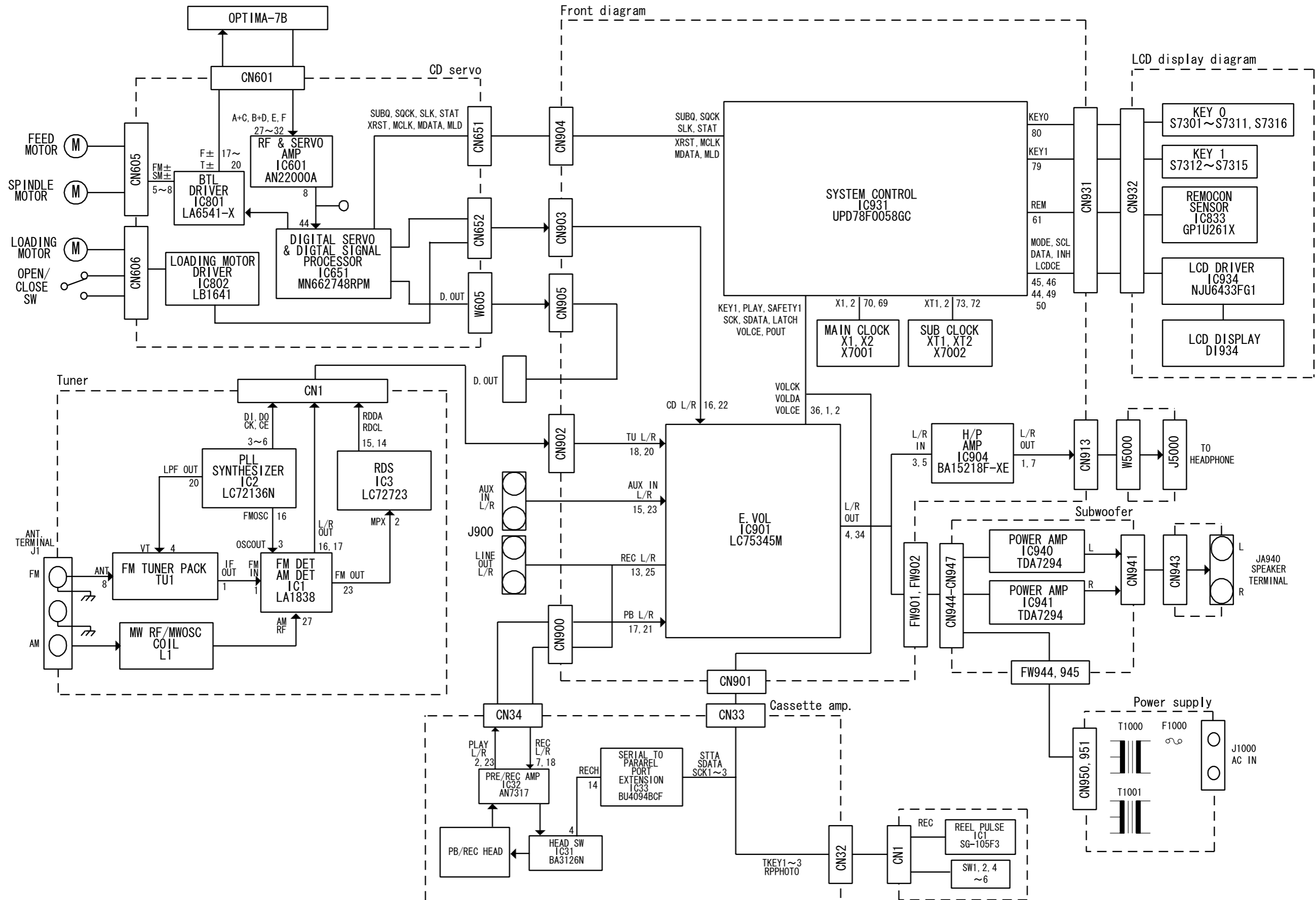


# Block diagram



# Standard schematic diagrams

## ■ Front circuit

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A

B

C

D

E

F

G

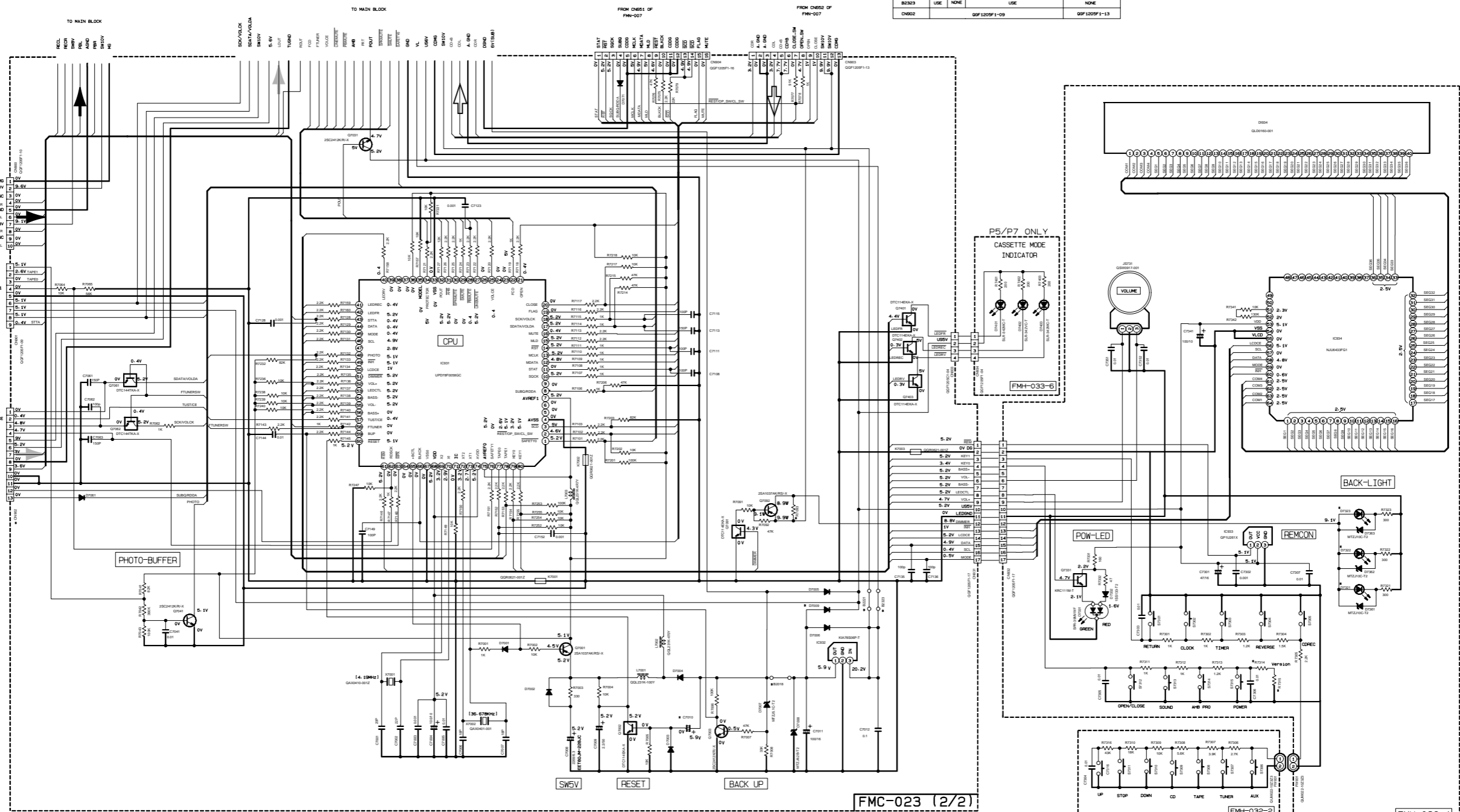
H

I

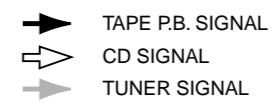
DTC144TKA-X 47K OPEN Q7061/Q7062	DTC144TKA-X 10K OPEN Q7002	DTC144EK-X 10K OPEN Q7091/Q7401/Q7402/Q7403
---	-------------------------------------	--

