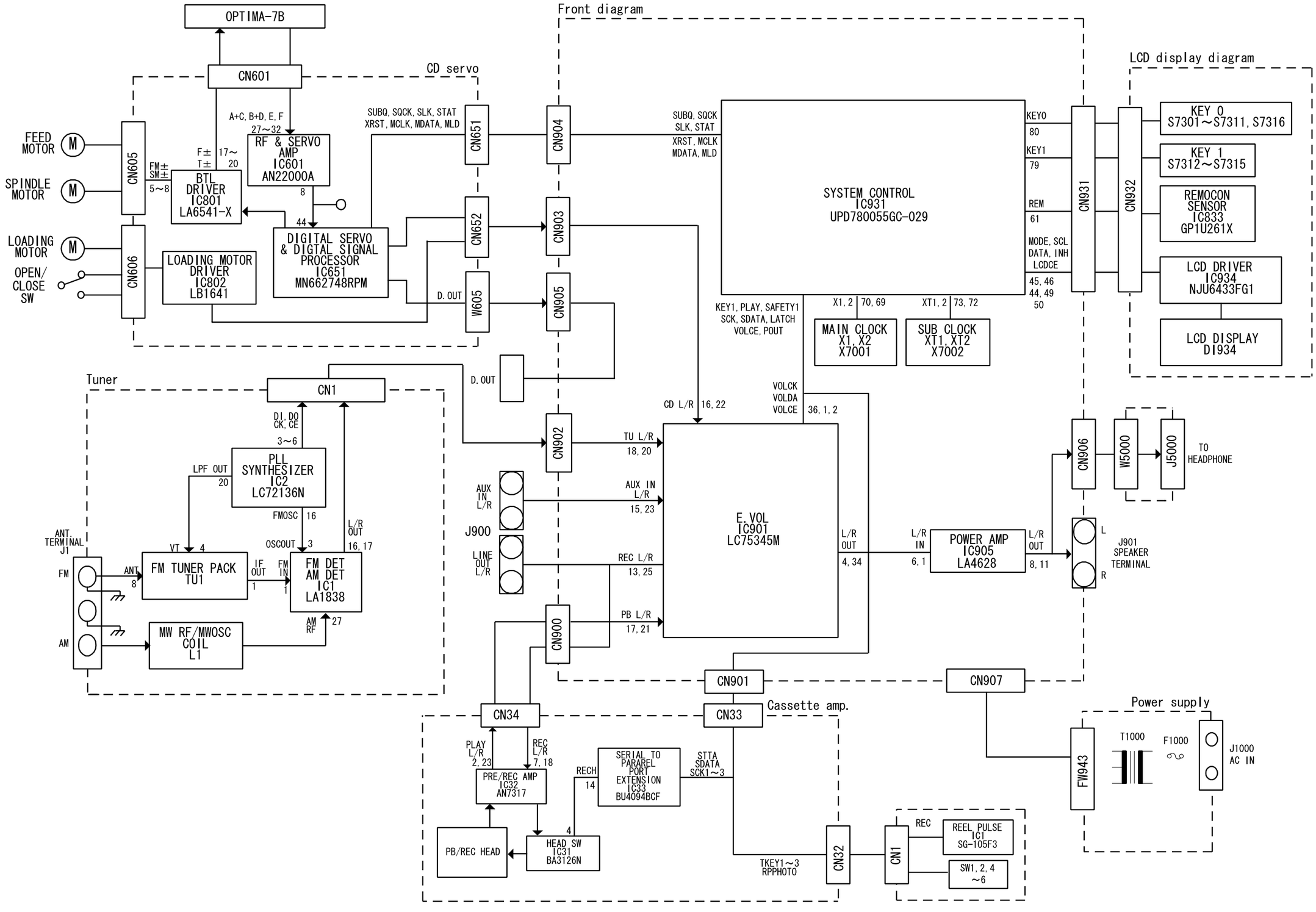
Block diagram



Standard schematic diagrams

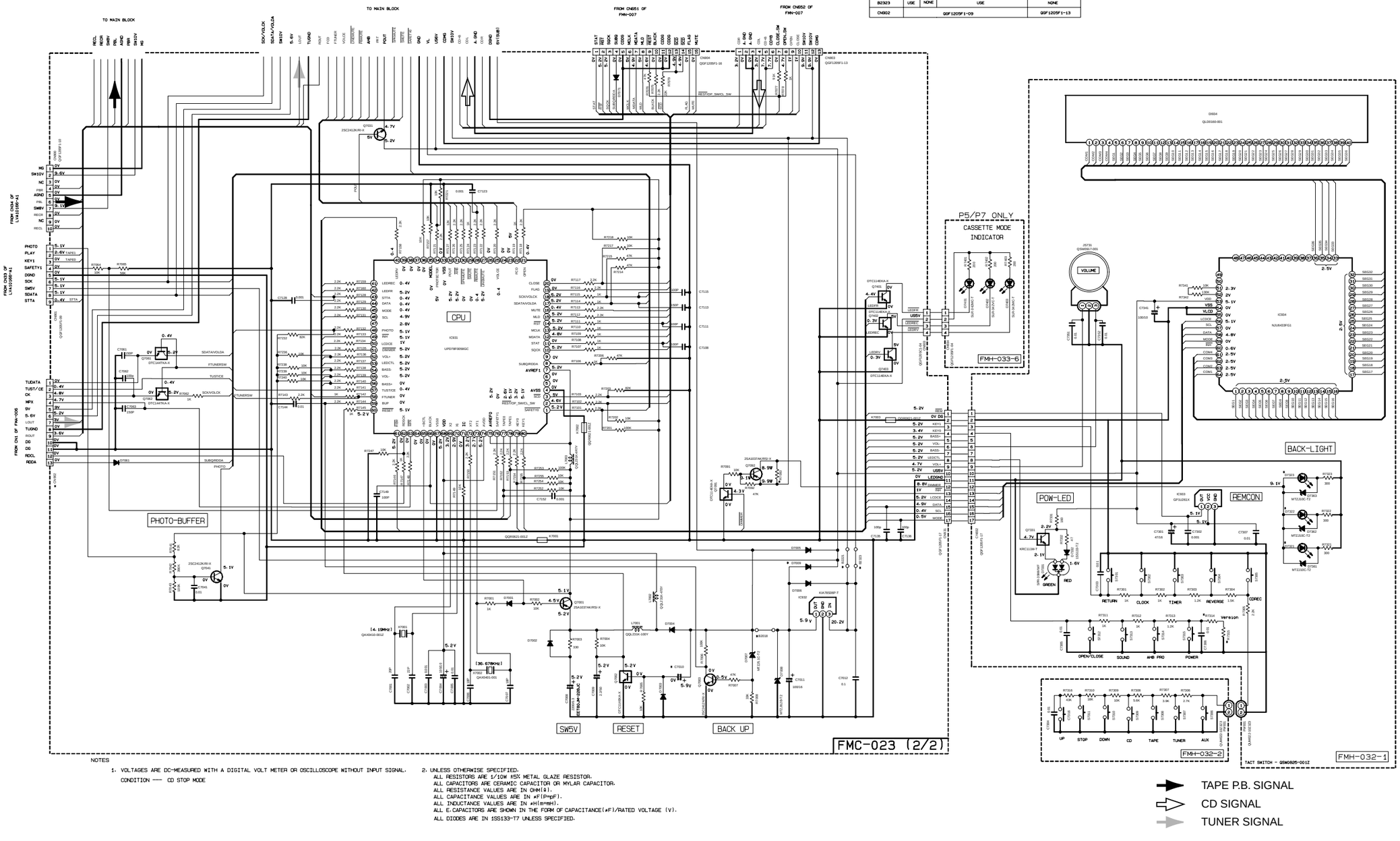
■ Front circuit

DTC144TKA-X	DTC114TKA-X	DTC114EK-X
47K OPEN	10K OPEN	10K 10K
Q7061/Q7062	Q7002	Q7091/Q7401/Q7402/Q7403

* MARK

VERSION / ITEMS	FS-P5 (J)	UX-P5 (UB)	UX-P5 (A)	UX-P5 (UB/UF/UN/UP US/UT/UW)	UX-P5 (UX)	UX-P5 (UY)	UX-P5R (B/E/EW/EV)	UX-P5R (EE)
R7093	1K	1K	1K	1K	1K	1K	1K	1K
D7321 D7322 D7323	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE
D7071/BW	BW						D7071	
