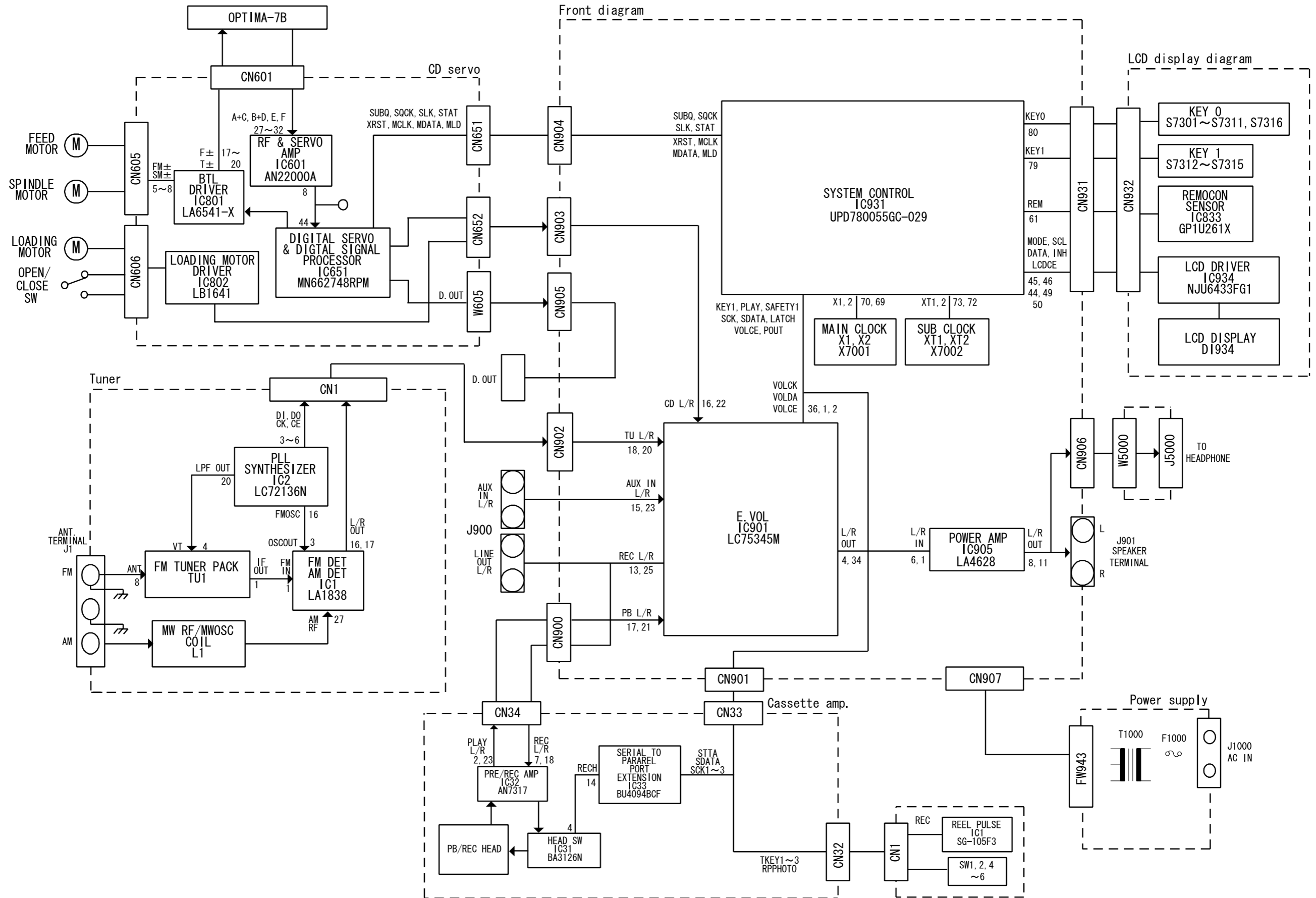


Block diagram



Standard schematic diagrams

Front circuit

6

5

4

3

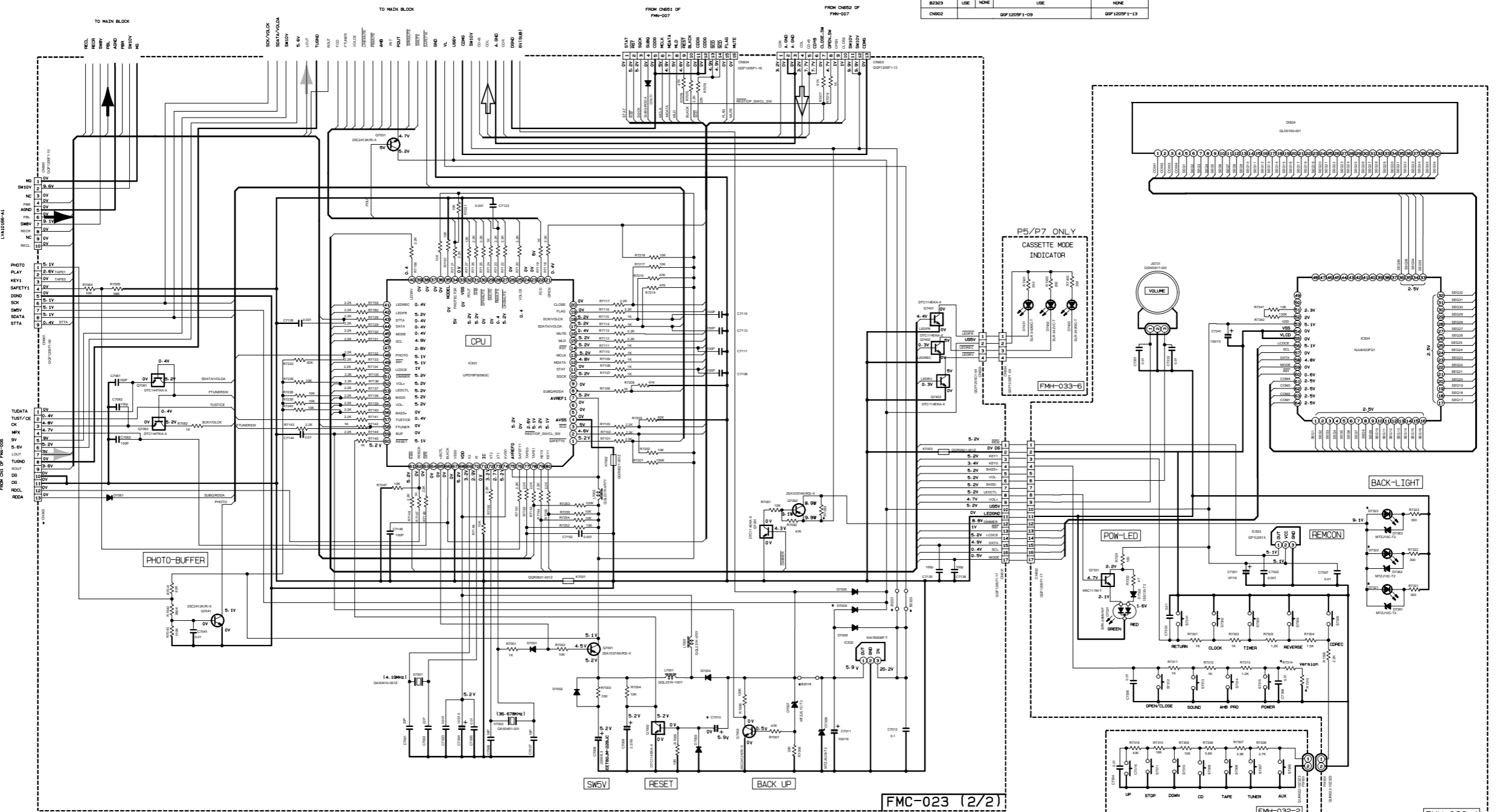
2

1

| DTC144TKA-X | DTC144TKA-X | DTC144EK-X |
|-------------|-------------|-------------------------|
| 47K | 10K | 10K |
| OPEN | OPEN | 10K |
| Q7061/Q7062 | Q7002 | Q7091/Q7401/Q7402/Q7403 |

