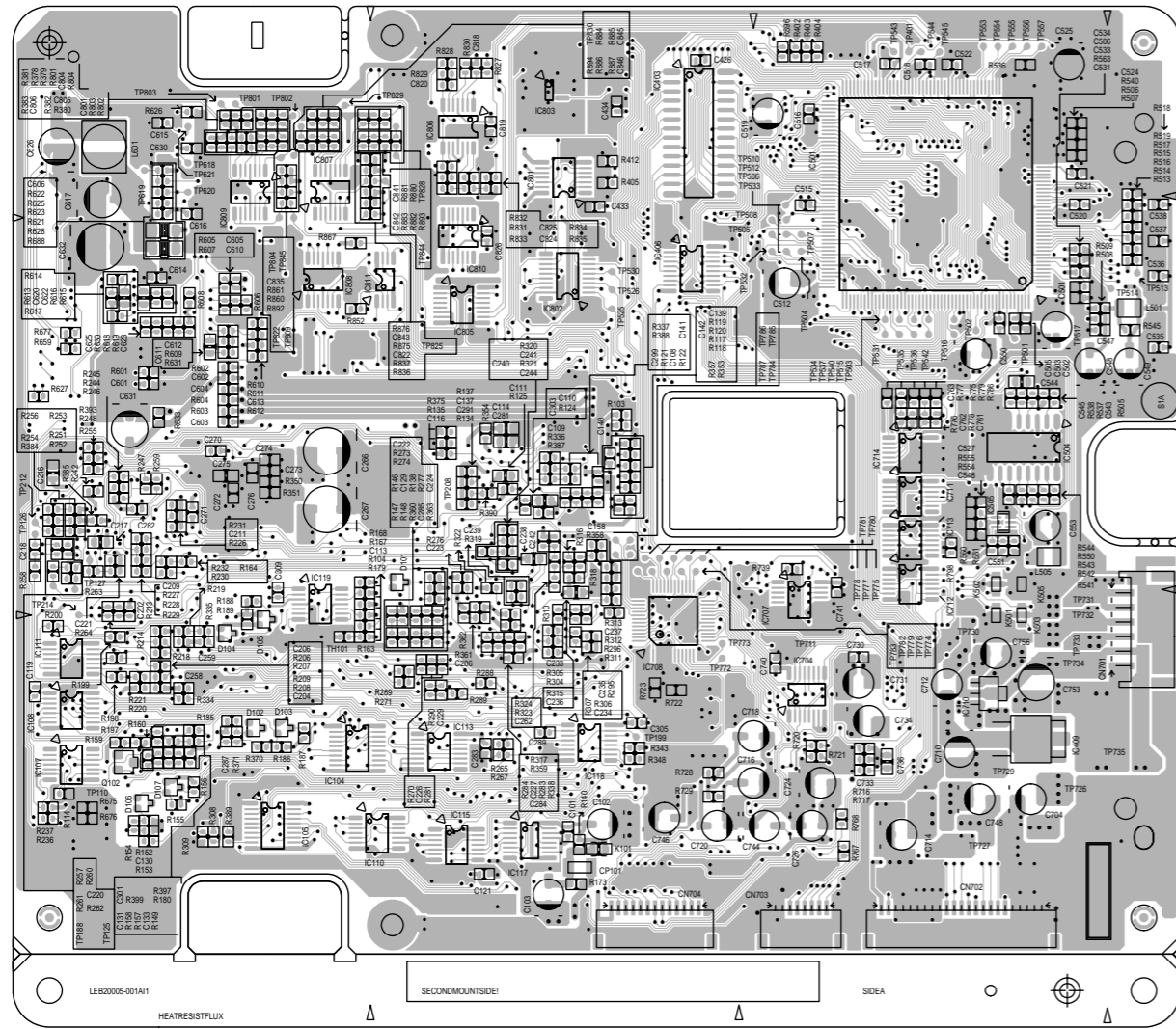
5

4

3

2

1



A

B

C

2-10