R7314 (VERSION1)	12K	B/W	B/W	B/W	B/W	B/W	B/W	B/W
R7315 (VERSION1)	82K	47K	47K	47K	3.6K	1.5K	15K	10K
C7010	4.7/50	10/50	4.7/50				10/50	
D7009	NONE	USE	NONE				USE	
B2018	USE	NONE	USE				NONE	
B2221	NONE	USE	NONE				USE	
B2323	USE	NONE	USE				NONE	
CN902	QGF1205F1-09						QGF1205F1-13	

BLUE:QLMP-A849



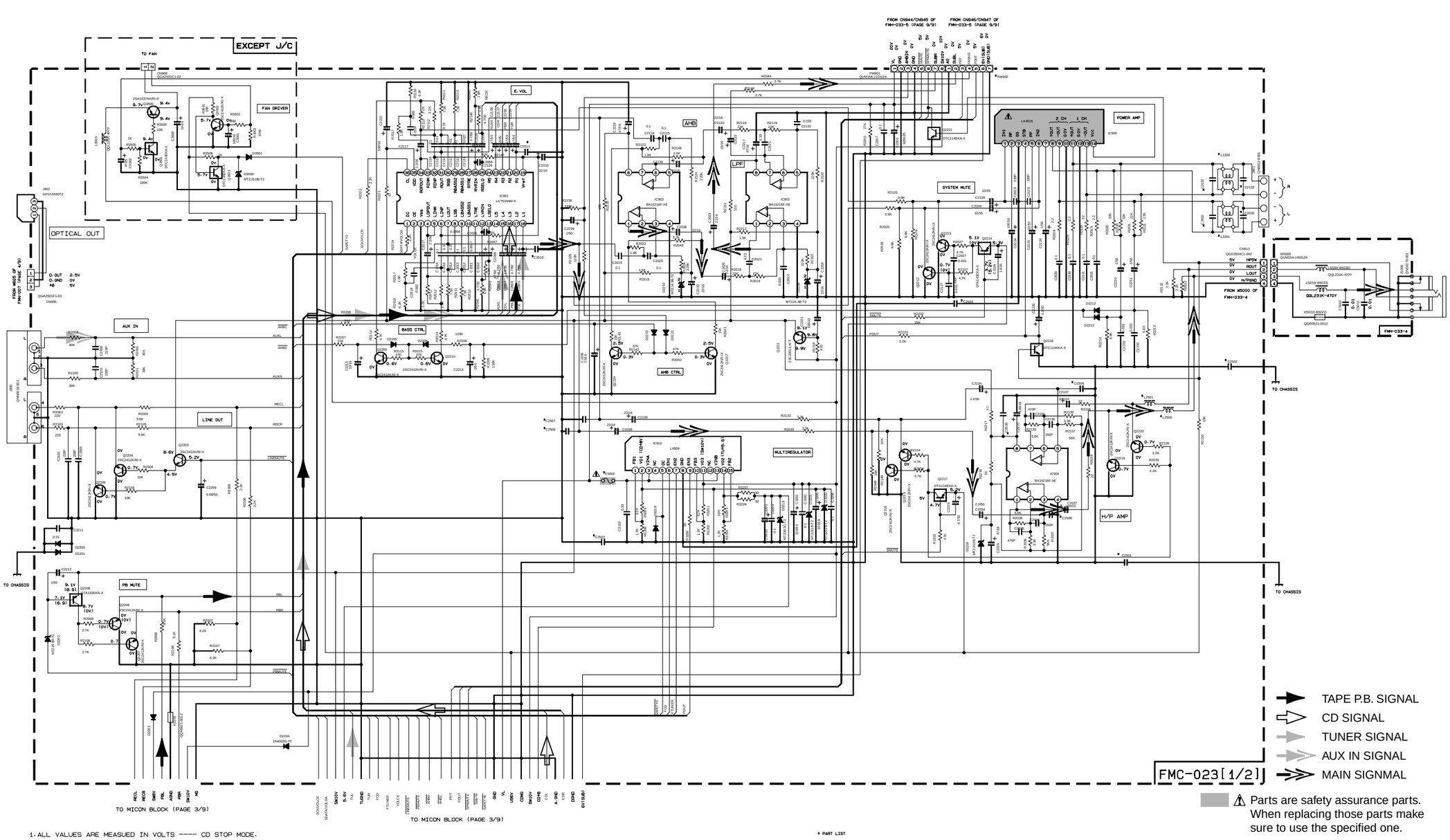
NOTES

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 OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
   ALL DIODES ARE IN 1SS133-T7 UNLESS SPECIFIED.