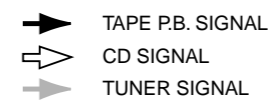
MARK

| VERSION | FS-P5 | | | UK-P5 | | | UK-P5R | |
|-----------------|----------------|-------|------|--------------|------|------|----------------|------|
| | (J) | (L) | (A) | (UBA/FAN/UP) | (UK) | (UV) | (E/E) | (EE) |
| ITEMS | | | | | | | | |
| R7059 | 1K | 1K | 1K | 1K | 1K | 1K | 1K | 1K |
| C7361 | BLUE | BLUE | BLUE | BLUE | BLUE | BLUE | BLUE | BLUE |
| D7363 | BLUE | BLUE | BLUE | BLUE | BLUE | BLUE | BLUE | BLUE |
| D7071/5M | BK | | | | | | D7071 | |
| R7314 (VERSION) | 10K | B/W | B/W | B/W | B/W | B/W | B/W | B/W |
| R7315 (VERSION) | 50K | 47K | 47K | 47K | 3.3K | 1.5K | 10K | 10K |
| C7010 | 4.7/50 | 10/50 | | 4.7/50 | | | 10/50 | |
| D7009 | NONE | USE | | NONE | | | USE | |
| R0018 | USE | NONE | | USE | | | NONE | |
| R0021 | NONE | USE | | NONE | | | USE | |
| R0023 | USE | NONE | | USE | | | NONE | |
| C0002 | GFP 120PF 1-09 | | | | | | GFP 120PF 1-13 | |



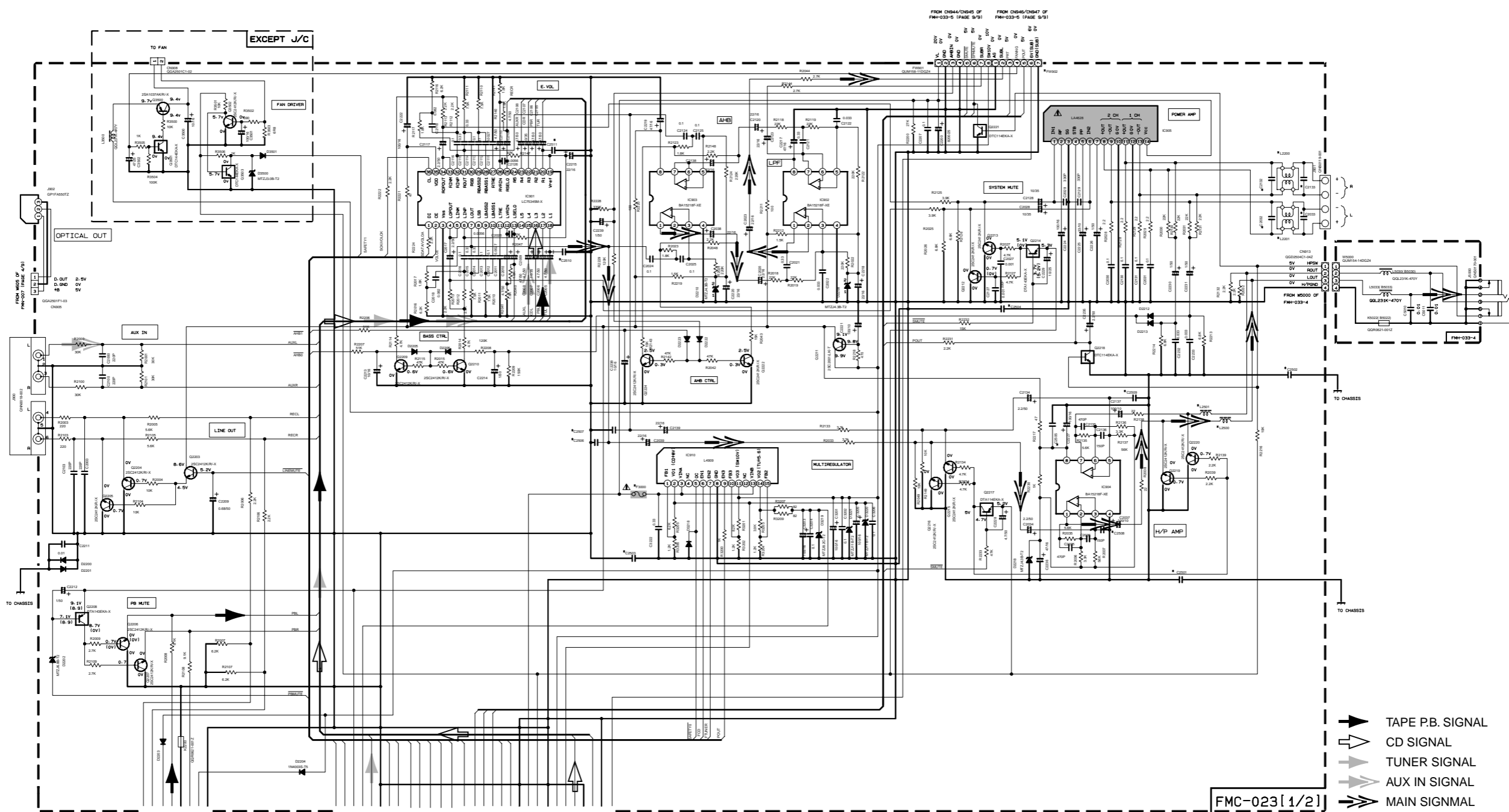
NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION --- CD STOP MODE
- UNLESS OTHERWISE SPECIFIED,
ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL RESISTANCE VALUES ARE IN Ω(M)Ω).
ALL CAPACITANCE VALUES ARE IN nF(pF).
ALL INDUCTANCE VALUES ARE IN μH(mH).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
ALL DIODES ARE IN 1SS133-T7 UNLESS SPECIFIED.



A B C D E F G H I

Main circuit



- ▶ TAPE P.B. SIGNAL
- ▶ CD SIGNAL
- ▶ TUNER SIGNAL
- ▶ AUX IN SIGNAL
- ▶ MAIN SIGNAL

FMC-023 [1/2]

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

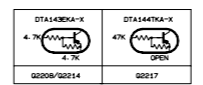
1. ALL VALUES ARE MEASURED IN VOLTS ----- CD STOP MODE.

| IC | 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 | 31 | 32 | 33 | 34 | 35 | 36 |
|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| IC901 | 5.2 | 0.4 | 0 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 7.4 | 0 | |
| IC902 | 4.1 | 4.1 | 4.1 | 0 | 4.1 | 4.1 | 4.1 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IC903 | 4.1 | 4.1 | 4.1 | 0 | 4.1 | 4.1 | 4.1 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IC904 | 4.1 | 4.1 | 4.1 | 0 | 4.1 | 4.1 | 4.1 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IC905 | 1.2 | 9.4 | 0 | 2.9 | 2 | 1.2 | 1.4 | 9 | 9.2 | 0 | 9 | 0 | 9.2 | 20.2 | | | | | | | | | | | | | | | | | | | | | | | |
| IC910 | 1.3 | 7.8 | 19.8 | 0 | 5.2 | 0.4 | 5.1 | 0 | 5.2 | 1.3 | 9.9 | 0 | 19.8 | 5.3 | 1.3 | | | | | | | | | | | | | | | | | | | | | | |