D

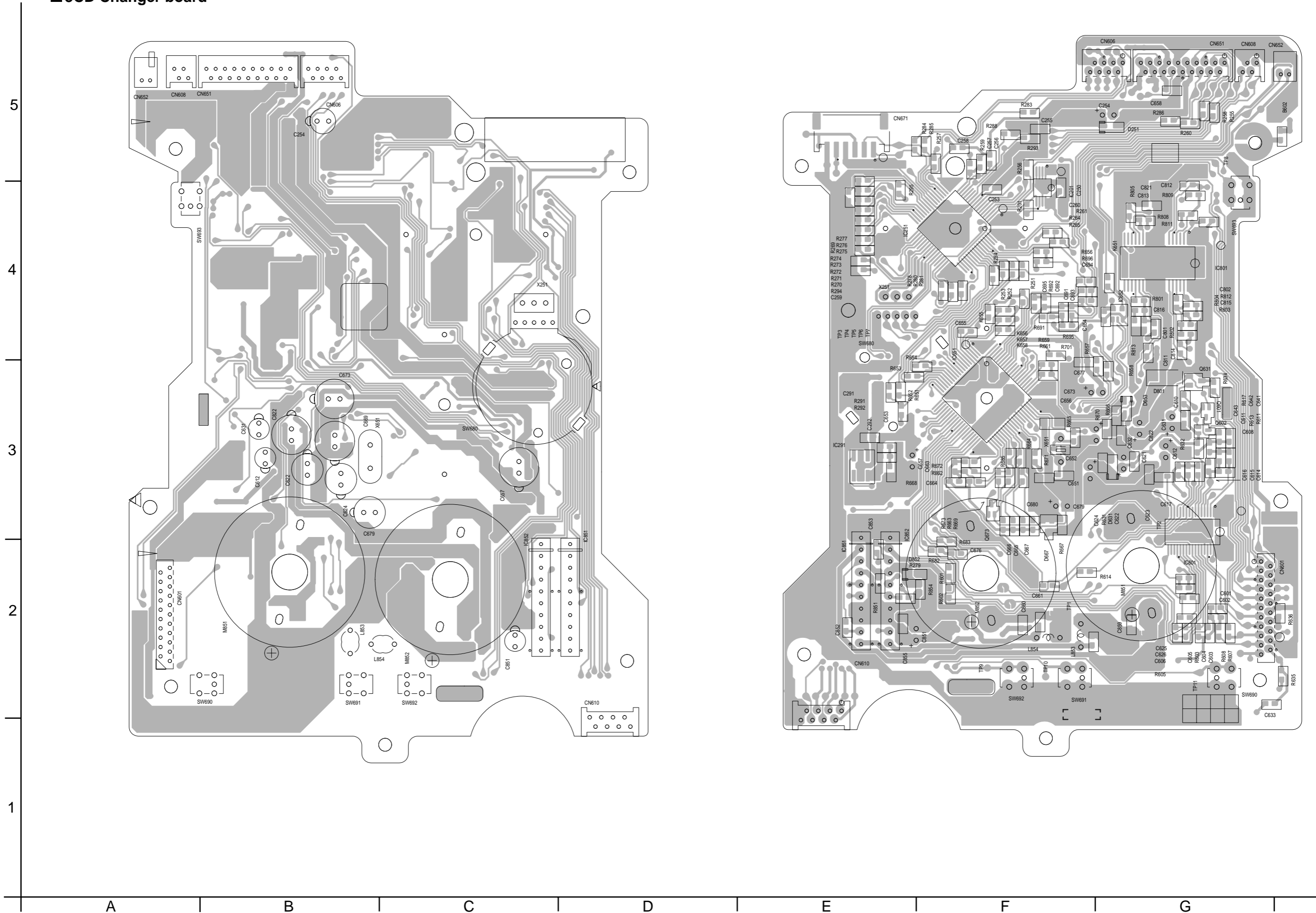
E

F

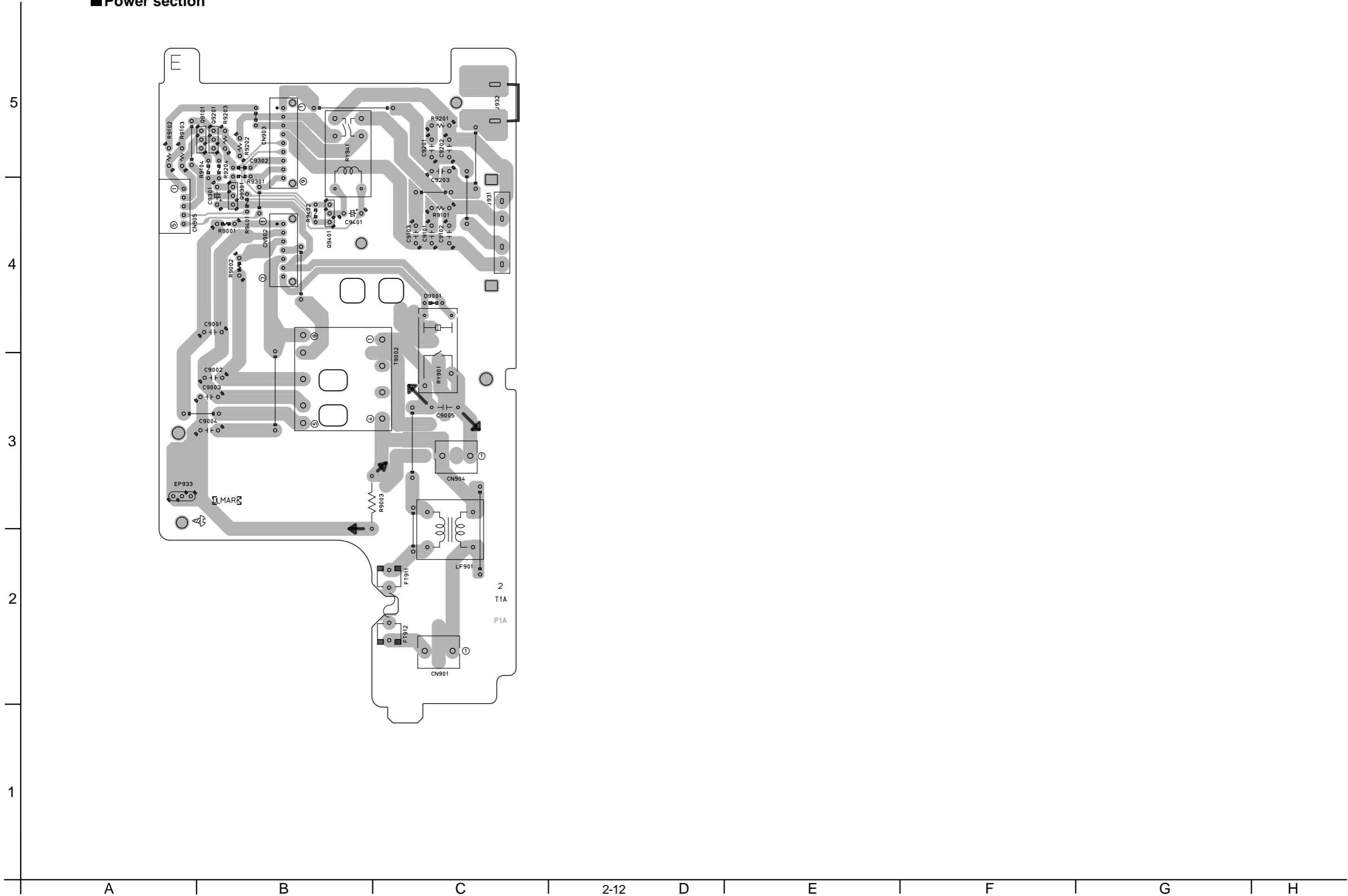
G

H

3CD Changer board



■ Power section



**-MEMO-**