MARK

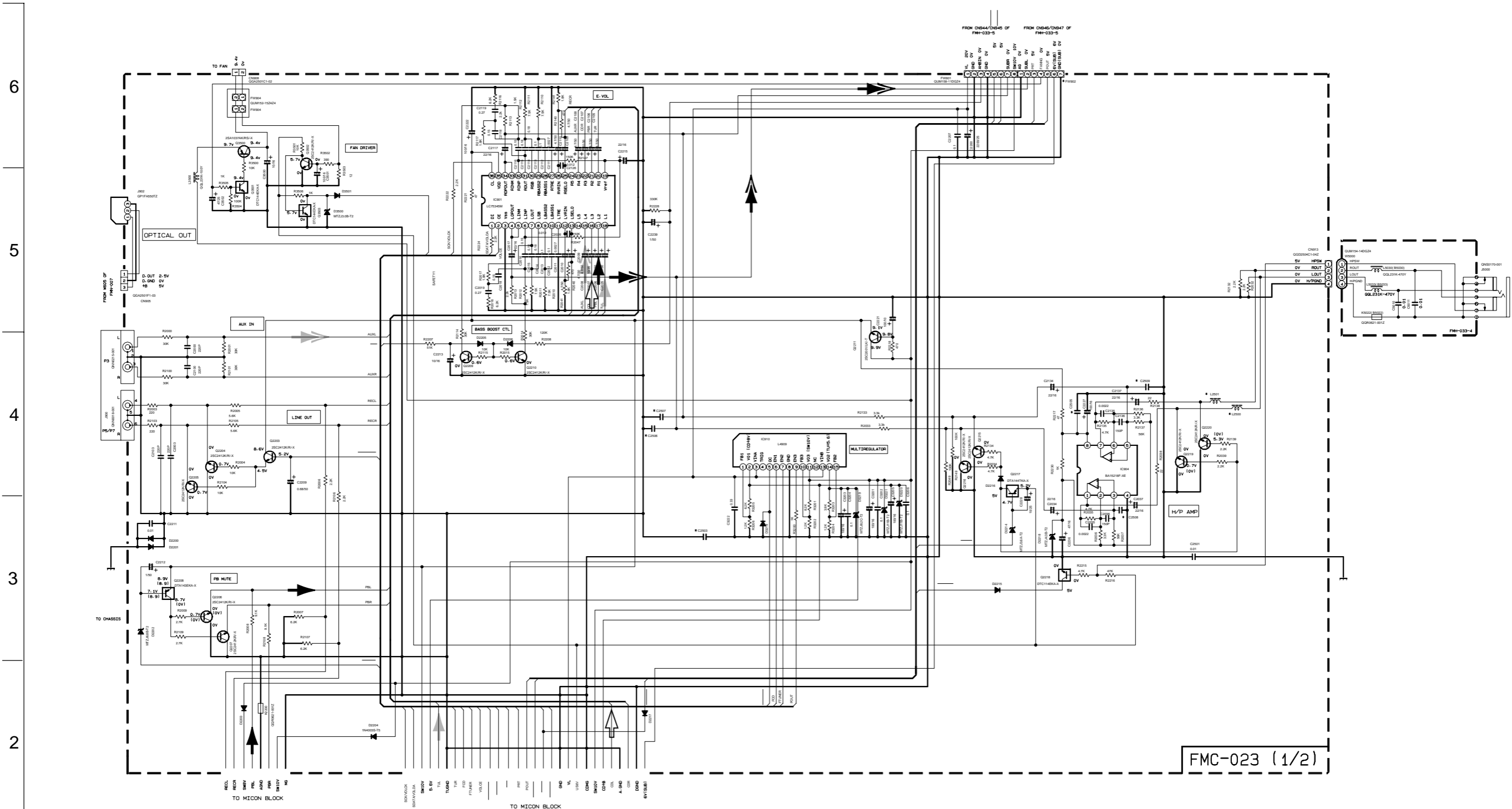
VERSION	PS-PS	UX-P5			UX-P6R		
ITEMS	(L)	(A)	(UBA/FAN/UP/UBA/FAM)	(L)	(U)	(E/E)	(E)
R7059	1K	1K	1K	1K	1K	1K	1K
C7361	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE
D7363	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE
D7071/8M	BM						D7071
R7314 (VERSION)	10K	B/W	B/W	B/W	B/W	B/W	B/W
R7315 (VERSION)	50K	47K	47K	47K	3.3K	1.5K	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				QSP1209F1-09			QSP1209F1-13



NOTES  
 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
 CONDITION --- CD STOP MODE  
 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 Ω(M), K, M.  
 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.



■ Main circuit



FMC-023 (1/2)

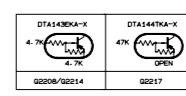
1. ALL VALUES ARE MEASURED IN VOLTS ---- CD STOP MODE.

IC	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	7.4	0			
IC902	4.1	4.1	4.1	0	4.1	4.1	4.1	4.1	0	0																												
IC903	4.1	4.1	4.1	0	4.1	4.1	4.1	4.1	0	0																												
IC904	4.1	4.1	4.1	0	4.1	4.1	4.1	4.1	0	0																												
IC905	1.2	9.4	0	2.9	2	1.2	1.4	9	9.2	0	9	0																										

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(Ω).  
 ALL CAPACITANCE VALUES ARE IN nF(nF) OR pF(pF).  
 ALL INDUCTANCE VALUES ARE IN μH(μH).  
 ALL DIODES ARE IN 1SS133-T7 UNLESS SPECIFIED.