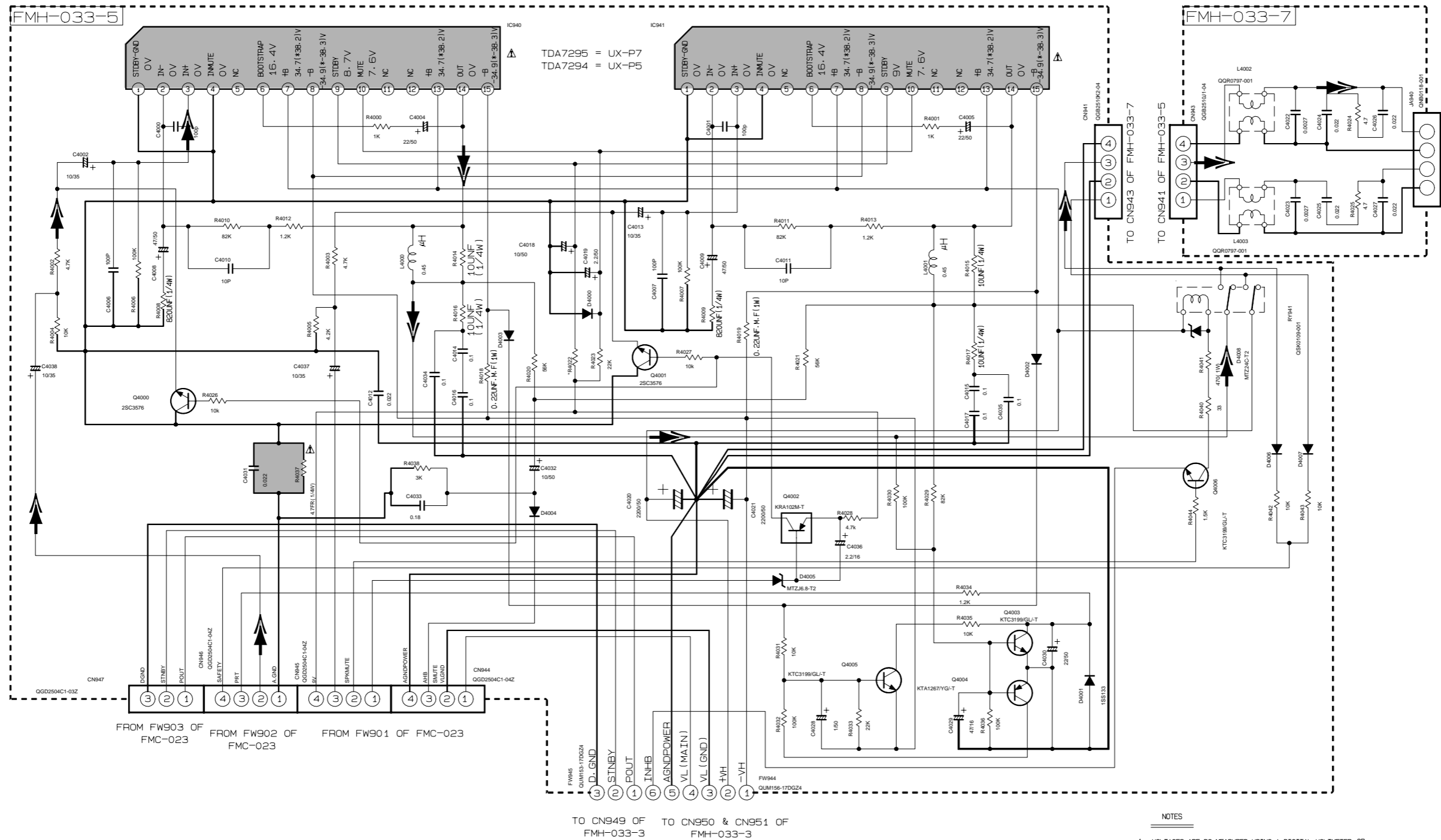
2. UNLESS OTHERWISE SPECIFIED.
 ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
 ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
 ALL RESISTANCE VALUES ARE IN OHM(S).
 ALL CAPACITANCE VALUES ARE IN #P(PpF).
 ALL INDUCTANCE VALUES ARE IN #H(mH).
 ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(±)/RATED VOLTAGE (V).
 ALL DIODES ARE IN 1SS133-T2 UNLESS SPECIFIED.

● PART LIST

| VERSION | PART | C030/C2130 | L2000/L2001 | C2035/C2133 | F9002 | F3000 | C0506/C0507 | L2500/L2501 | C0508/C0509 | C0503 | C0505 | C0501 | C0510 | C0511 | C0502 | C0504 |
|---------------|------|------------|-------------|---------------|---------|---------|-------------|-------------|-------------|-------|-------|--------|--------|-------|-------|-------|
| J/C | NONE | N/A | NONE | NONE | NONE | 1A-125V | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B/E/RE/TV/EV | 0.1u | GG9797-001 | 0.0033u | NONE | T1AL | 470P | GL231K-560Y | 330P | 0.001 | 0.01 | 0.01 | 0.0082 | 0.0082 | 0.001 | 0.001 | |
| A/C/P/2/3/5/7 | 0.1u | GG9797-001 | 0.0033u | NONE | T1AL | 470P | GL231K-560Y | 330P | 0.001 | 0.01 | 0.01 | 0.0082 | 0.0082 | 0.001 | 0.001 | |
| LP | 0.1u | GG9797-001 | 0.0033u | NONE | 1A-250V | 470P | GL231K-560Y | 330P | 0.001 | 0.01 | 0.01 | 0.0082 | 0.0082 | 0.001 | 0.001 | |
| UB | 0.1u | GG9797-001 | 0.0033u | 0UM157-110524 | T1AL | 470P | GL231K-560Y | 330P | 0.001 | 0.01 | 0.01 | 0.0082 | 0.0082 | 0.001 | 0.001 | |



Subwoofer circuit



| VERSION | FW945 | CN947 | R4022 | C4034 | C4035 | L4002 | L4003 | C4022 | C4023 | C4024 | C4025 | R4024 | R4025 | C4026 | C4027 | C4014 | C4015 | C4016 | C4017 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| J | X | X | 10K | 0 | 0 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| UF/UN/UP/US/ UT/UW/UX/UY | X | X | 1K | X | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B/E/EN/EV/EE/UB | 0 | 0 | 1K | X | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

0 = USED
X = NOT USED

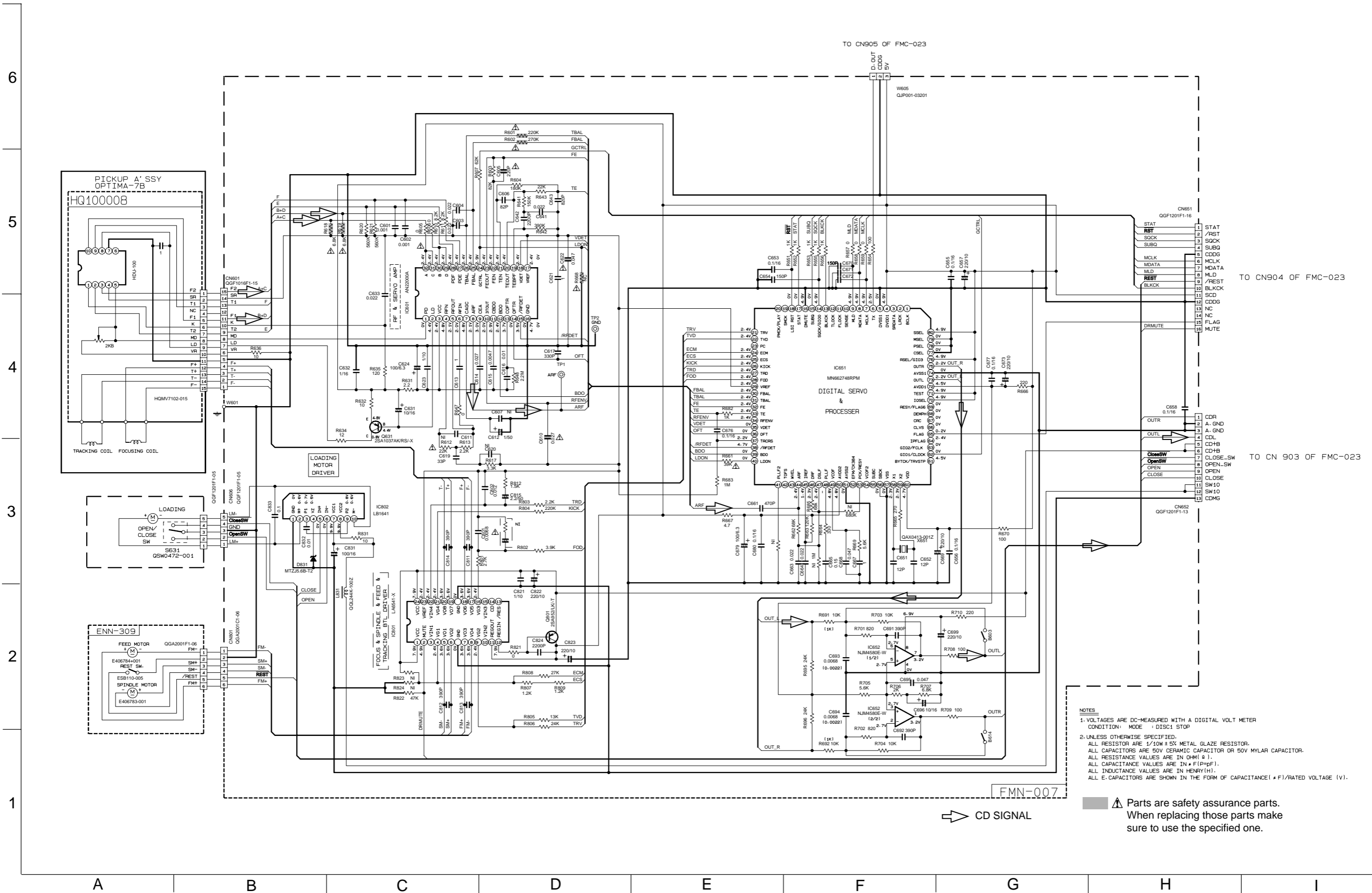
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

