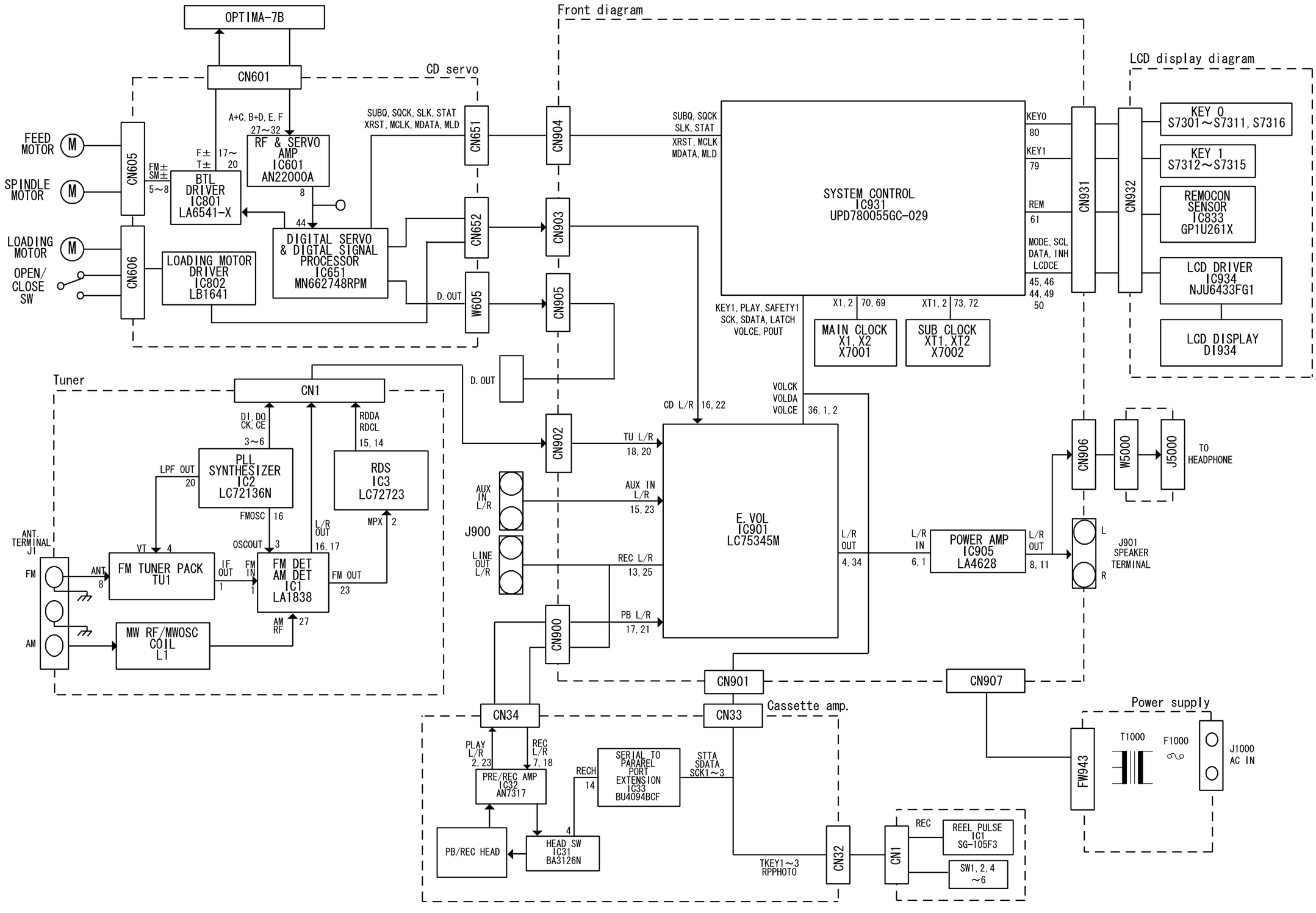
Block diagram



Standard schematic diagrams

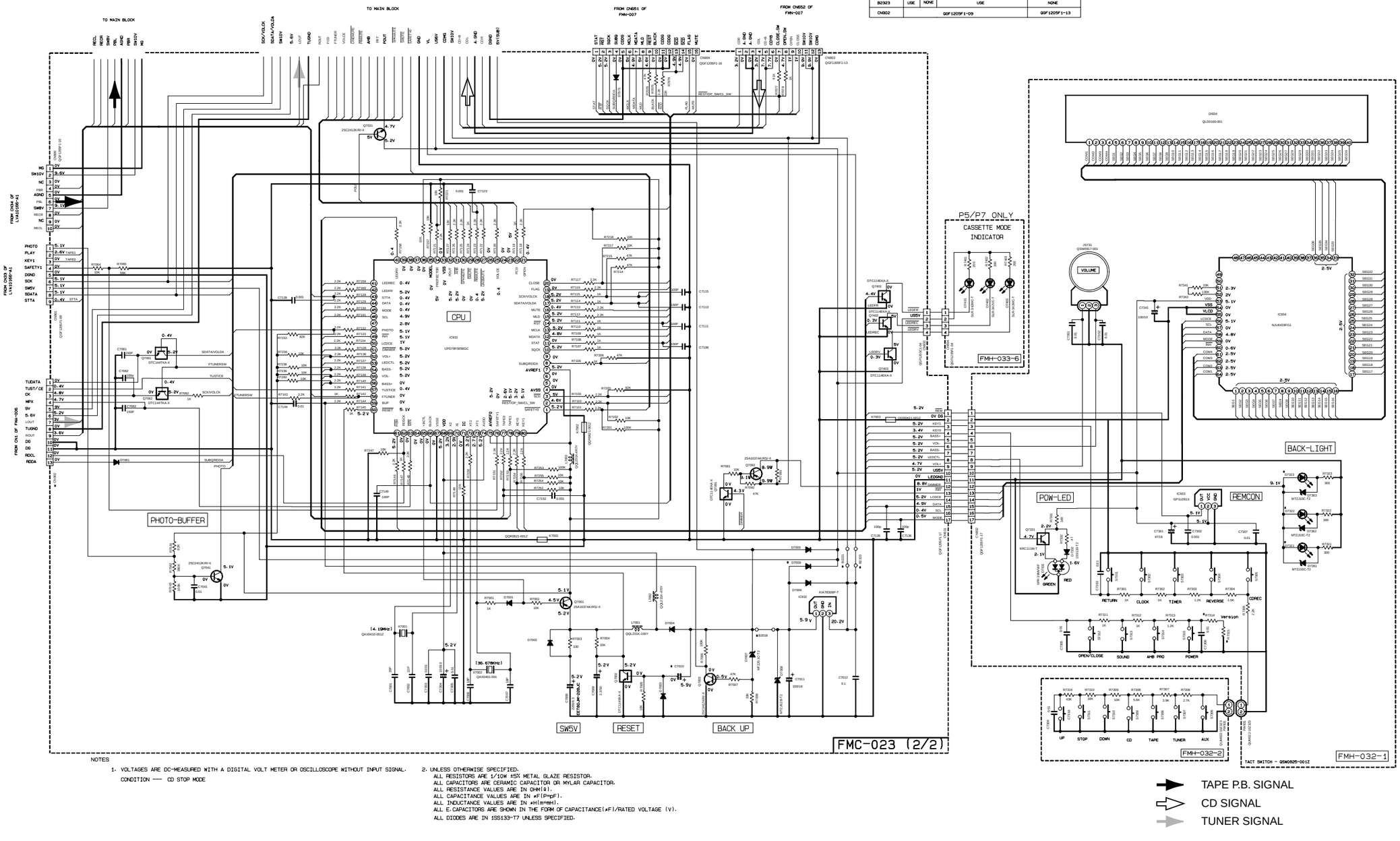
■ Front circuit

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 (LB)	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