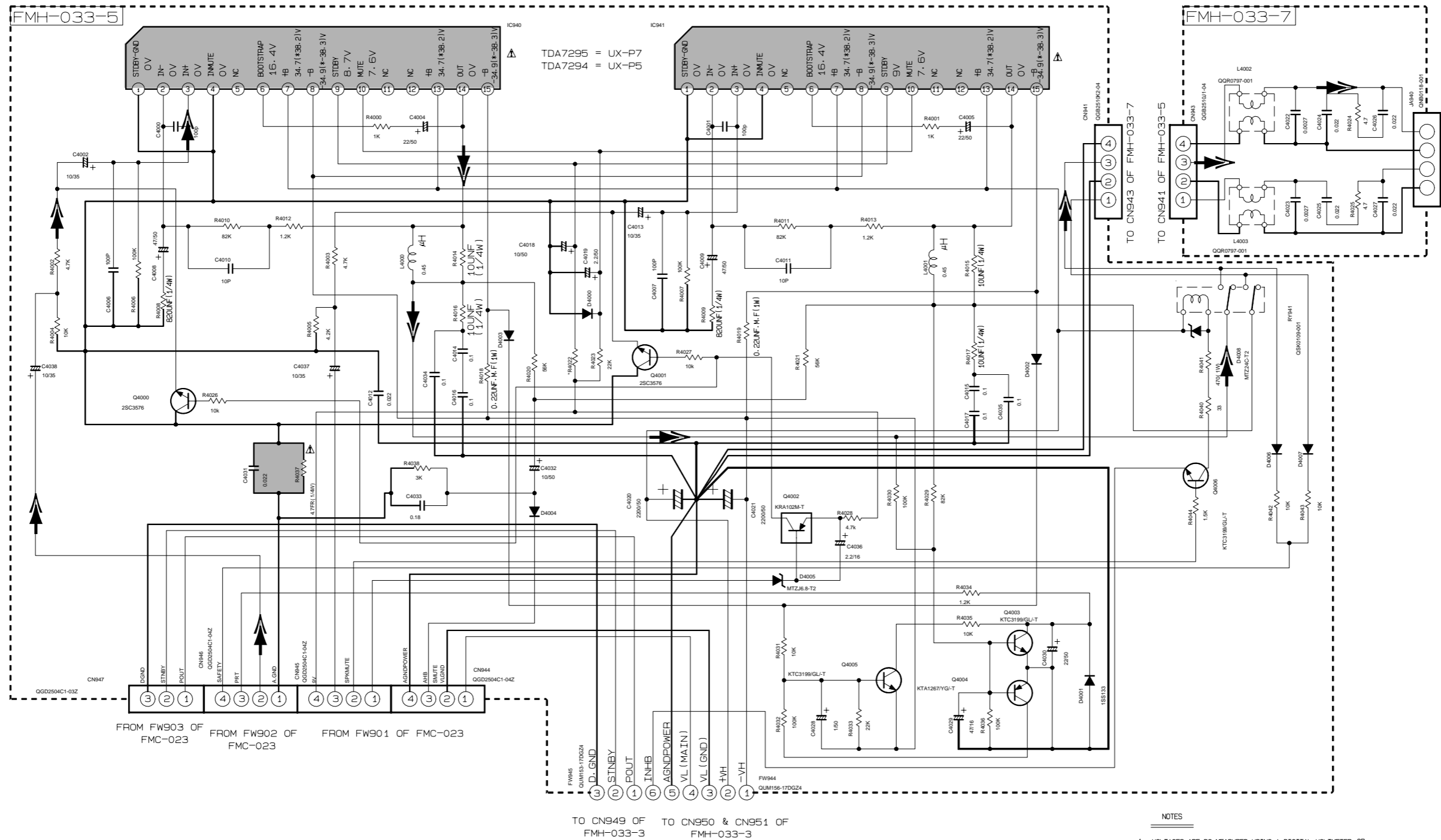
\* PART LIST

VERSION	PART	FW02	C2506/C2507	L2505/L2501	C2508/C2509	C2503	C2506
B/E/EN/VE/EE/UB	GM157-110224	470P	GL231X-560Y	330P	0.001	0.01	
A/F/A/N/A/S/A/S/U/A/K/A/U	GM154-110224	470P	GL231X-560Y	330P	0.001	0.01	
J/C	GM154-110224						



- ▶ TAPPE PB. SIGNAL
- ◀ CD SIGNAL
- ▶ TUNER SIGNAL
- ▶ AUX IN SIGNAL
- ▶ MAIN SIGNAL

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

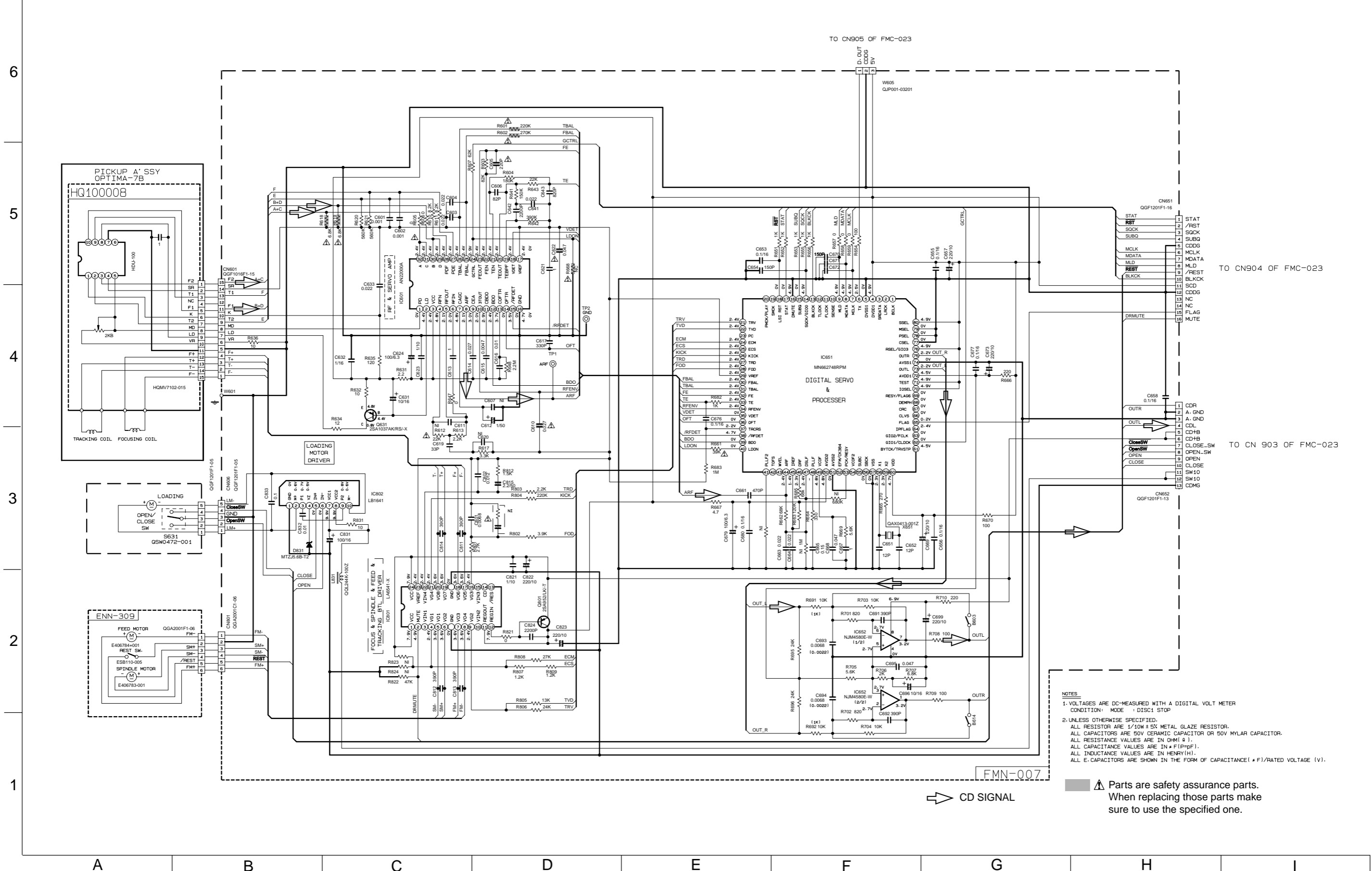
Parts are safety assurance parts.  
When replacing those parts make  
sure to use the specified one.