TAPE P.B. SIGNAL
CD SIGNAL
TUNER SIGNAL

■ Main circuit



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

1. ALL VALUES ARE MEASUED 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																					

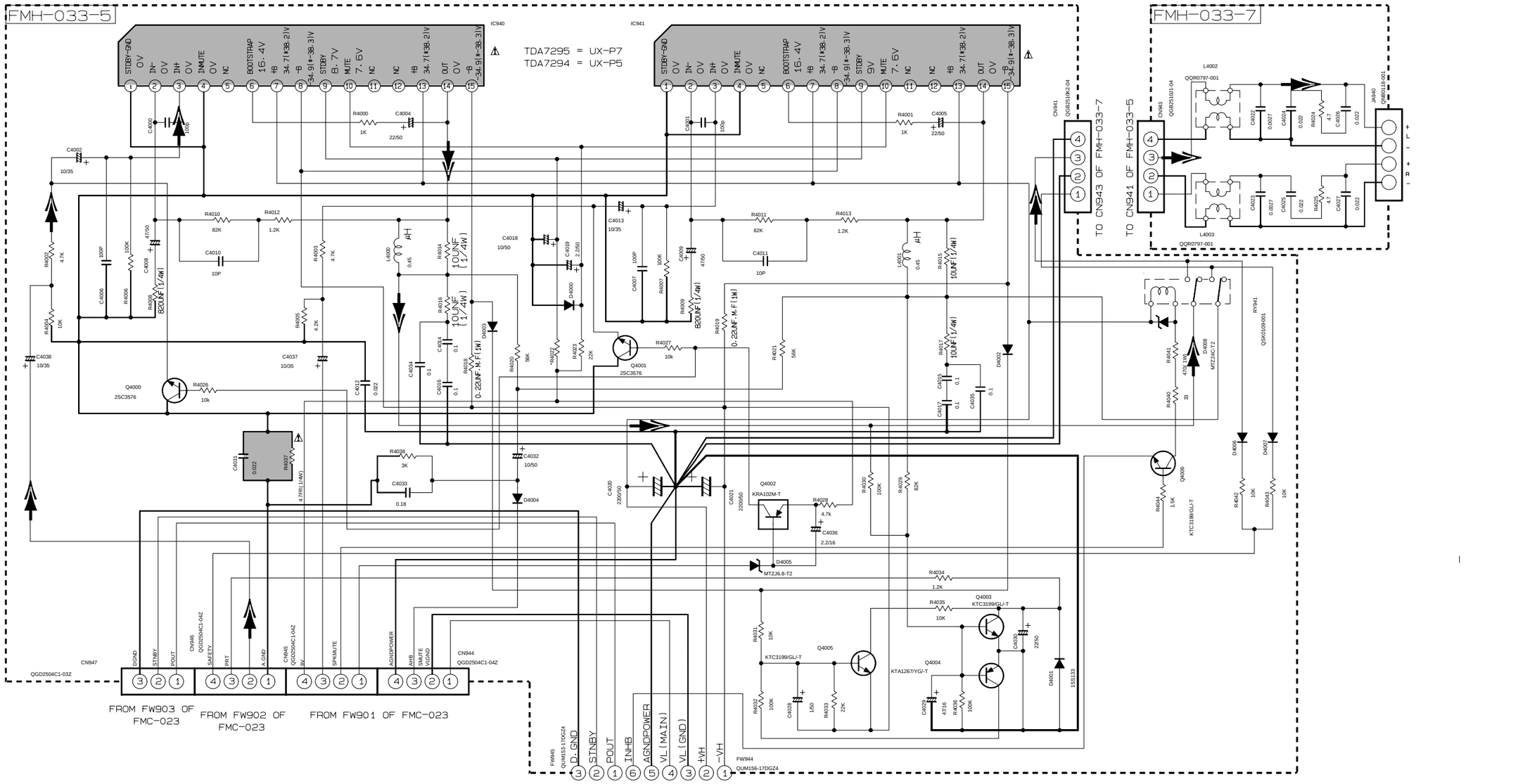
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN ★F(P=pF).
ALL INDUCTANCE VALUES ARE IN ★H(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(★F)/RATED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

* PART LIST

PART / VERSION	C2032/C2132	L2200/L2201	C2033/C2133	FW902	F3000	C2506/C2507	L2500/L2501	C2508/C2509	C2503	C2505	C2501	C2510	C2511	C2502	C2504
J/C	NONE	B/M	NONE	NONE	1A-125V	—	—	—	—	—	—	—	—	—	—
B/E/EE/EN/EV	0.1u	QQR0797-001	0.0033u	NONE	T1AL	470P	QQL231K-560Y	330P	0.001	0.01	0.01	0.0082	0.0082	0.001	0.001
A/UF/UN/UB/UT/UW/UX/UY	0.1u	QQR0797-001	0.0033u	NONE	T1AL	470P	QQL231K-560Y	330P	0.001	0.01	0.01	0.0082	0.0082	0.001	0.001
UP	0.1u	QQR0797-001	0.0033u	NONE	1A-250V	470P	QQL231K-560Y	330P	0.001	0.01	0.01	0.0082	0.0082	0.001	0.001
UB	0.1u	QQR0797-001	0.0033u	QUM157-11D5Z4	T1AL	470P	QQL231K-560Y	330P	0.001	0.01	0.01	0.0082	0.0082	0.001	0.001

DTA143EKA-X	DTA144TKA-X
4.7K	47K
Q2208/Q2214	Q2217

■ 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	O	O	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	O	O	O	O	O	O	O	O	O	O	O	O	O	O
B/E/EN/EV/EE/UB	O	O	1K	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O