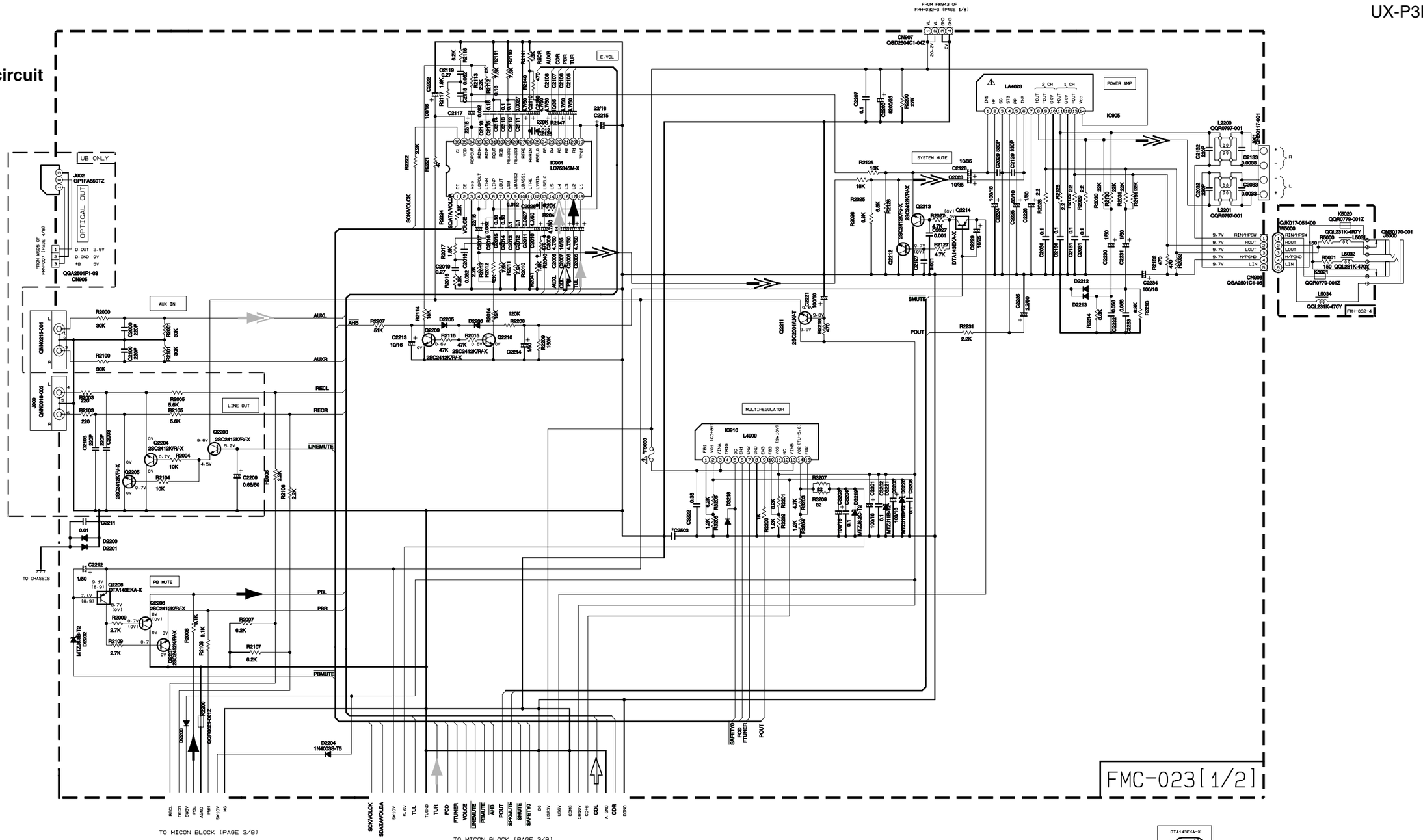


NOTES

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.

■ Main circuit



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
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 