- NOTES
- VOLTAGES ARE DC-MEASURED USING A DIGITAL VOLTMETER OR AN OSCILLOSCOPE WITHOUT INPUT SIGNAL CONDITION
 - UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE 1/6W ± 5% CARBON RESISTOR. ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITANCE VALUES ARE IN μF(P=PF). ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V). ALL DIODES ARE 1SS133-T7 TYPE UNLESS SPECIFIED. POLYPROPYLENE CAPACITOR 50V ± 5% MYLAR CAPACITOR OR 50V ± 5% THIN FILM CAPACITOR
 - THOSE PART WITH BRACKET IS NOT USED. FOR RESISTOR-IT WOULD BE A SHORT. FOR CAPACITOR-IT WOULD BE AN OPEN.

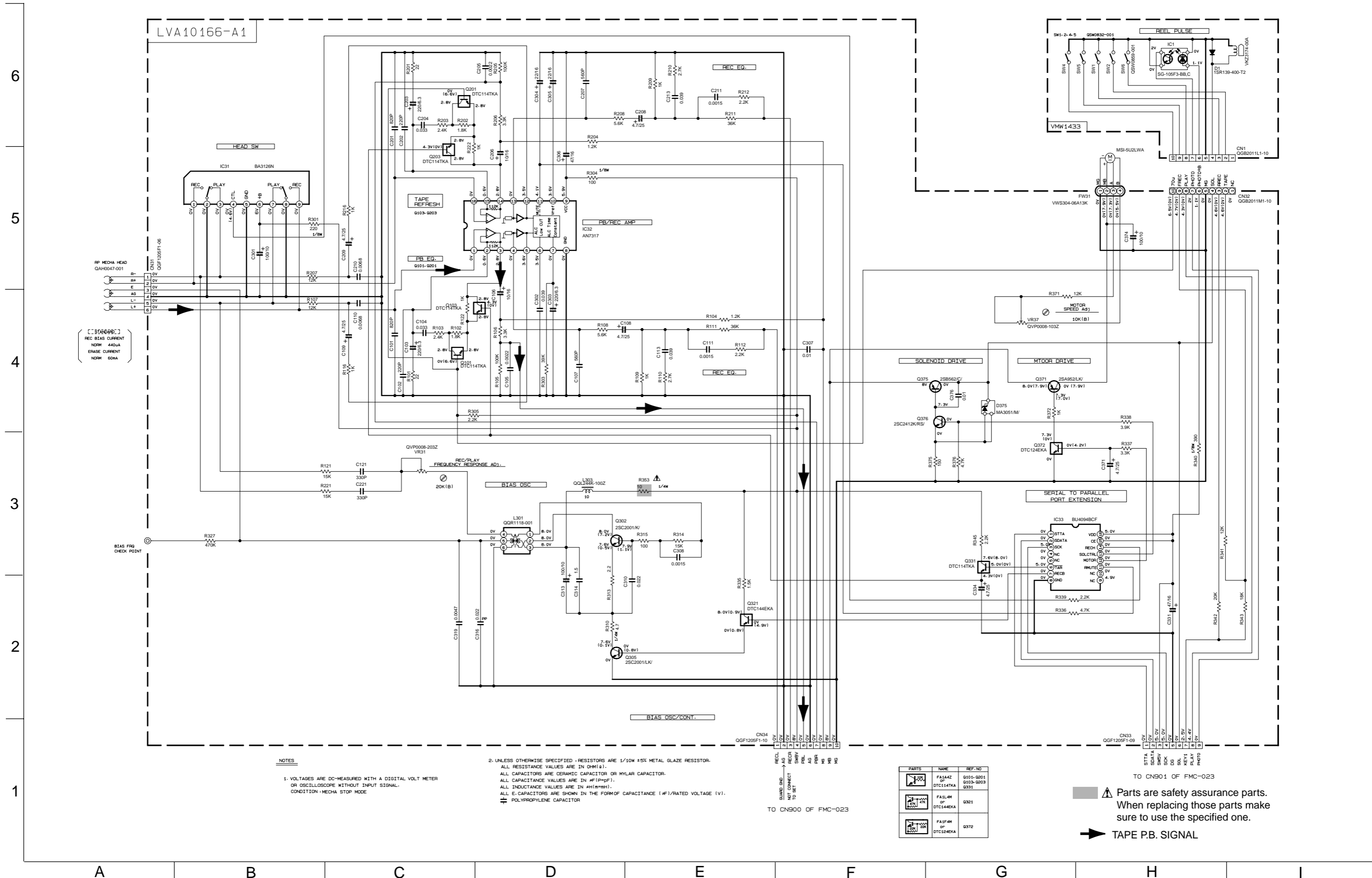
MAIN SIGNAL

A B C D E F G H I

CD servo circuit



Cassette amplifier circuit



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION : MECHA STOP MODE

2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR. ALL RESISTANCE VALUES ARE IN Ω(M)(k)(M). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN #P(p)(F). ALL INDUCTANCE VALUES ARE IN #H(m)(MH). ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (#F)/RATED VOLTAGE (V). POLYPROPYLENE CAPACITOR

| PARTS | NAME | REF. NO |
|-------|---------------------|--------------------------------|
| | F1A4AZ or DTC114TKA | Q101-QB01 Q103-QB03 Q331 |
| | F1A14M or DTC144EKA | Q301 |
| | F1A14M or DTC124EKA | Q372 |