O = USED
X = NOT USED

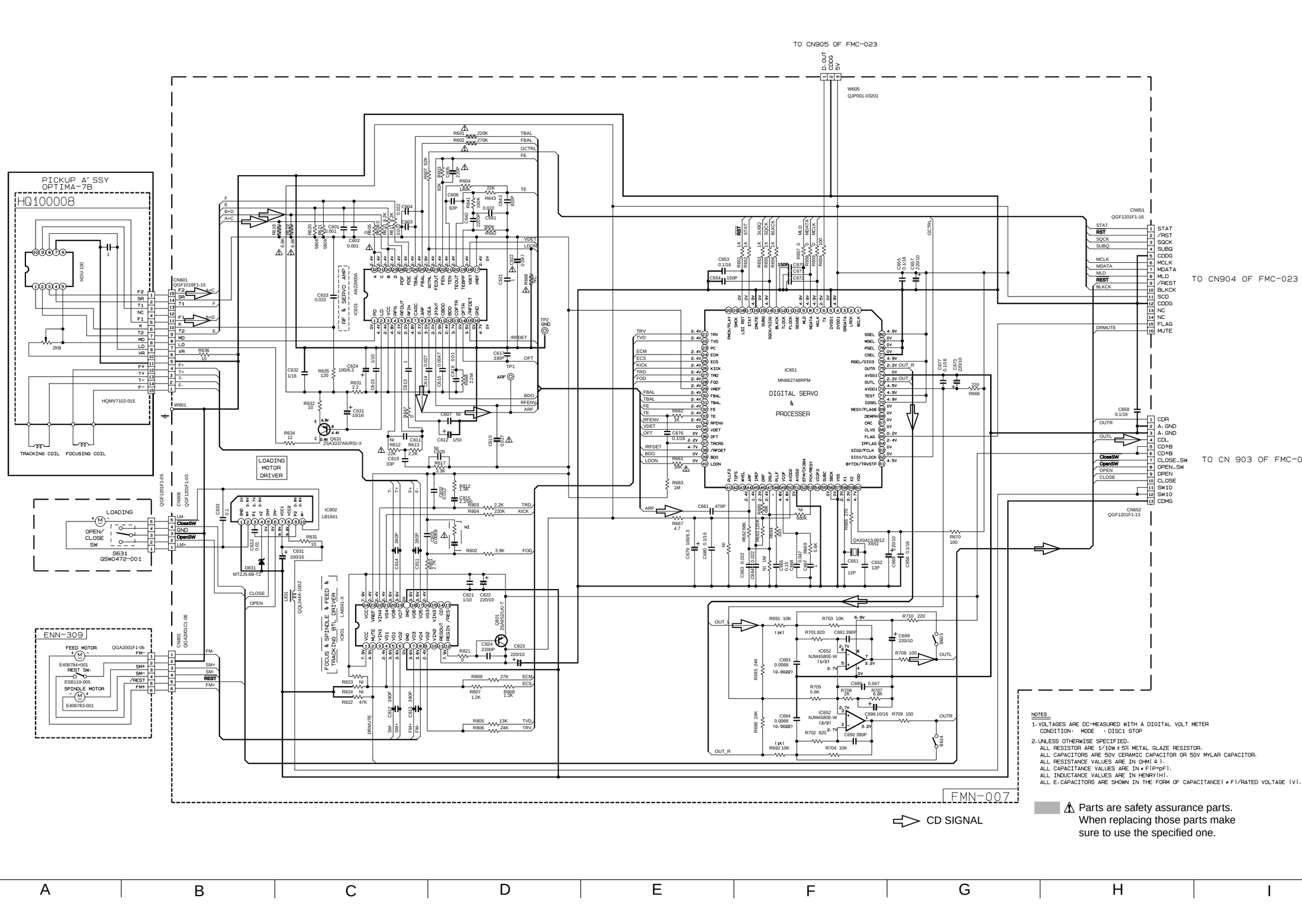
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

NOTES

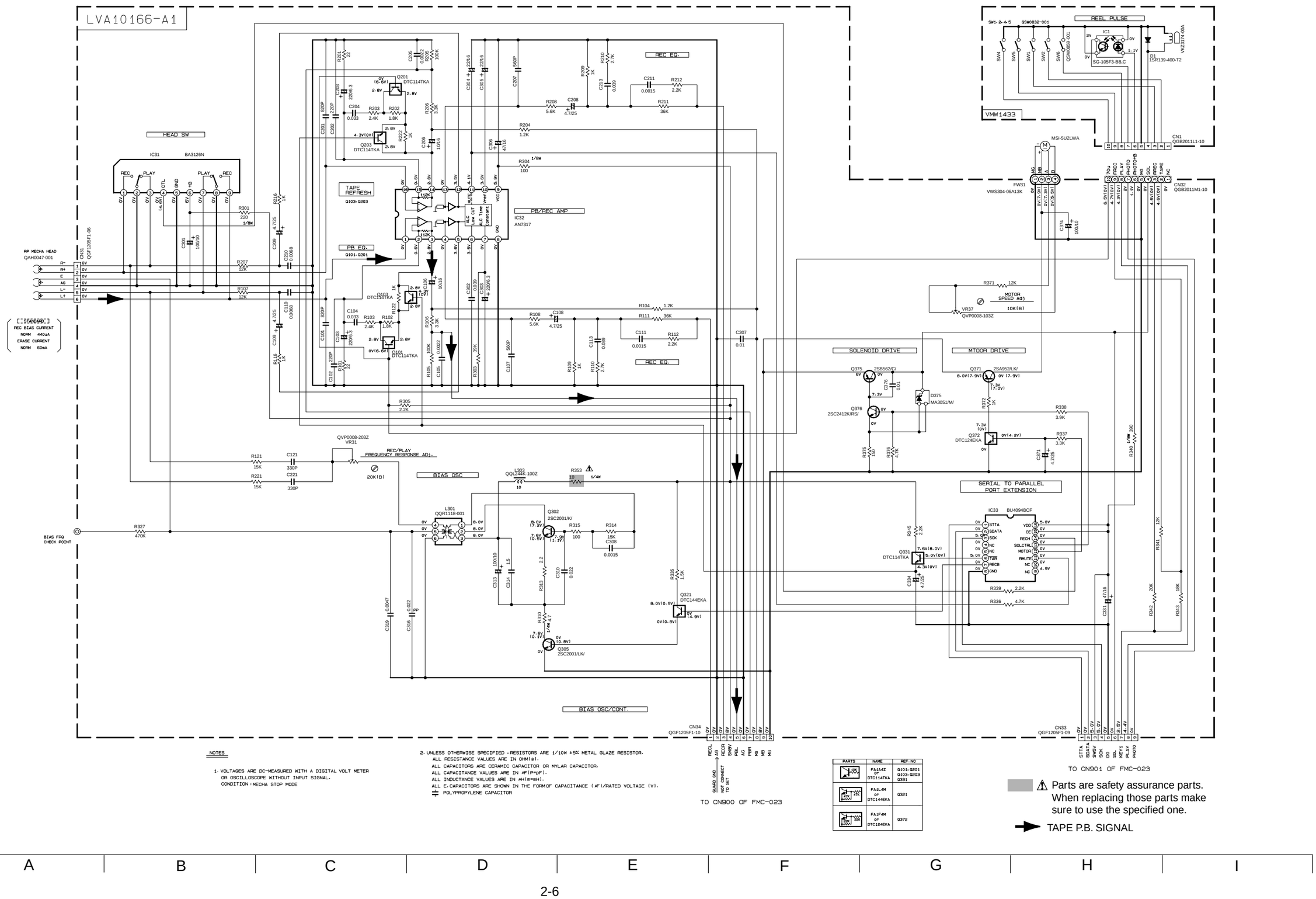
1. VOLTAGES ARE DC-MEASURED USING A DIGITAL VOLTMETER OR AN OSCILLOSCOPE WITHOUT INPUT SIGNAL CONDITION
2. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS ARE 1/6W ± 5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE 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.
   (PP) POLYPROPYLENE CAPACITOR
   (M) 50V ± 5% MYLAR CAPACITOR OR 50V ± 5% THIN FILM CAPACITOR
3. 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



■ 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).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN #F(P=pF).
   ALL INDUCTANCE VALUES ARE IN #H(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORMOF CAPACITANCE (#F)/RATED VOLTAGE (V).
   POLYPROPYLENE CAPACITOR

PARTS	NAME	REF.NO
47K	FA1A4Z or DTC114TKA	Q101·Q201 Q103·Q203 Q331
47K	FA1L4M or DTC144EKA	Q321
22K	FA1F4M or DTC124EKA	Q372