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 1SS133-T2 TYPE UNLESS SPECIFIED

*MARK

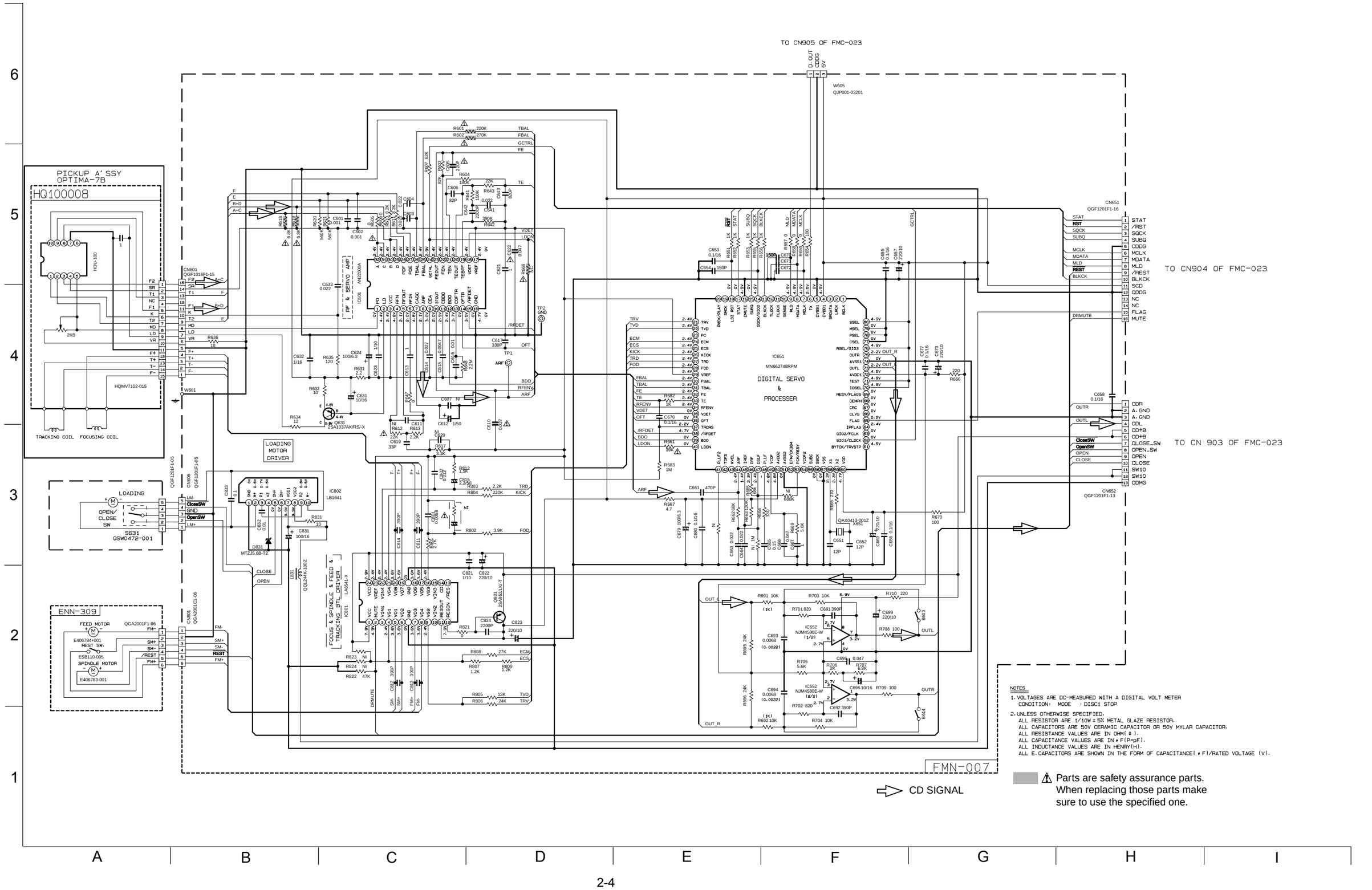
PART / VERSION	F3000	C2503
ALL EXCEPT UP	T1AL	0.001
UP	1A-250V	0.001