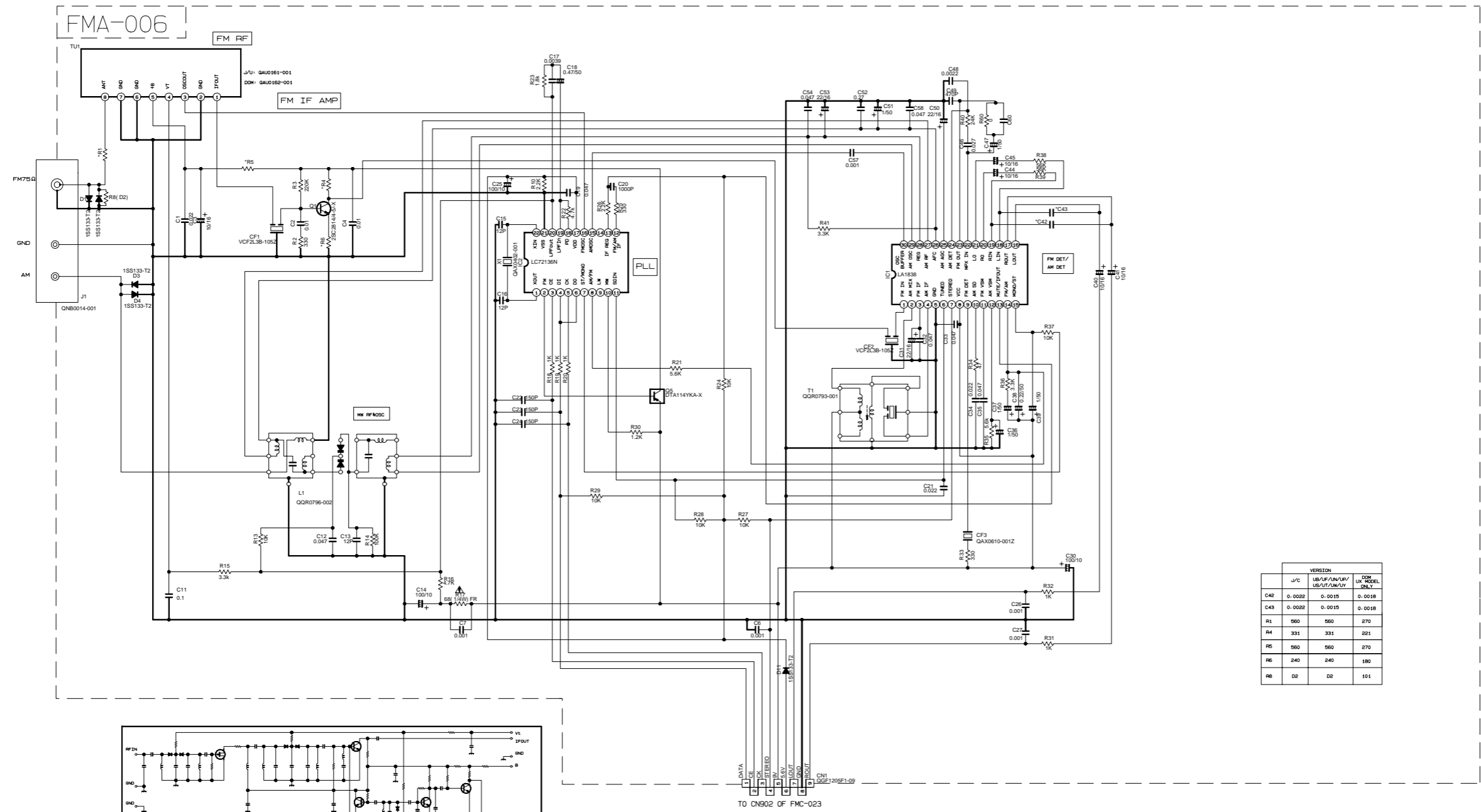
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

TAPE P.B. SIGNAL

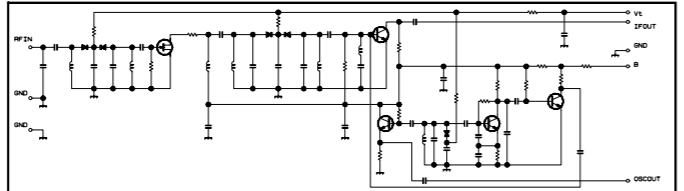
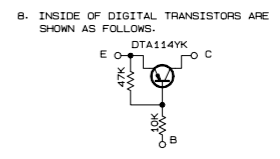
A B C D E F G H I

■ Tuner circuit

6
5
4
3
2
1



- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
 2. ALL RESISTORS ARE 1/8W ±5% METAL GLAZE RESISTOR.
 3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
 4. ALL CAPASITANCE VALUES ARE IN nF(P=pF).
 5. ALL E. CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (nF)/RATED VOLTAGE (V).
 6. SI DIODES (D1, D2) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
 7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
Q1 2SC2814/4-5/-X Q2-Q3 2SC2412K/R/-X
Q4-Q5 DTA114YKA-X



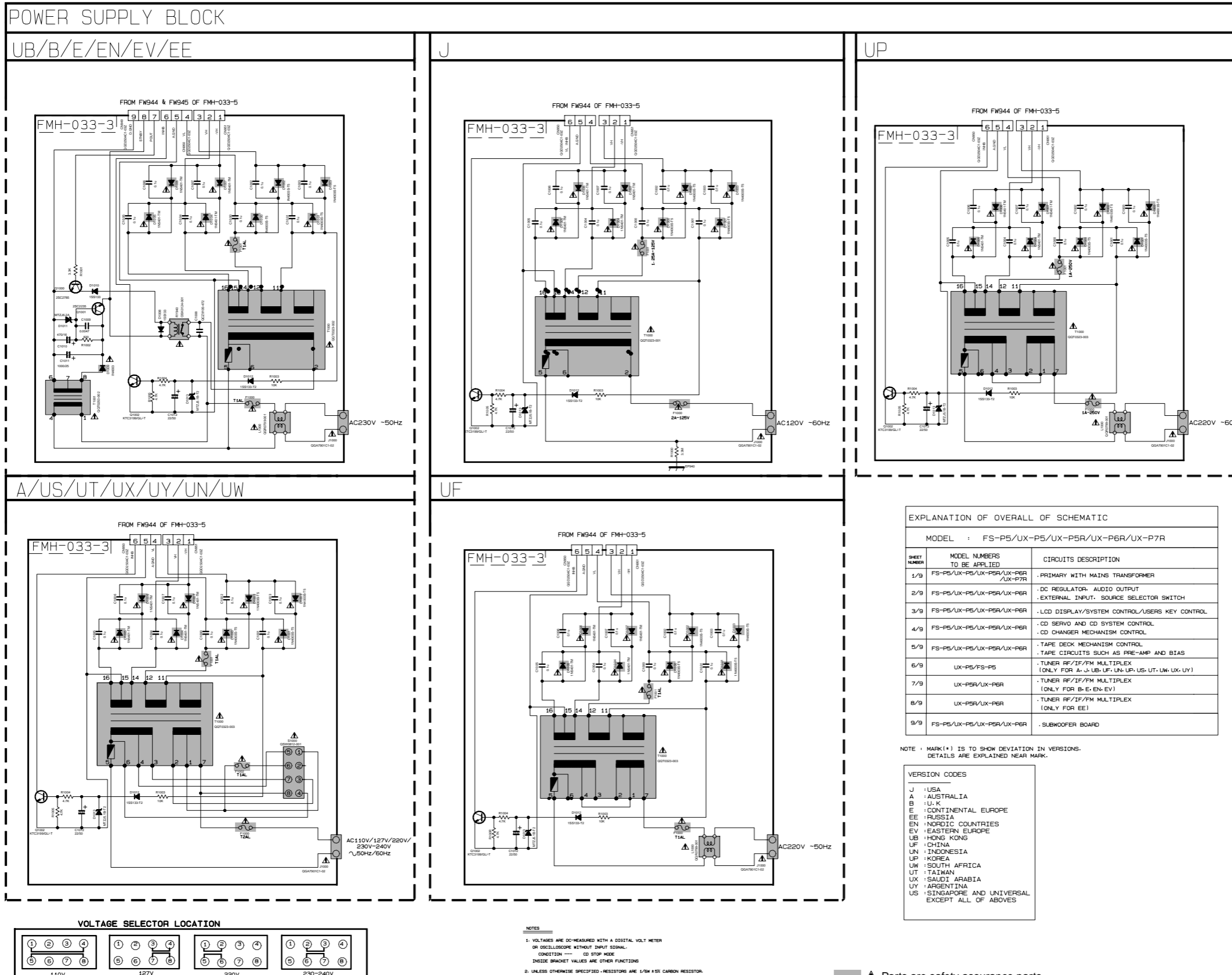
| CONDITION | PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|-----------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IC1 | FM NO SIGNAL | 3.6 | 8.9 | 3.6 | 3.6 | 0 | 5.0 | 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 | 3.4 | 3.4 | 2.8 | 3.4 | 0 | 0 | 3.5 | 3.5 | 3.6 | 3.6 | 2.7 |
| IC1 | FM 600B STEREO | 3.6 | 8.9 | 3.6 | 3.6 | 0 | 5.0 | 5.0 | 8.9 | 8.9 | 1.3 | 4.3 | 0 | 0.9 | 7.8 | 7.8 | 4.3 | 4.3 | 4.3 | 4.3 | 3.4 | 3.4 | 2.8 | 3.4 | 0 | 0 | 3.6 | 3.6 | 3.6 | 3.6 | 2.7 |
| IC1 | 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 | 3.2 | 2.8 | ust | 0.7 | 0.7 | 3.6 | 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 | 0 | 2.5 | 5.1 | 0.9 | 0.9 | 3.8 | 0 | 2.3 | | | | | | | | |

| Tr. NO. | Q1 | Q5 | |
|----------------------|------------|-----------|-------------|
| PIN NO. | E C B | E C B | |
| FM 87.5MHz NO SIGNAL | 0 7.1 0.85 | B.9 B.B 0 | |
| AM 52kHz NO SIGNAL | 0 0 0 | 9.0 0 B.9 | |
| 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 |

| | VERSION | | |
|-----|------------------------|-------------|------------------|
| J/C | US/A/UK/US/US/UT/UM/UV | US/UT/UM/UV | OM UN REGEL ONLY |
| C42 | 0.0022 | 0.0015 | 0.0018 |
| C43 | 0.0022 | 0.0015 | 0.0018 |
| R1 | 560 | 560 | 270 |
| R4 | 331 | 331 | 221 |
| R5 | 560 | 560 | 270 |
| R6 | 240 | 240 | 180 |
| R8 | D2 | D2 | 101 |