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

CD servo circuit



**NOTES**

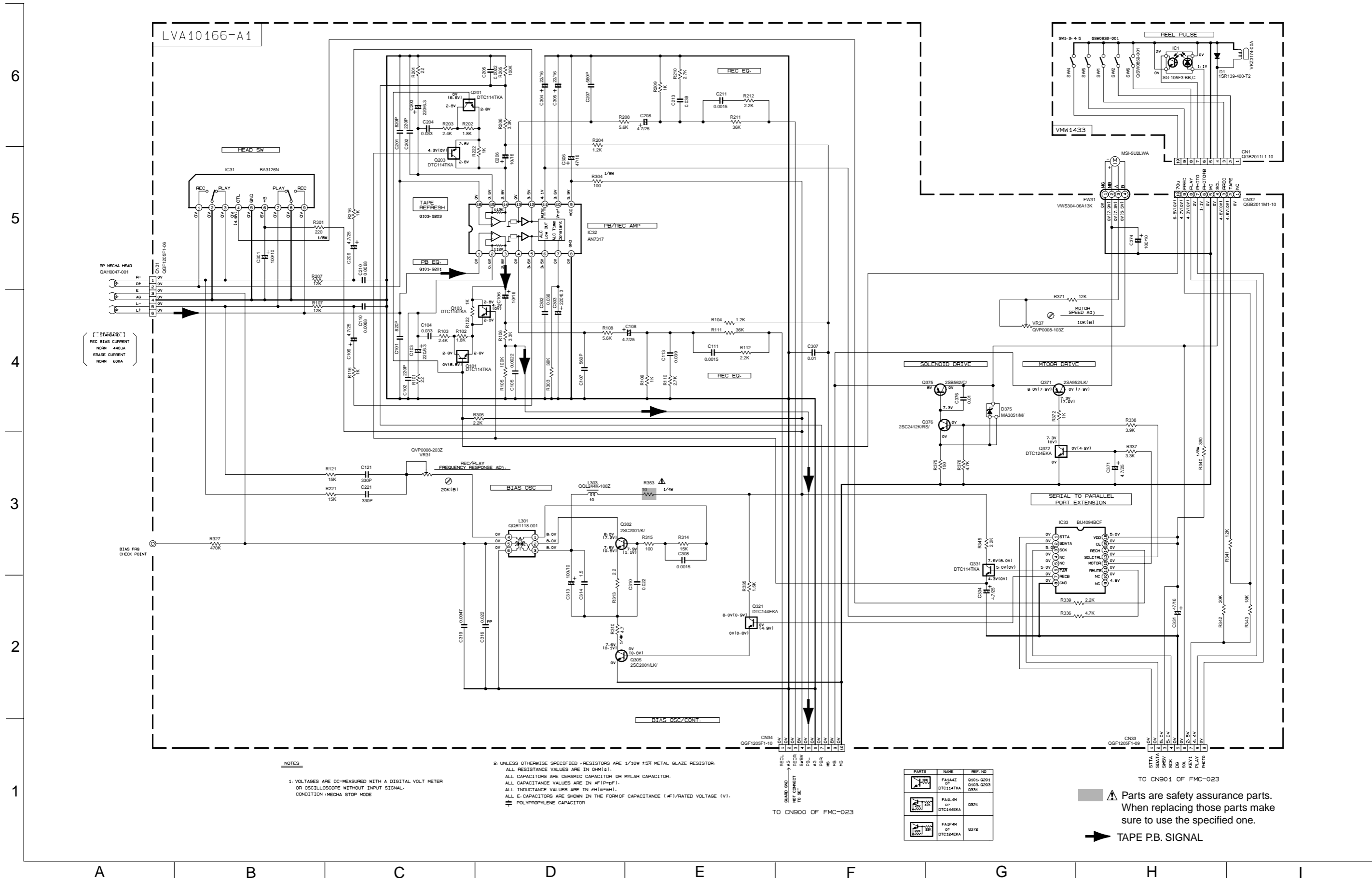
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER  
CONDITION: MODE : DISC1 STOP
2. UNLESS OTHERWISE SPECIFIED:  
ALL RESISTOR ARE 1/10W ± 5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM (Ω).  
ALL CAPACITANCE VALUES ARE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

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

➡ CD SIGNAL

FMN-007

■ 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 OHM(Ω).
3. ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN #F(10<sup>-6</sup>F).
4. ALL INDUCTANCE VALUES ARE IN #M(mH).
5. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (#F/RATED VOLTAGE (V)).
6. POLYPROPYLENE CAPACITOR

PARTS	NAME	REF. NO
	FA1A4Z 51T DTC114TKA	G101, G201 G103, G203 G331
	FA1F4H 51T DTC144EKA	G321
	FA1F4H 51T DTC124EKA	G372

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

▶ TAPE P.B. SIGNAL

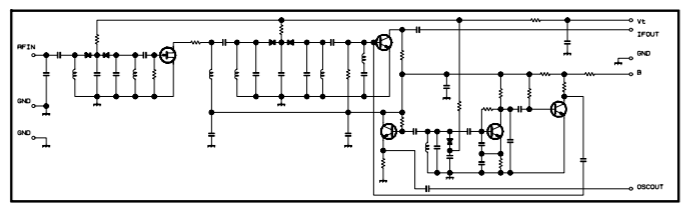
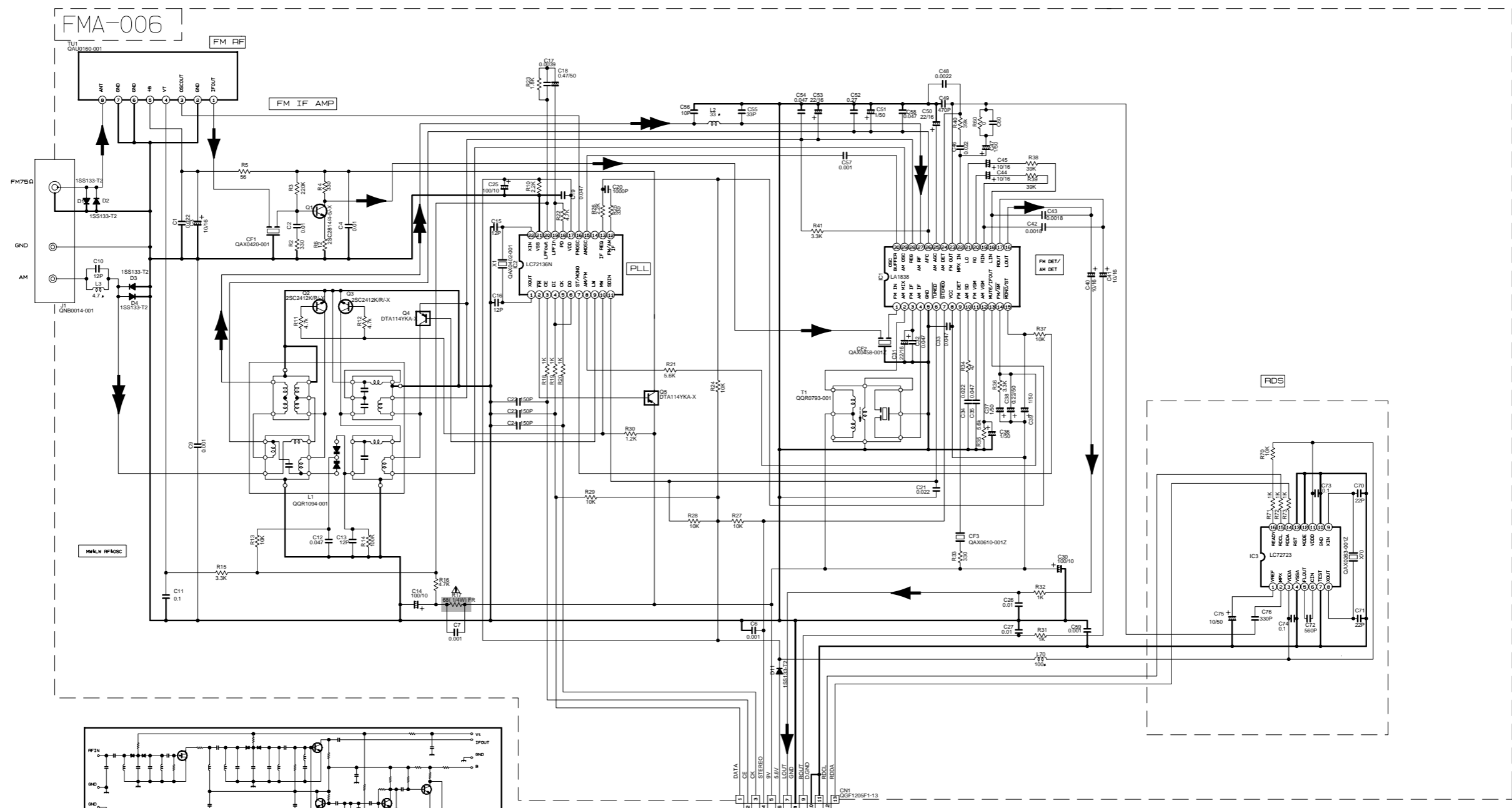
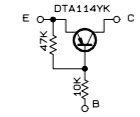
■ Tuner circuit (E)