DTA143EKA-X
4.7K
4.7K
Q2206/Q2214

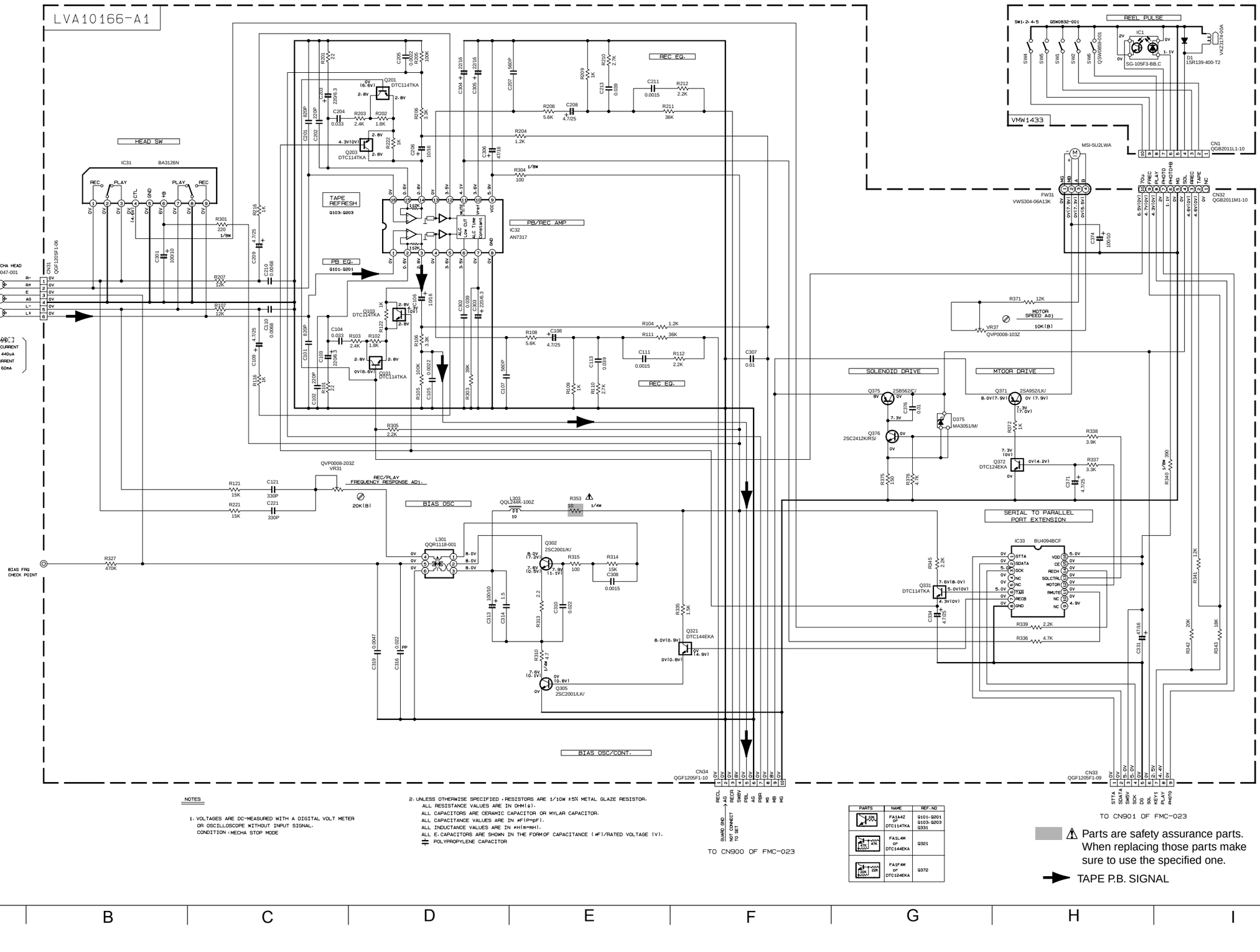
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

TAPE P.B. SIGNAL
CD SIGNAL
TUNER SIGNAL
AUX IN SIGNAL
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

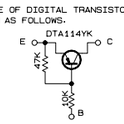
2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN #F(P=pF).
   ALL INDUCTANCE VALUES ARE IN #H(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM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