A B C D E F G H I

Power supply circuit



EXPLANATION OF OVERALL OF SCHEMATIC

MODEL : FS-P5/UX-P5/UX-P5R/UX-P6R/UX-P7R

| SHEET NUMBER | MODEL NUMBERS TO BE APPLIED | CIRCUITS DESCRIPTION |
|--------------|----------------------------------|---|
| 1/9 | FS-P5/UX-P5/UX-P5R/UX-P6R/UX-P7R | PRIMARY WITH MAINS TRANSFORMER |
| 2/9 | FS-P5/UX-P5/UX-P5R/UX-P6R | DC REGULATOR, AUDIO OUTPUT EXTERNAL INPUT, SOURCE SELECTOR SWITCH |
| 3/9 | FS-P5/UX-P5/UX-P5R/UX-P6R | LCD DISPLAY/SYSTEM CONTROL/USERS KEY CONTROL |
| 4/9 | FS-P5/UX-P5/UX-P5R/UX-P6R | CD SERVO AND CD SYSTEM CONTROL CD CHANGER MECHANISM CONTROL |
| 5/9 | FS-P5/UX-P5/UX-P5R/UX-P6R | TAPE DECK MECHANISM CONTROL TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS |
| 6/9 | UX-P5/FS-P5 | TUNER RF/IF/FM MULTIPLEX (ONLY FOR A, J, UB, UF, UN, UP, US, UT, UX, UY) |
| 7/9 | UX-P5R/UX-P6R | TUNER RF/IF/FM MULTIPLEX (ONLY FOR B, E, EN, EV) |
| 8/9 | UX-P5R/UX-P6R | TUNER RF/IF/FM MULTIPLEX (ONLY FOR EE) |
| 9/9 | FS-P5/UX-P5/UX-P5R/UX-P6R | SUBWOOFER BOARD |

NOTE : MARK (*) IS TO SHOW DEVIATION IN VERSIONS. DETAILS ARE EXPLAINED NEAR MARK.

VERSION CODES

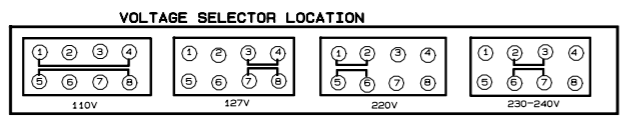
- J : USA
- A : AUSTRALIA
- B : U.K
- E : CONTINENTAL EUROPE
- EE : RUSSIA
- EN : NORDIC COUNTRIES
- EV : EASTERN EUROPE
- UB : HONG KONG
- UF : CHINA
- UN : INDONESIA
- UP : KOREA
- UW : SOUTH AFRICA
- UT : TAIWAN
- UX : SAUDI ARABIA
- UY : ARGENTINA
- US : SINGAPORE AND UNIVERSAL EXCEPT ALL OF ABOVE

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — CD STOP MODE
INSIDE BRACKET VALUES ARE OTHER FUNCTIONS

2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHMS (Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN nF (n=10⁻⁹), μF (μ=10⁻⁶), pF (p=10⁻¹²).
ALL INDUCTANCE VALUES ARE IN mH (m=10⁻³).
ALL C-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES (10V, Name: 1SS133-T2)