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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 #F(P=pF).
5. ALL E. CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (#F)/RATED VOLTAGE (V).
6. SI DIODES (D) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA16S OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.  
G1 2SC2814/4-5/-X G2-G3 2SC2412K/R/-X  
G4-G5 DTA114YKA-X

B. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS:



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
	FM 60dB 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	3.5	3.5	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	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.	G1				G5				
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			

Tr. NO.	G2			G3			G4		
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

➡ FM/TUNER MAIN SIGNAL  
➡ AM SIGNAL

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

A B C D E F G H I

Tuner circuit (EE)

6

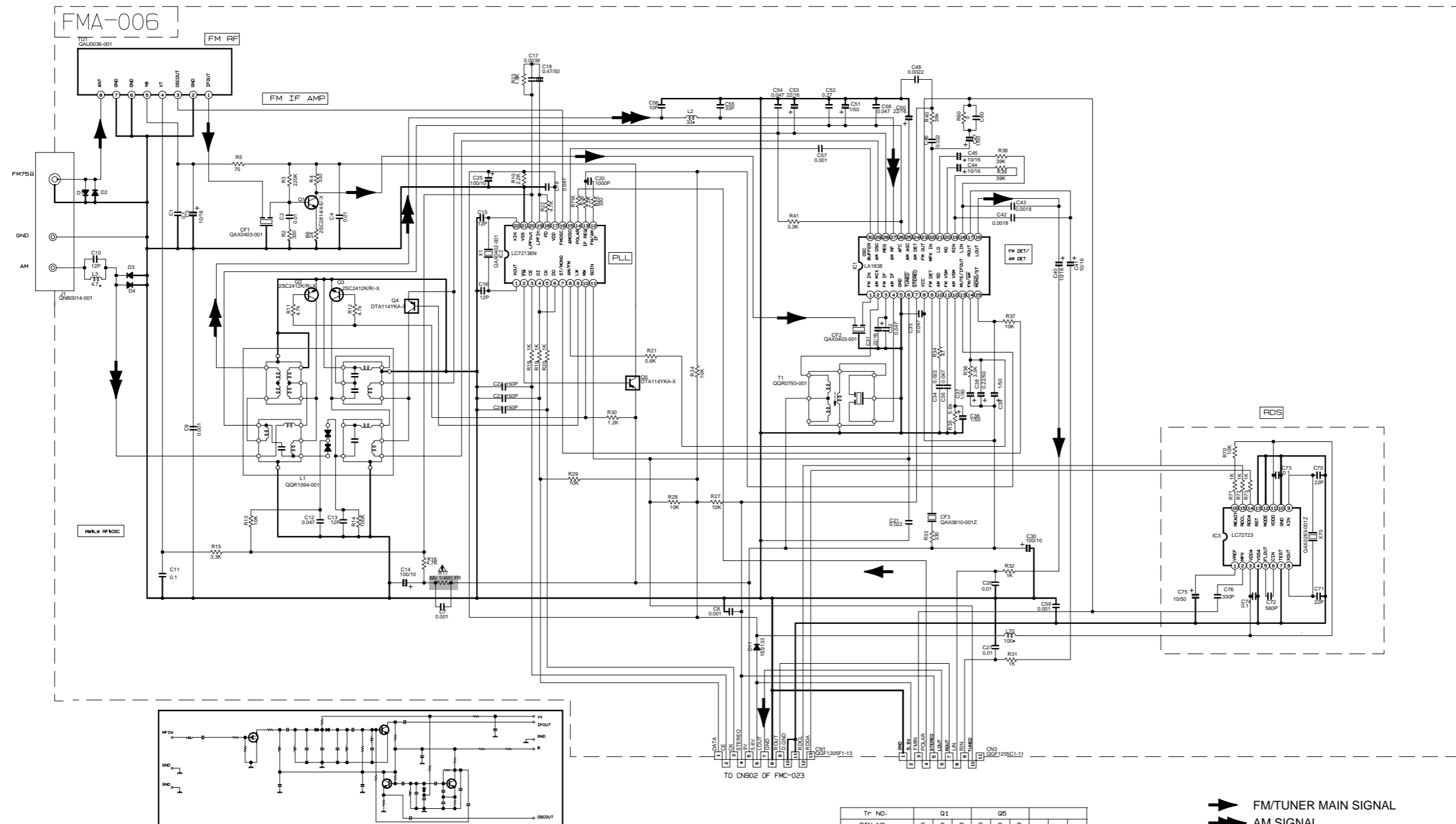
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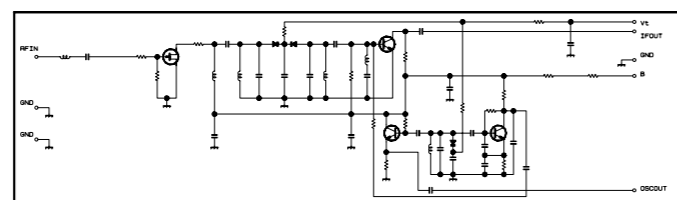
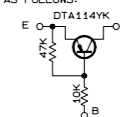
1



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 CAPACITANCE VALUES ARE IN μF(P=PF).
5. ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (D) 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

B. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.



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	3.4	2.8	3.4	0	0	3.6	3.6	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	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	4.3	3.4	3.4	2.8	3.4	0	0	3.6	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	0.9	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	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	8.9	8.8	0
AM 52KHz NO SIGNAL	0	0	0	9.0	0	8.9