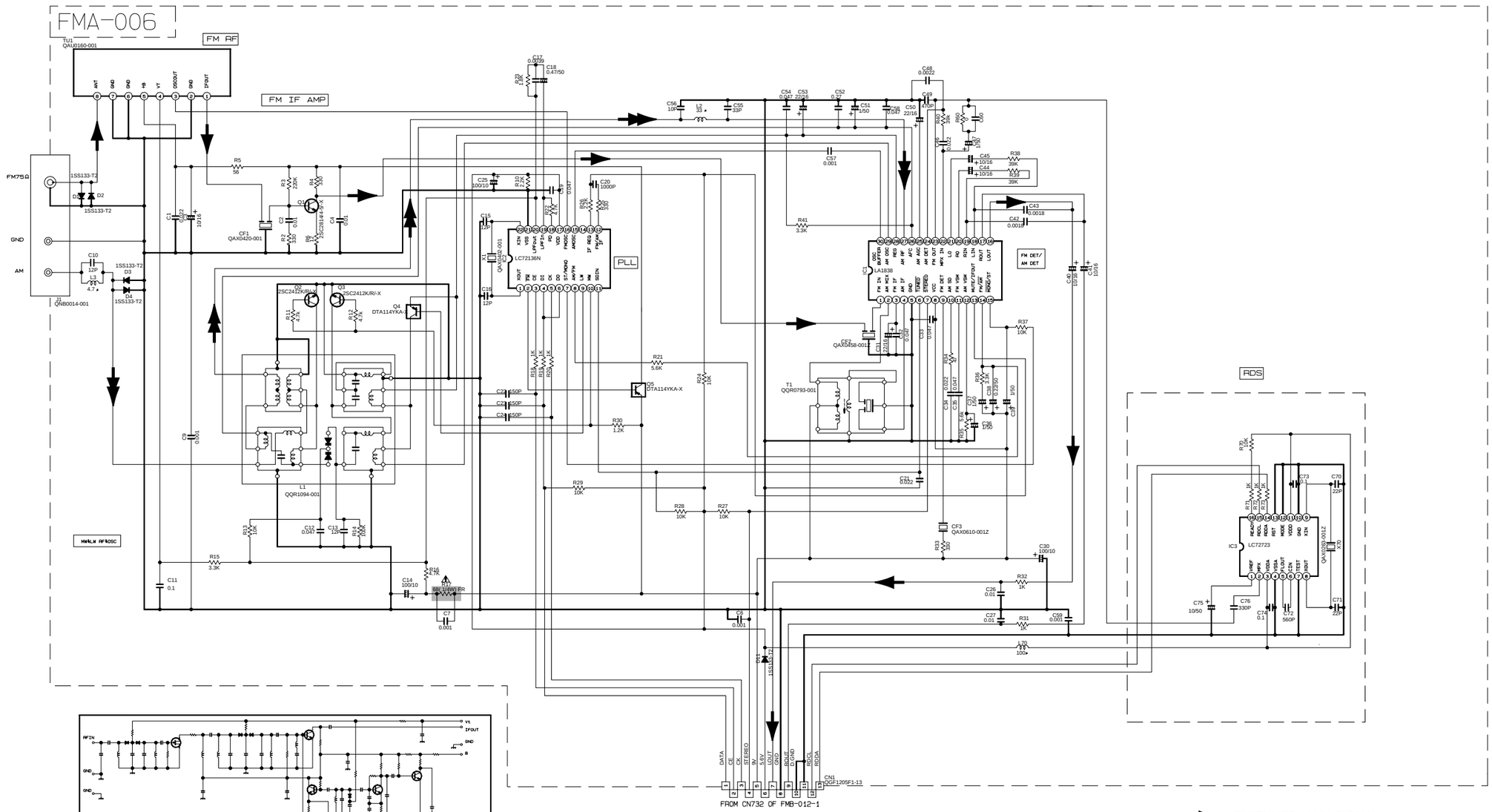
PARTS	NAME	REF.NO
	FA1A4Z or DTC114TKA	Q101-Q201 Q103-Q203 Q331
	FA1L4M or DTC144EKA	Q321
	FA1F4M or DTC124EKA	Q372

■ Tuner circuit (E)

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 (▶|) 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.