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

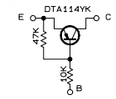
TAPE P.B. SIGNAL

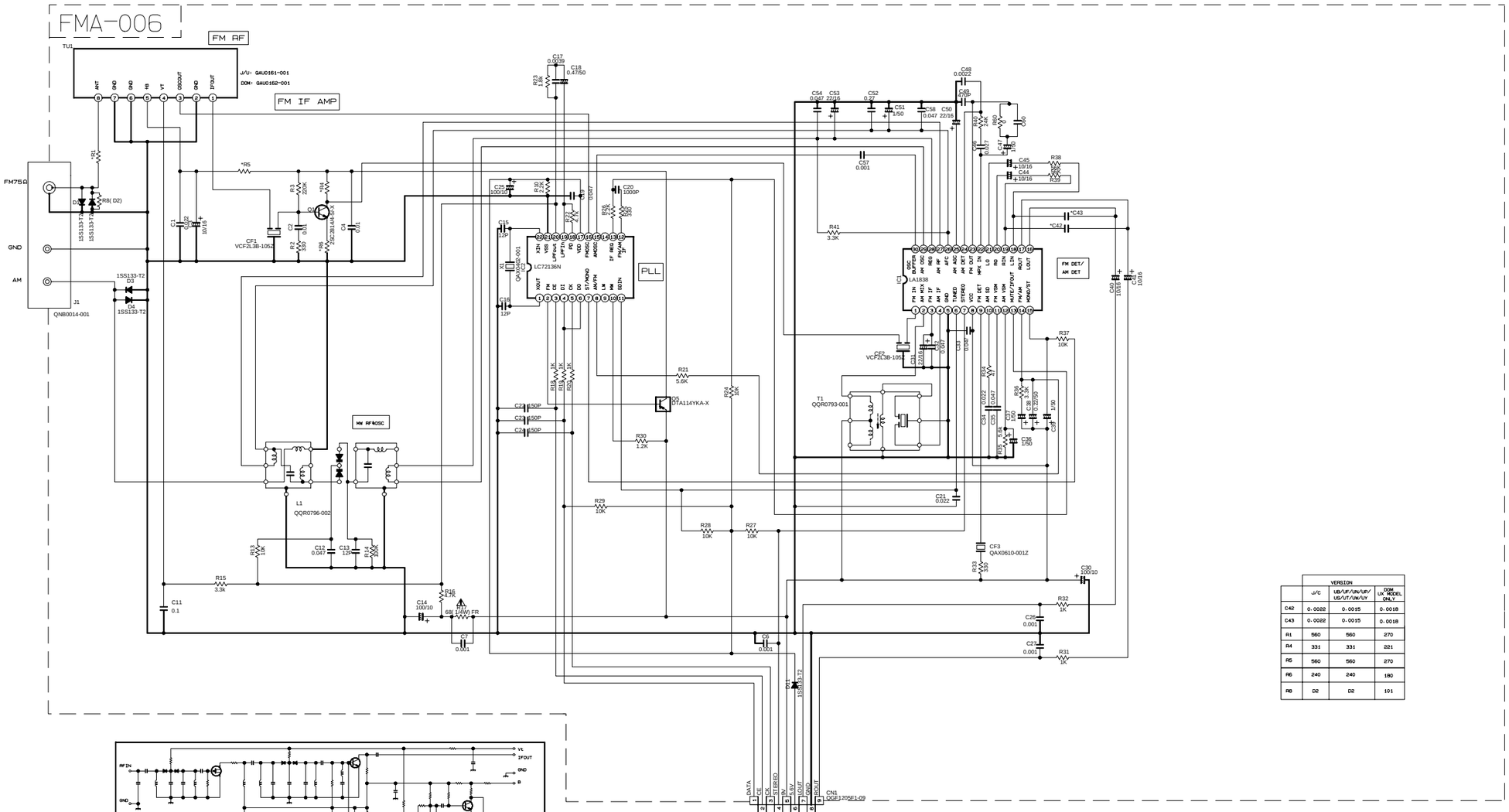
■ Tuner circuit

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 μF(P=pF).
5. ALL E.CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (▶|) 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

8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.





	VERSION		
	J/C	UB/UF/UN/UP/ US/UT/UW/UY	DOM UK MODEL 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

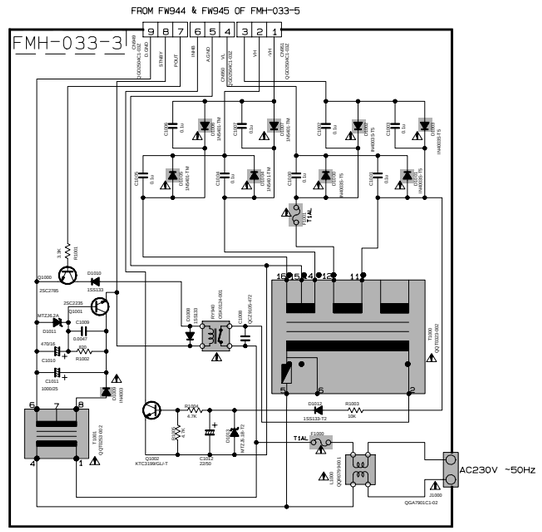
	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	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
	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	8.9	8.8	0			
AM 522KHz 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 522KHz 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