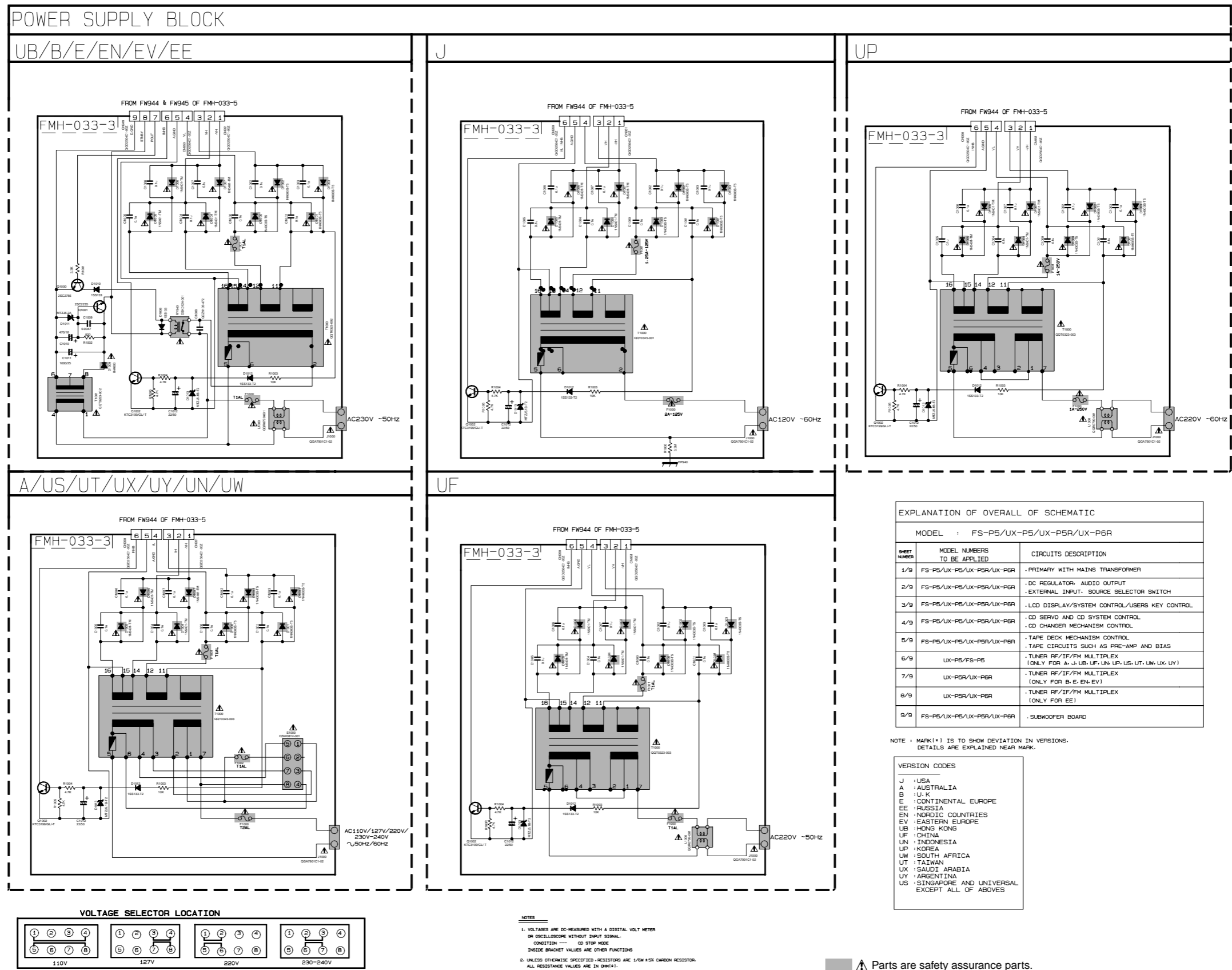
Tr. NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 52KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

FM/TUNER MAIN SIGNAL  
 AM SIGNAL

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



Power supply circuit



EXPLANATION OF OVERALL OF SCHEMATIC

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

SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/9	FS-P5/UX-P5/UX-P5R/UX-P6R	. 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, UW, 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 : INDIAN 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

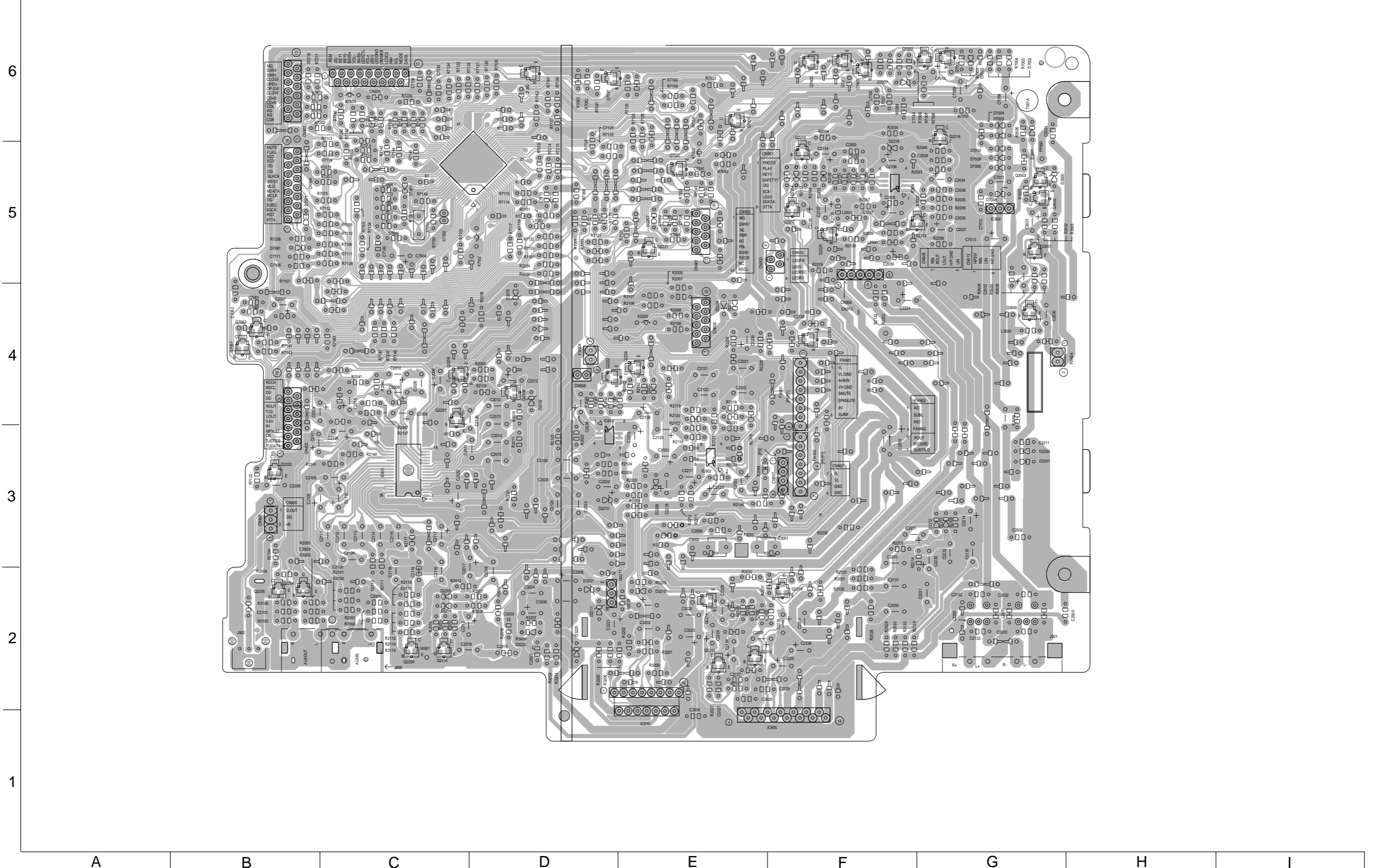
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A      B      C      D      E      F      G      H      I