	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

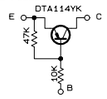
FM/TUNER MAIN SIGNAL
AM SIGNAL

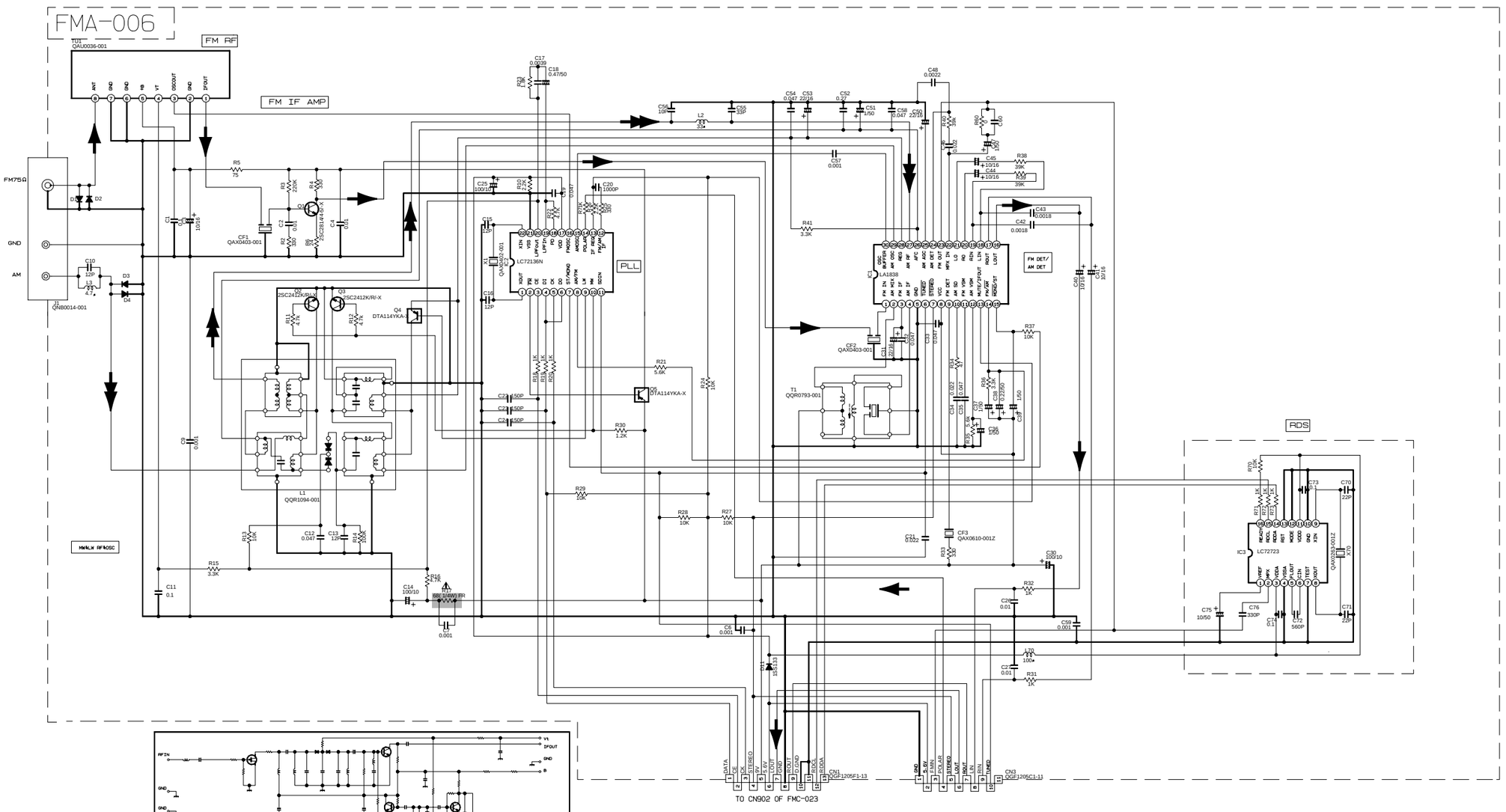
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ Tuner circuit (EE)

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.





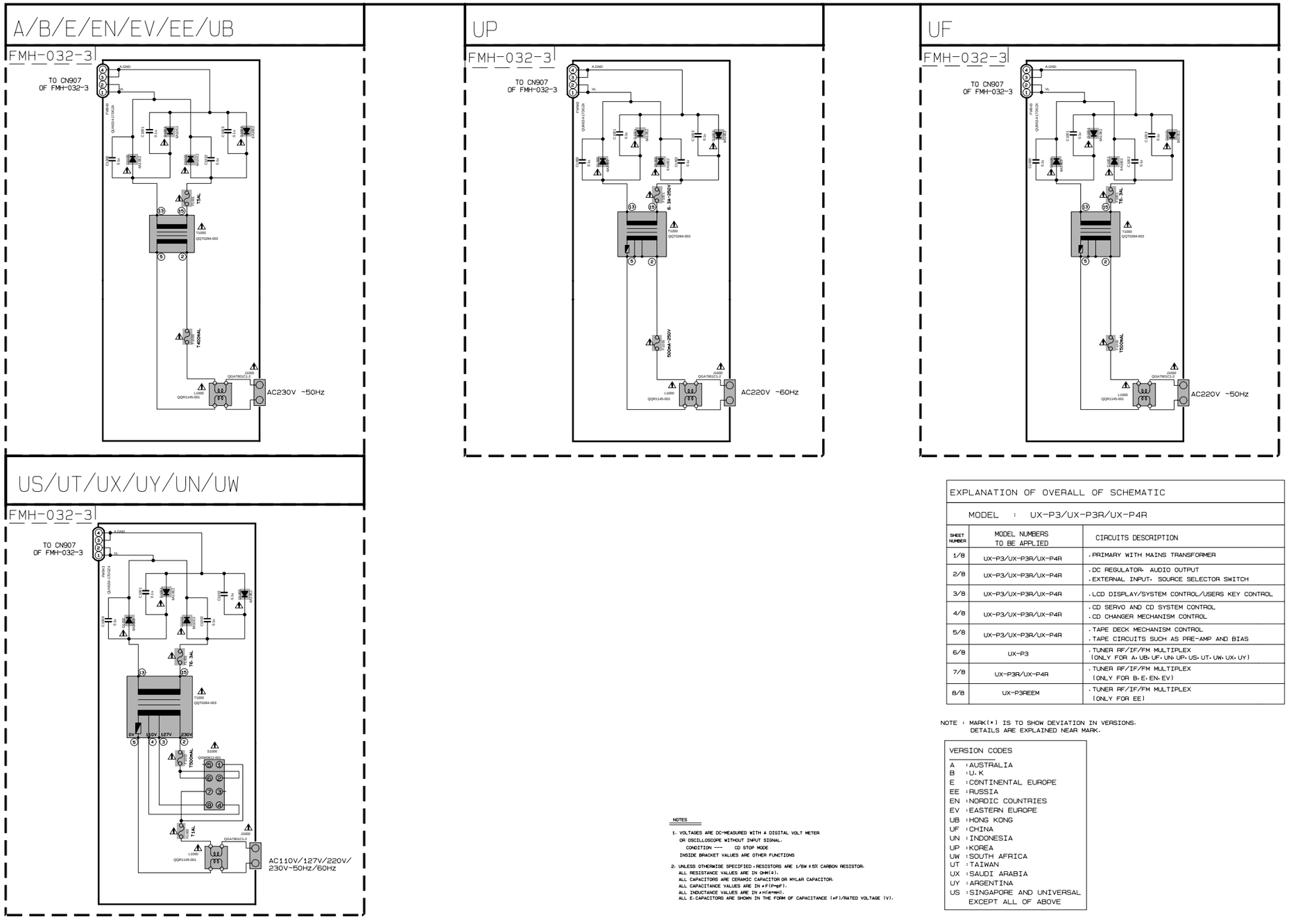
	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3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