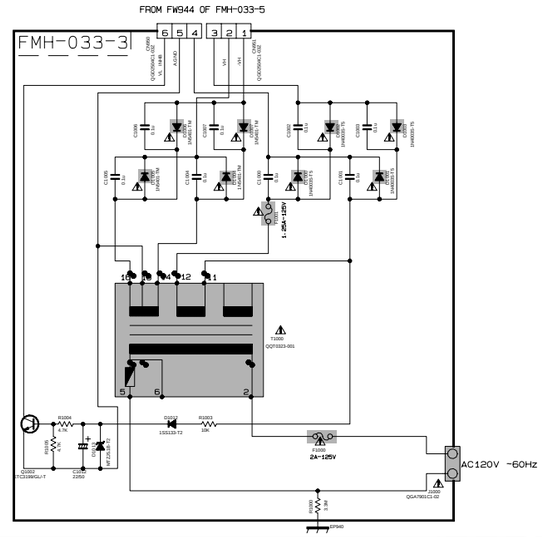
■ Power supply circuit

POWER SUPPLY BLOCK

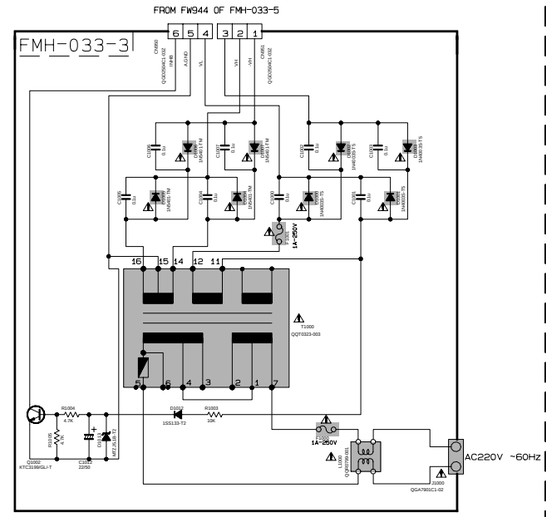
UB/B/E/EN/EV/EE



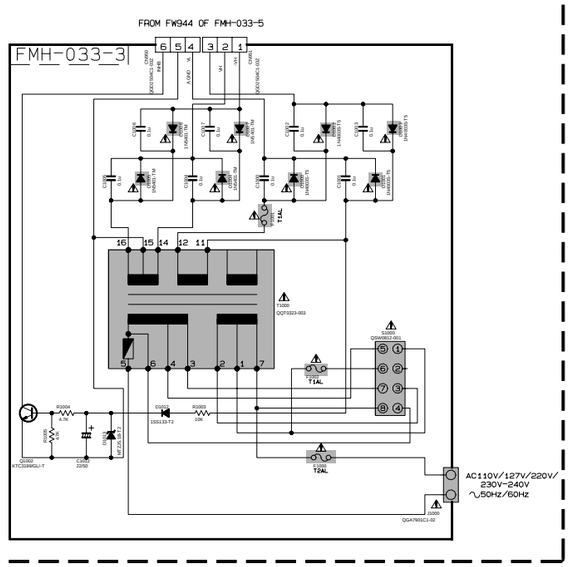
J



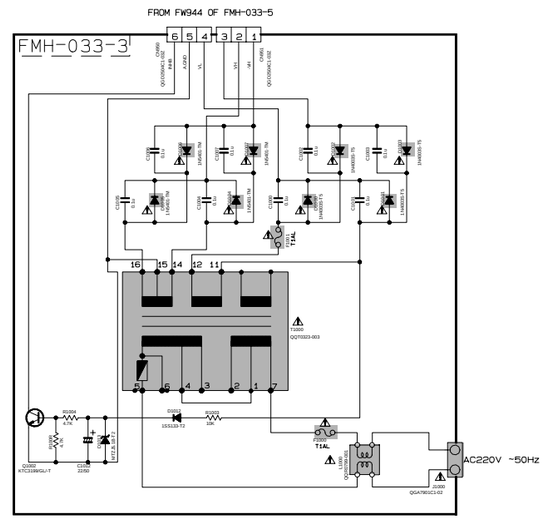
UP



A/US/UT/UX/UY/UN/UW



UF



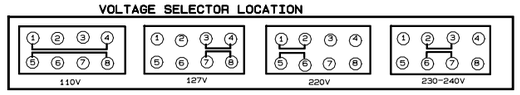
EXPLANATION OF OVERALL OF SCHEMATIC		
MODEL : FS-P5/UX-P5/UX-P5R/UX-P6R/UX-P7R		
SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/9	FS-P5/UX-P5/UX-P5R/UX-P6R /UX-P7R	.PRIMARY WITH MAINS TRANSFORMER
2/9	FS-P5/UX-P5/UX-P5R/UX-P6R	.DC REGULATOR, AUDIO OUTPUT .EXTERNAL INPUT, SOURCE SELECTOR 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, 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	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 ABOVES

VOLTAGE SELECTOR LOCATION



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

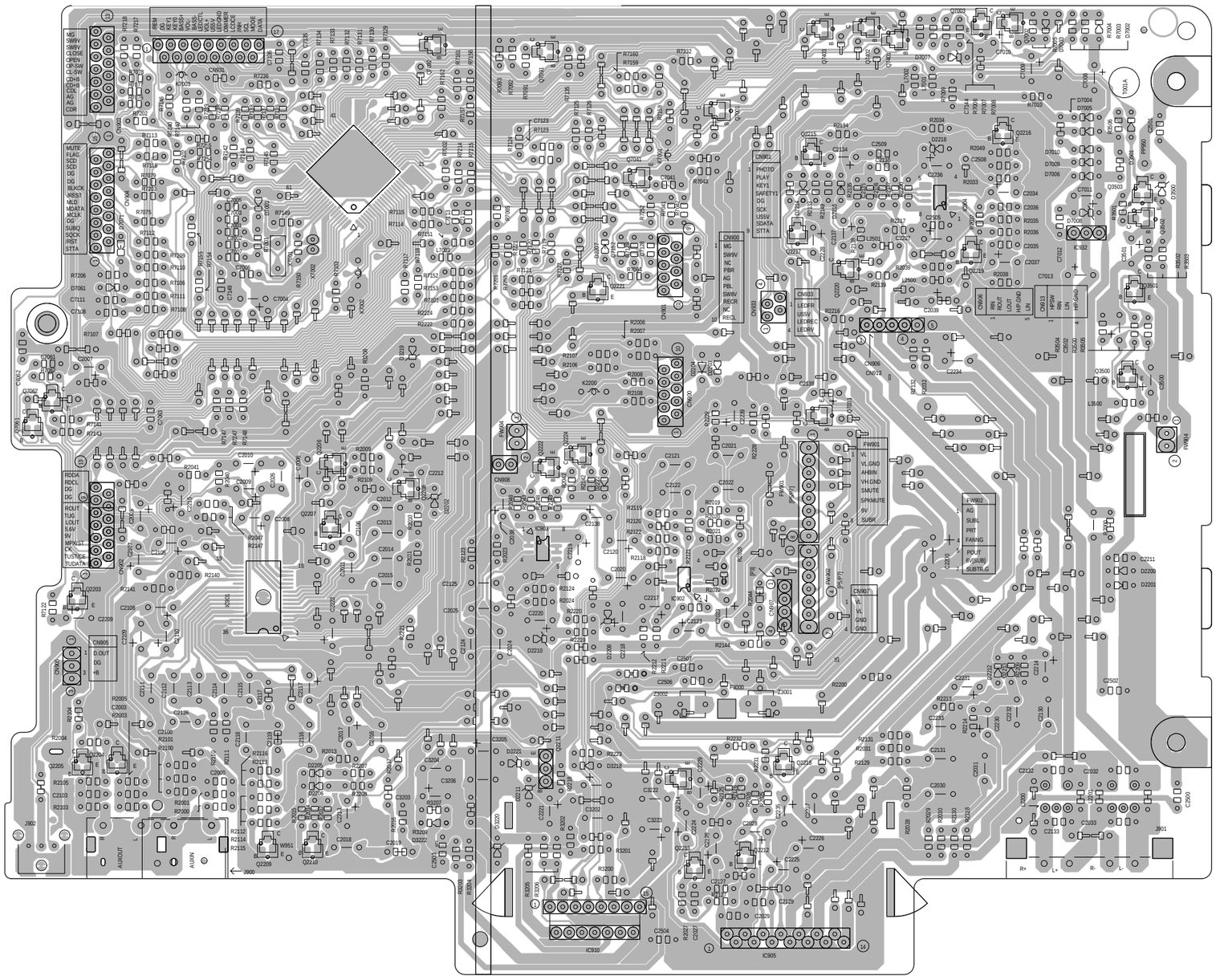
2. UNLESS OTHERWISE SPECIFIED
   ALL RESISTANCE VALUES ARE IN Ω(Ω=Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(μ=μF).
   ALL INDUCTANCE VALUES ARE IN H(H=H).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES(Ex. Name:1SS133-T2)

RESISTORS ARE 1/6W ±5% CARBON RESISTOR.