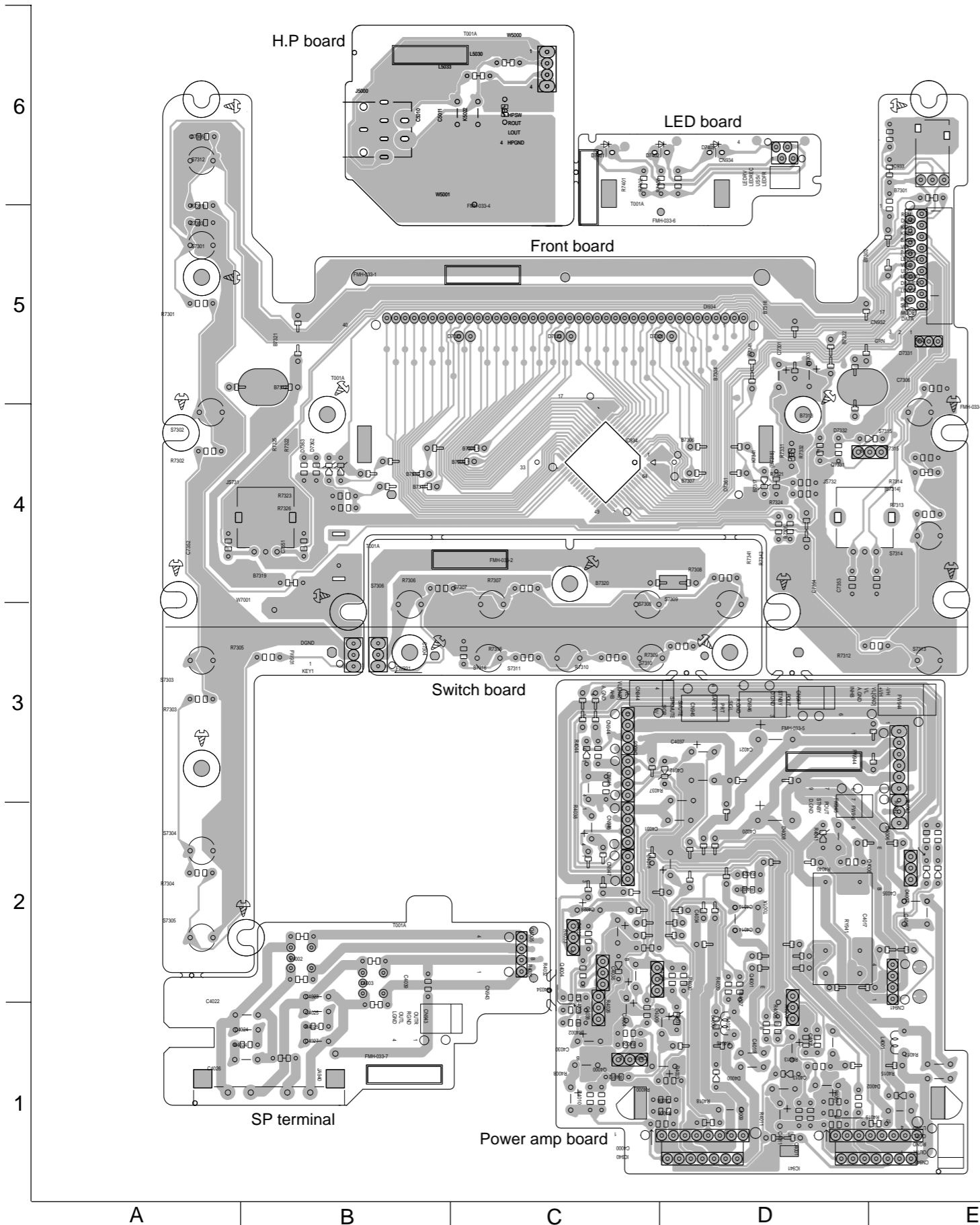
# Printed circuit boards

■ Main board

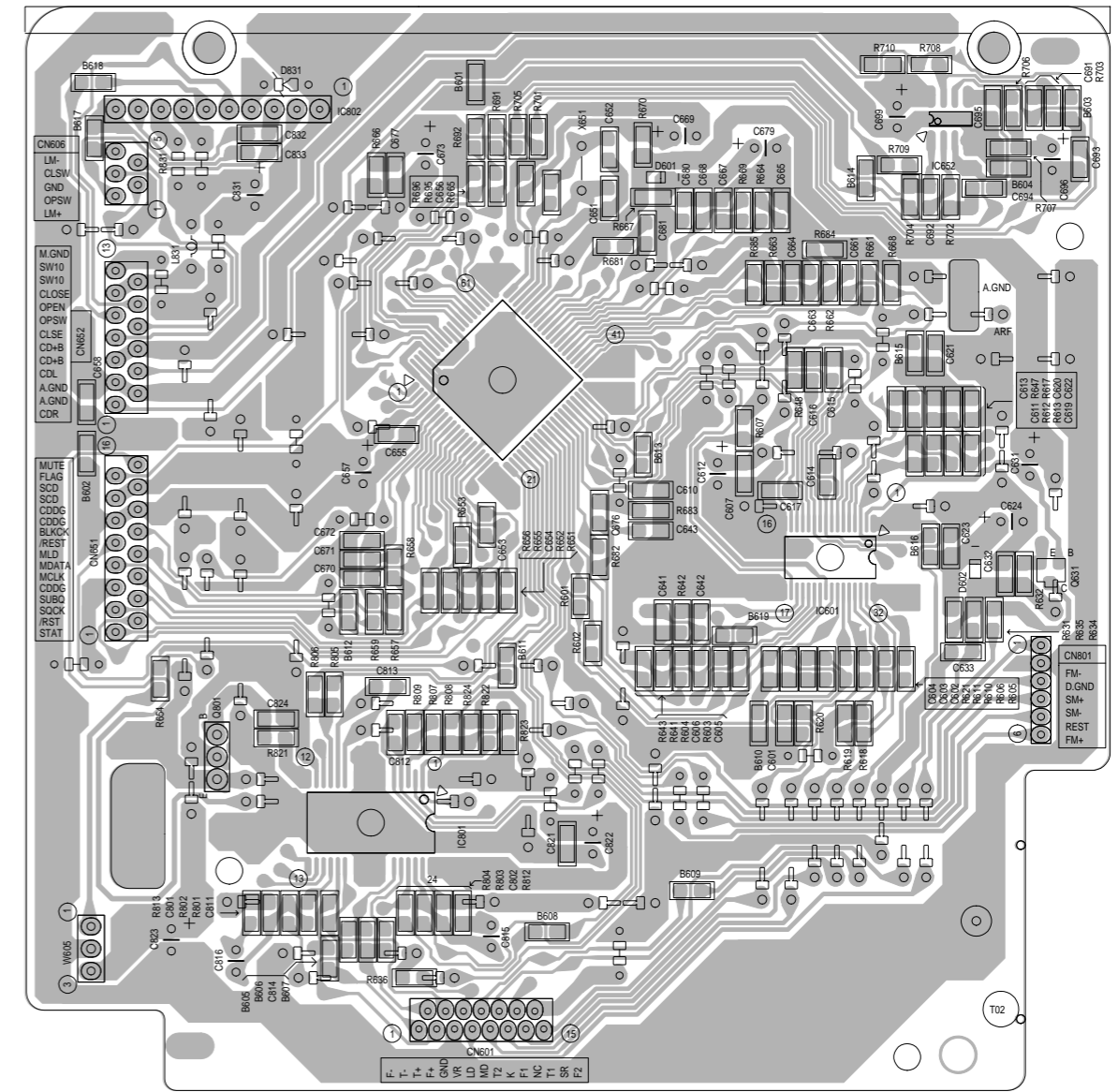
Block No. 01



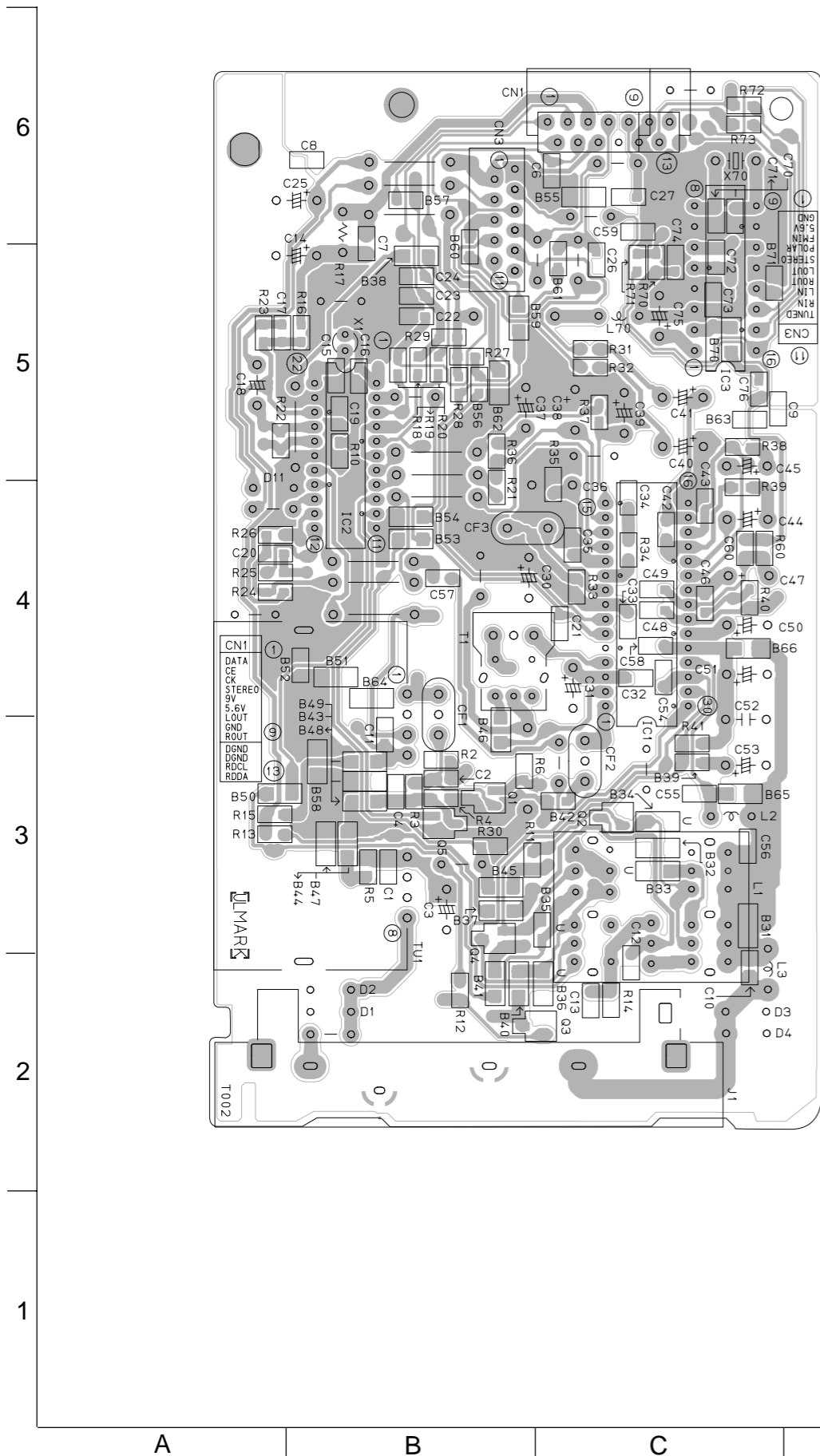
■ Front board Block No. 02