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

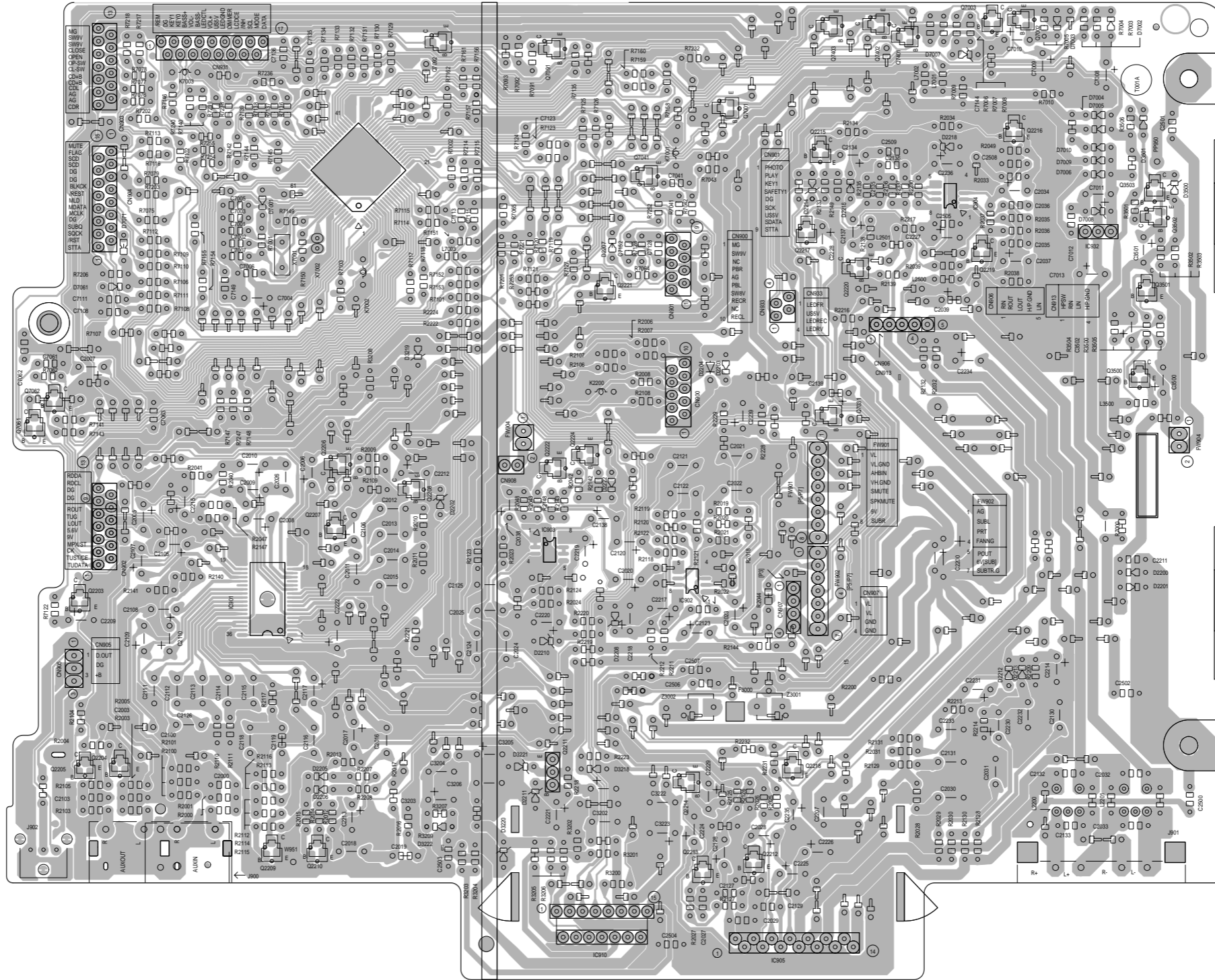


Printed circuit boards

■ Main board

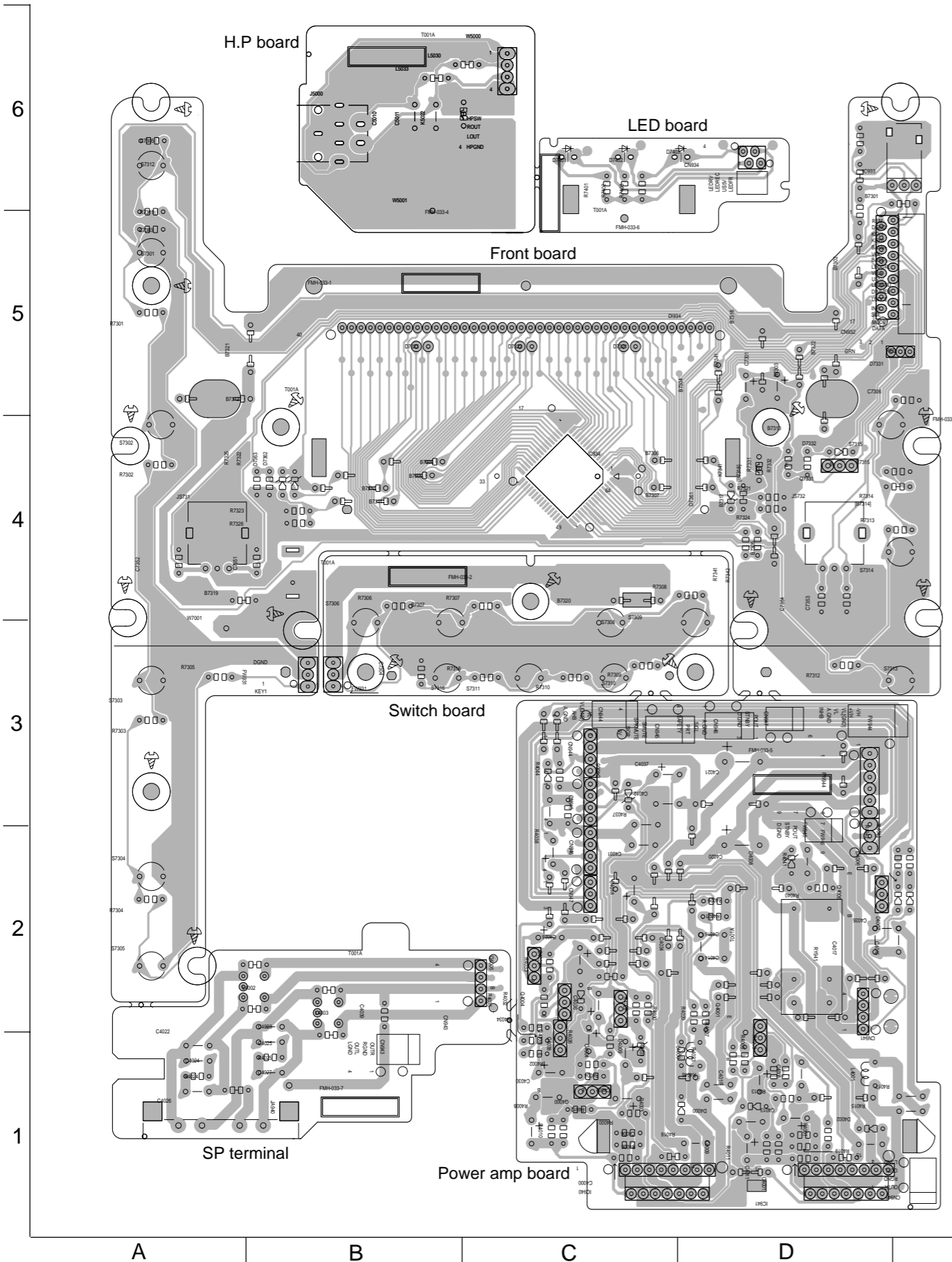
Block No. 01

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4
3
2
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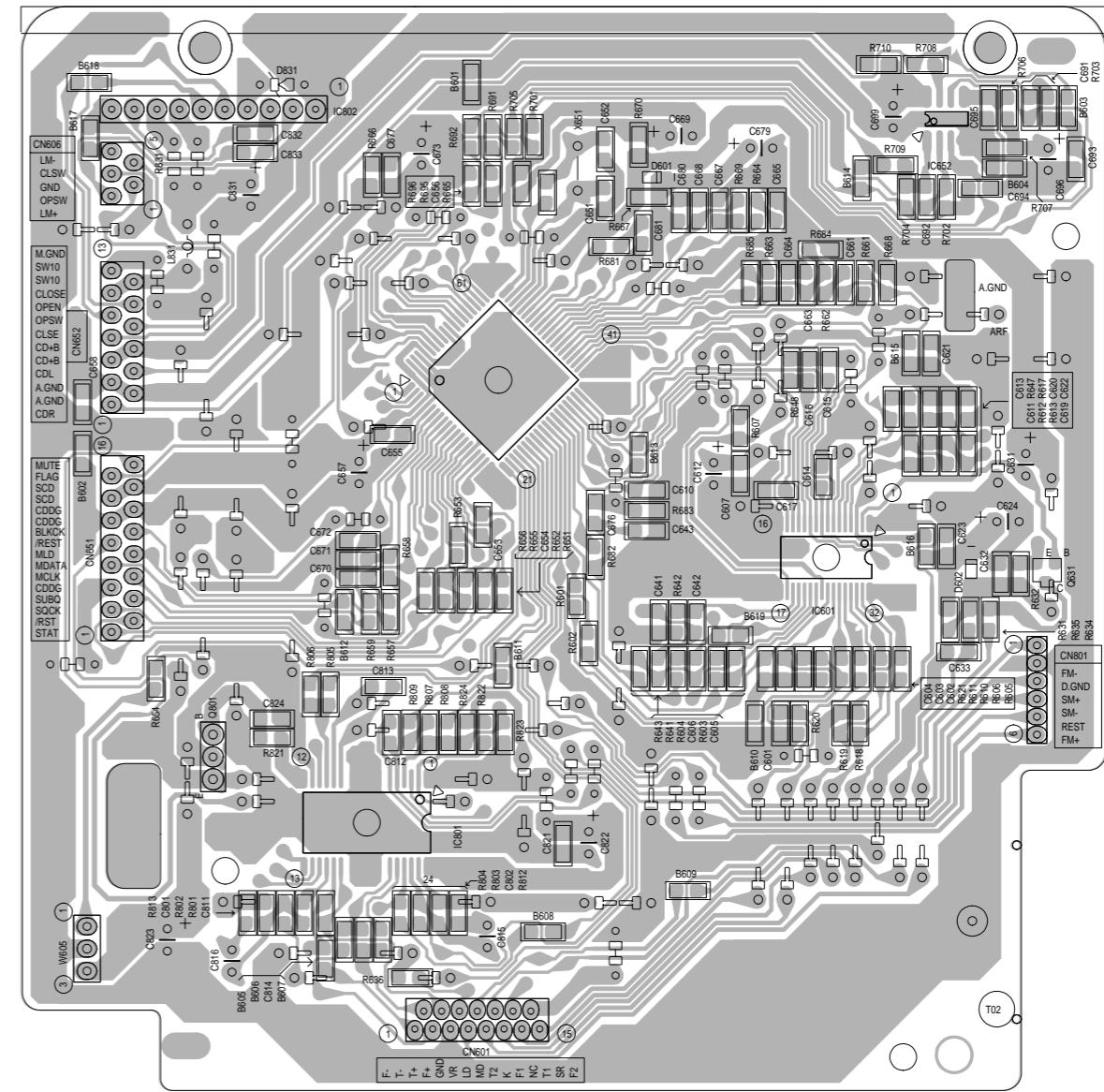