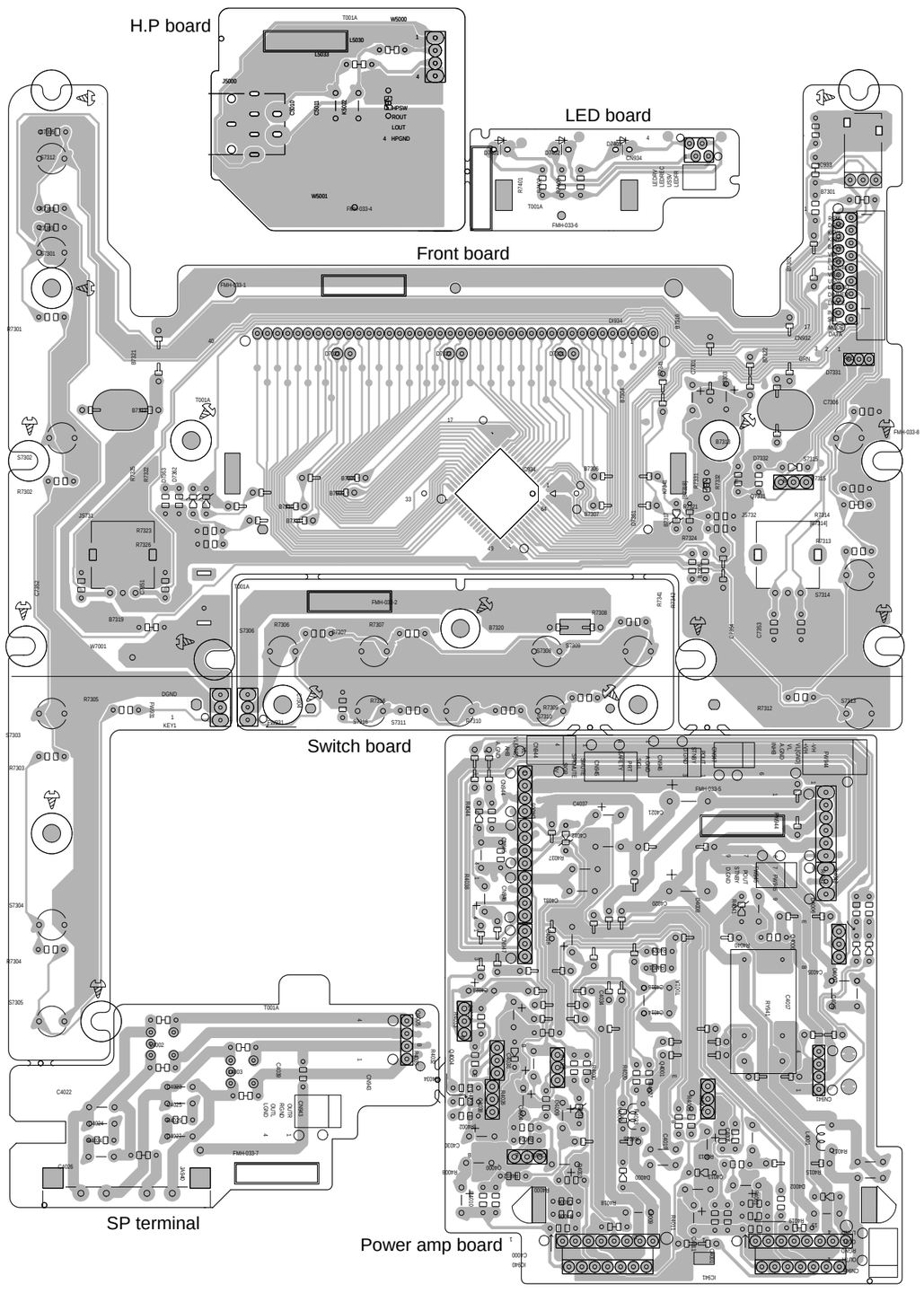
⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