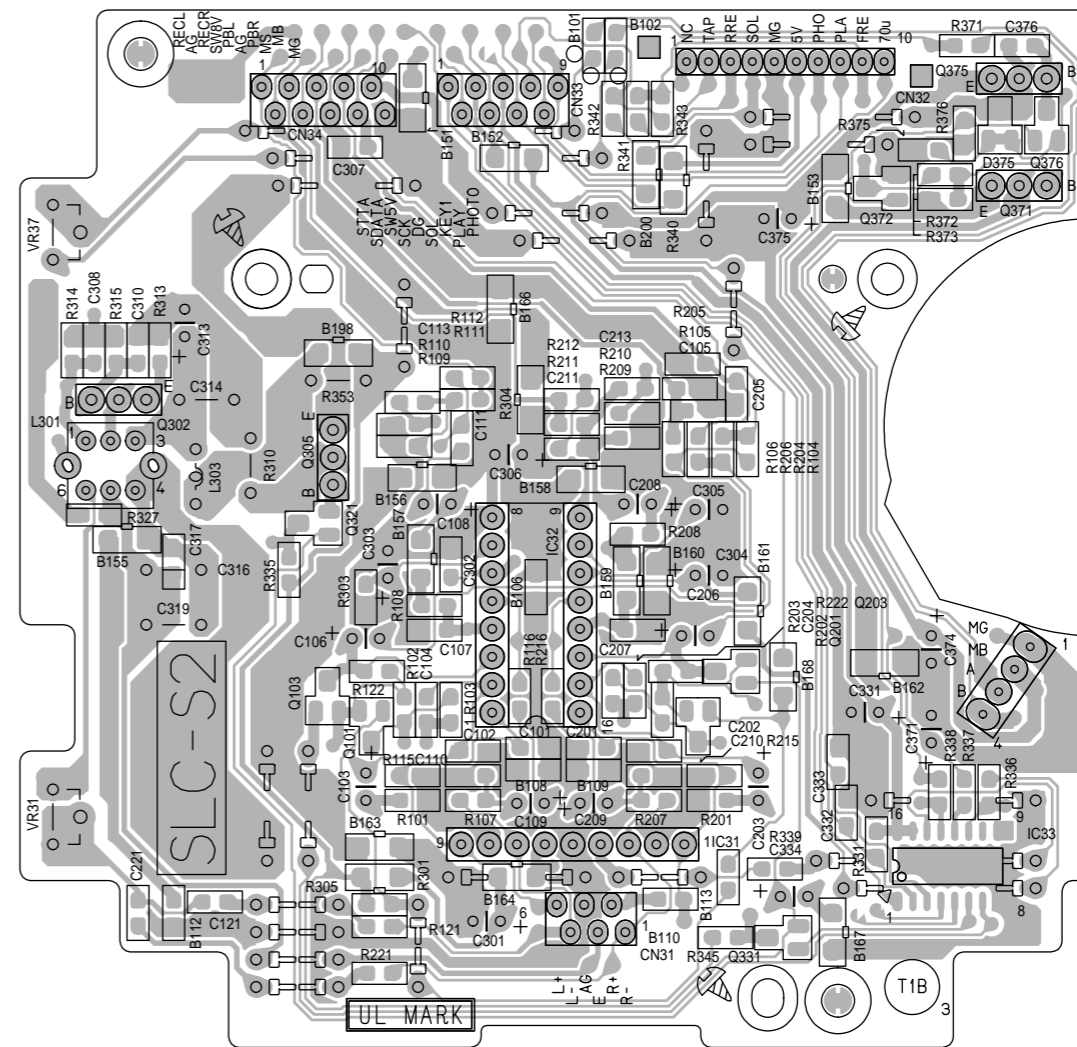
■ CD servo board Block No. 03



■ Tuner board Block No. 04



■ Head amplifier board Block No. 05



■ Cassette switch board Block No. 06