A B C D E F G H I

■ Front board Block No. 02

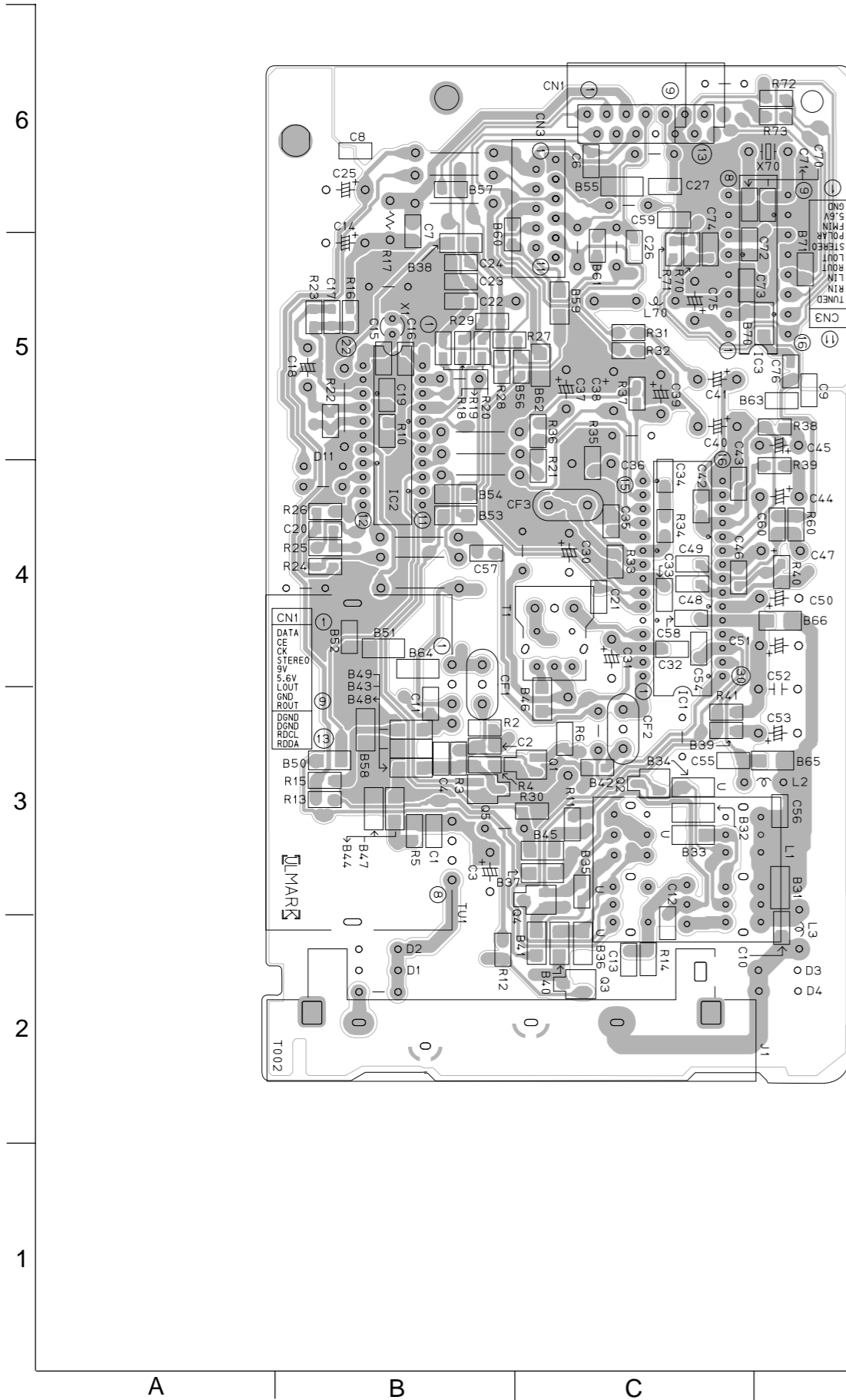


■ CD servo board Block No. 03



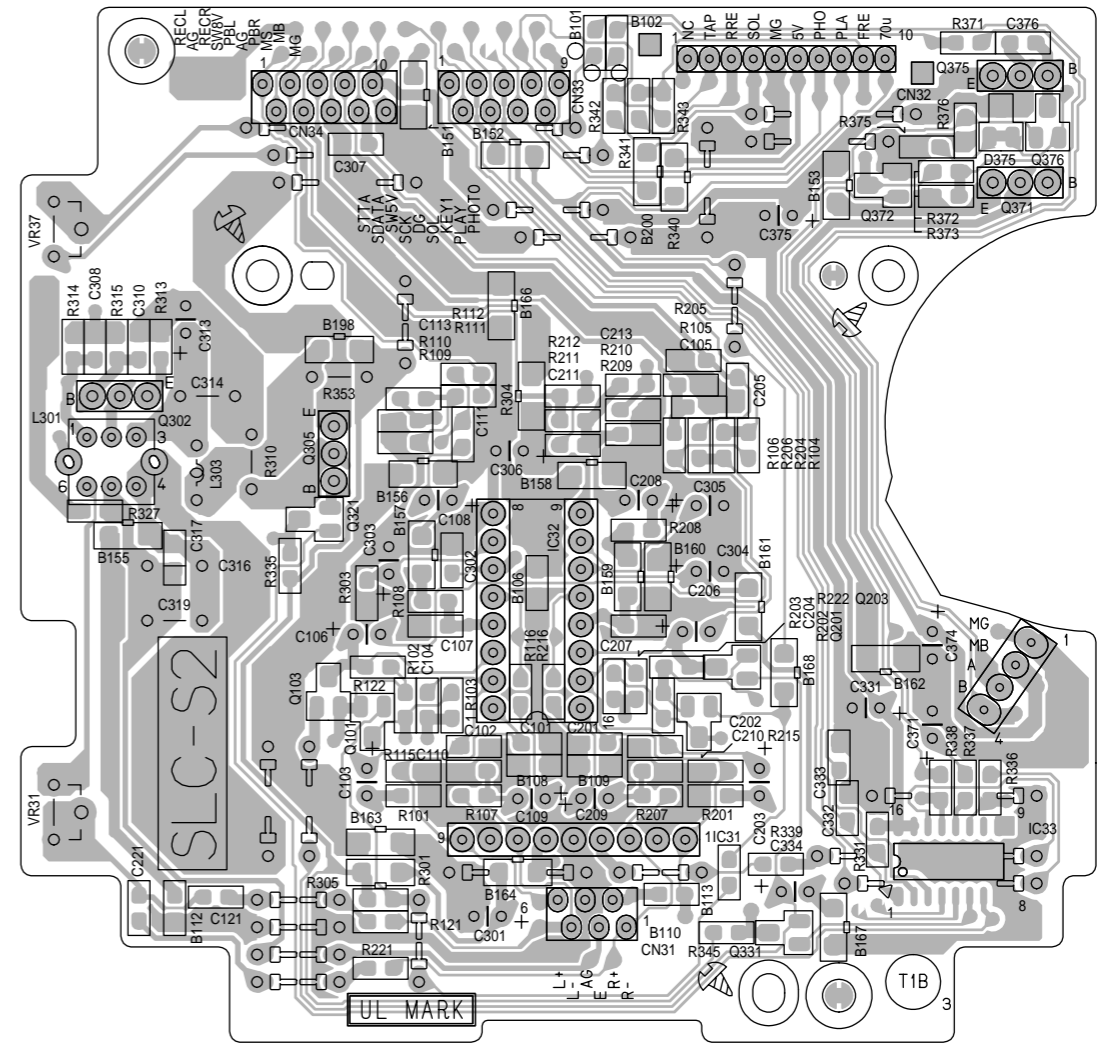
■ Tuner board

Block No. 04



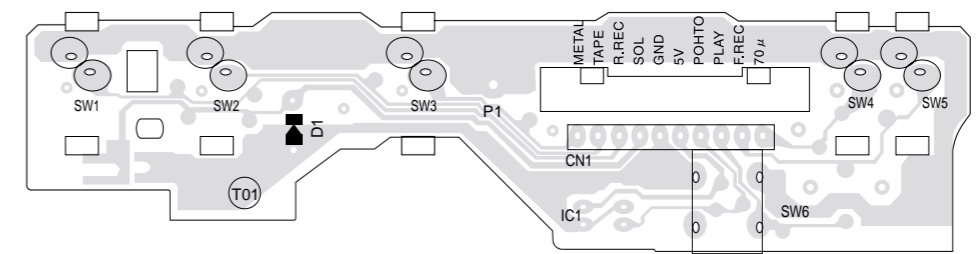
■ Head amplifier board

Block No. 05



■ Cassett switch board

Block No. 06



<<MEMO>>