Printed circuit boards

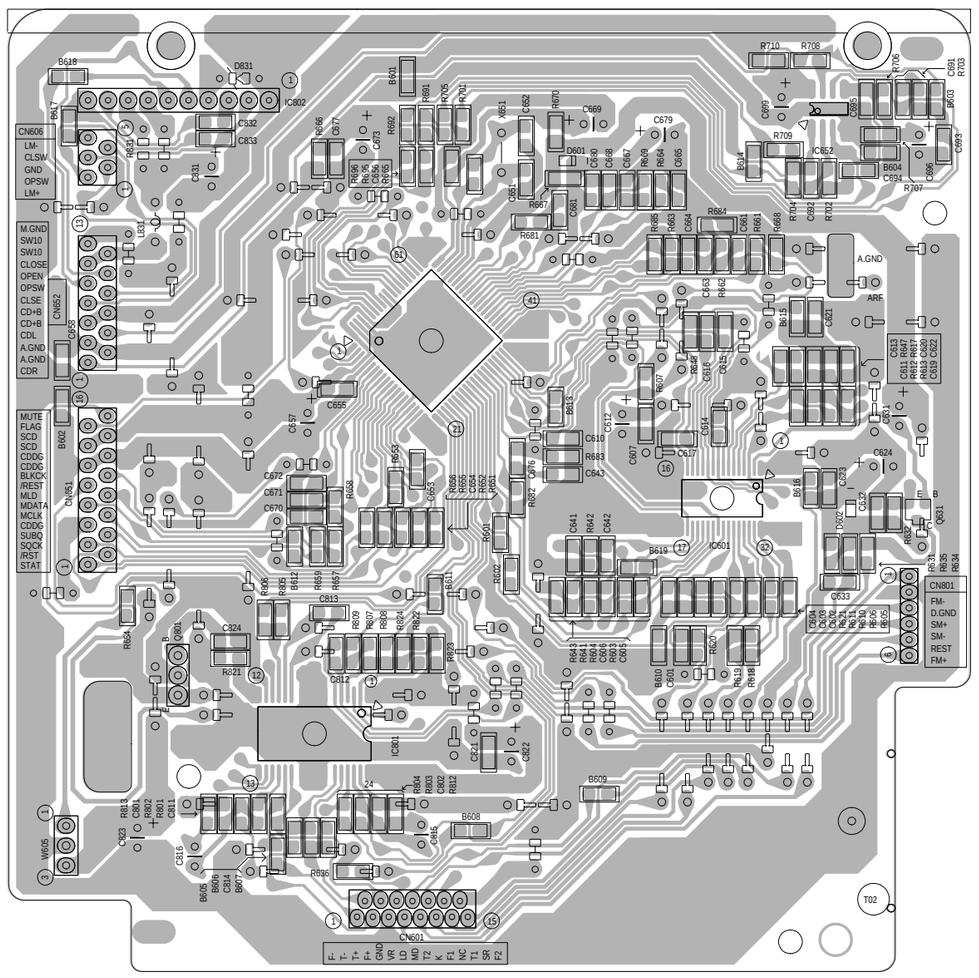
■ Main board Block No. 01



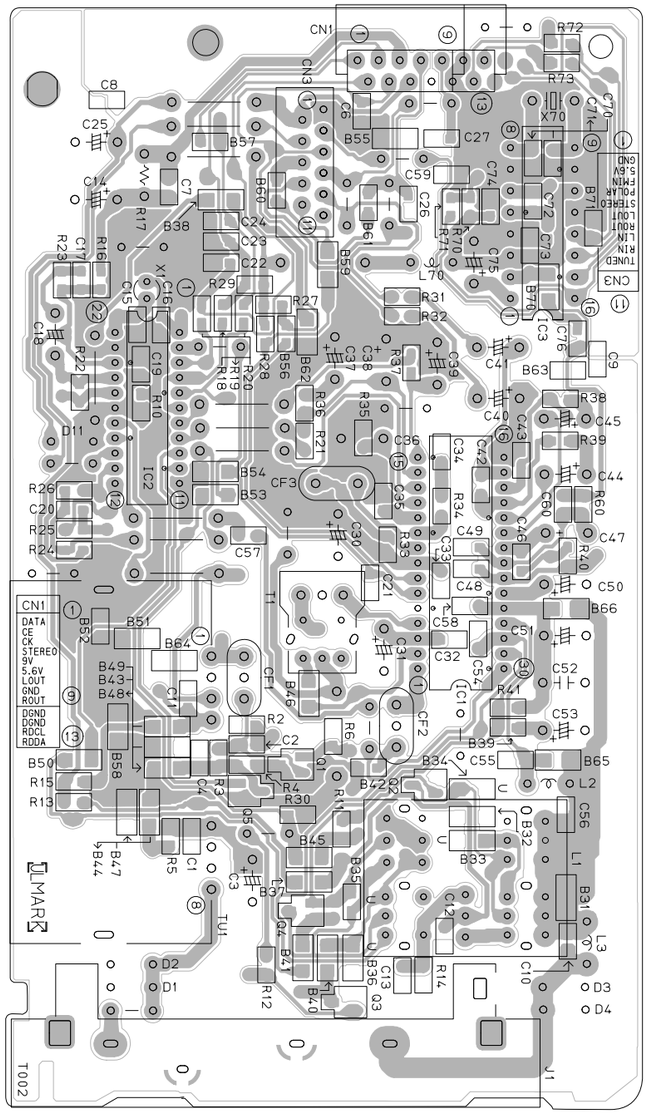
■ Front board Block No. 02



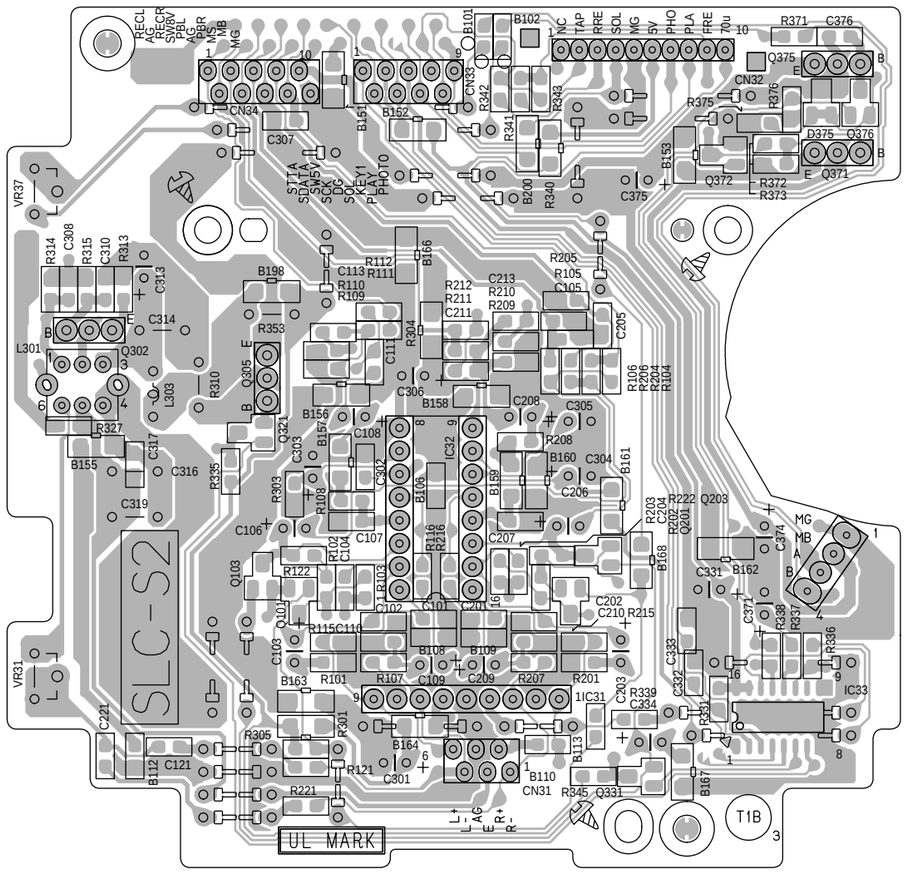
■ CD servo board Block No. 03



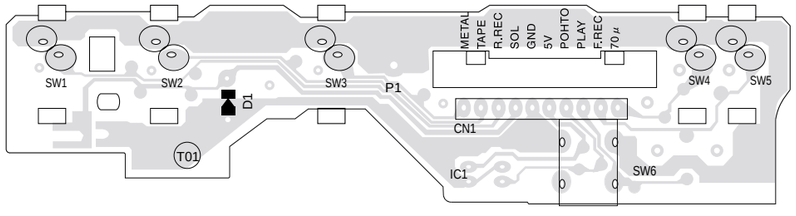
■ Tuner board Block No. 04



■ Head amplifier board Block No. 05



■ Cassett switch board Block No. 06



UX-P7 UX-P7

<<MEMO>>