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 : UX-P3/UX-P3R/UX-P4R		
SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/8	UX-P3/UX-P3R/UX-P4R	.PRIMARY WITH MAINS TRANSFORMER
2/8	UX-P3/UX-P3R/UX-P4R	.DC REGULATOR, AUDIO OUTPUT .EXTERNAL INPUT, SOURCE SELECTOR SWITCH
3/8	UX-P3/UX-P3R/UX-P4R	.LCD DISPLAY/SYSTEM CONTROL/USERS KEY CONTROL
4/8	UX-P3/UX-P3R/UX-P4R	.CD SERVO AND CD SYSTEM CONTROL .CD CHANGER MECHANISM CONTROL
5/8	UX-P3/UX-P3R/UX-P4R	.TAPE DECK MECHANISM CONTROL .TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
6/8	UX-P3	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR A, UB, UF, UN, UP, US, UT, UW, UX, UY)
7/8	UX-P3R/UX-P4R	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR B, E, EN, EV)
8/8	UX-P3REEM	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR EE)

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

VERSION CODES	
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

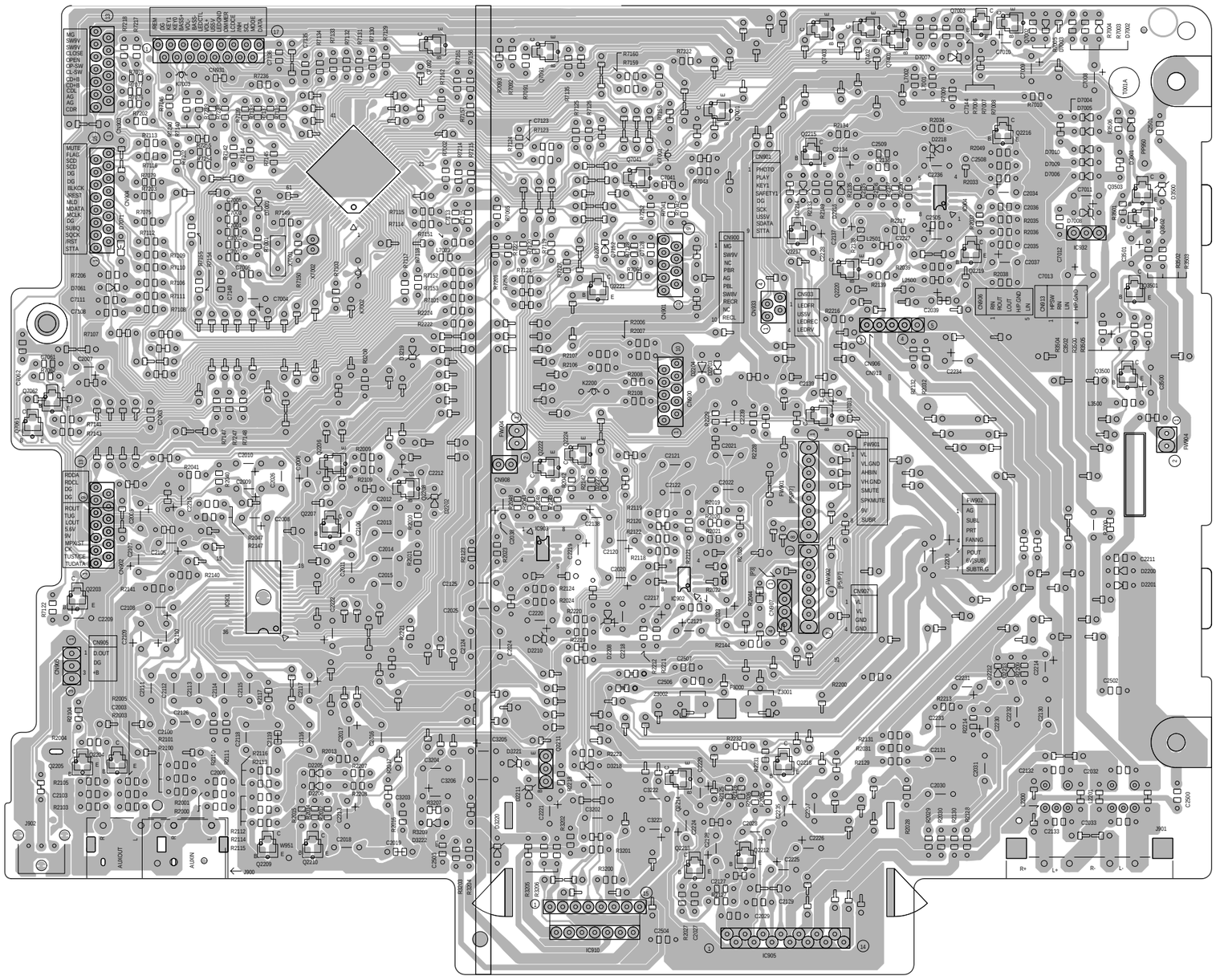
NOTES

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 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   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).

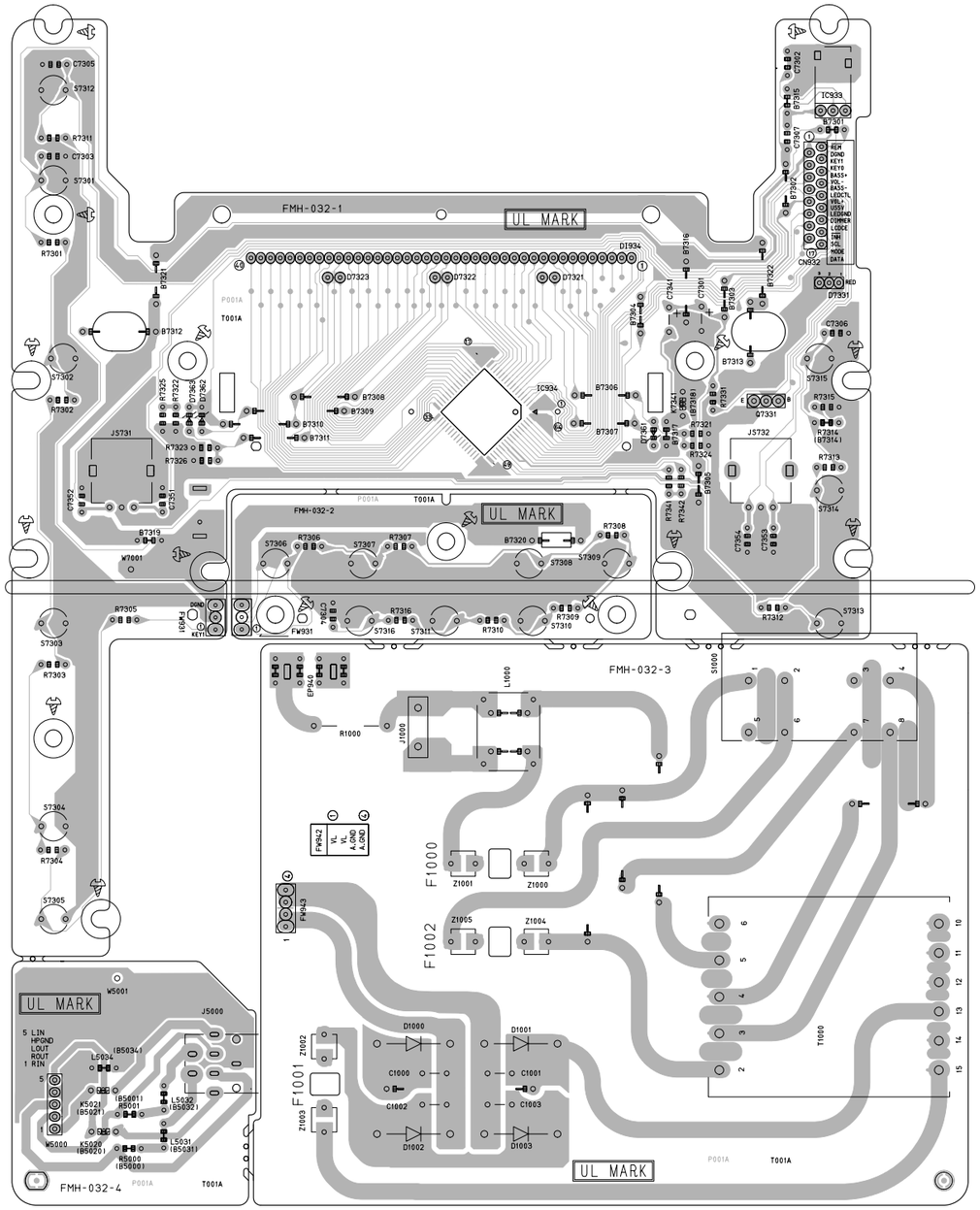
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

Printed circuit boards

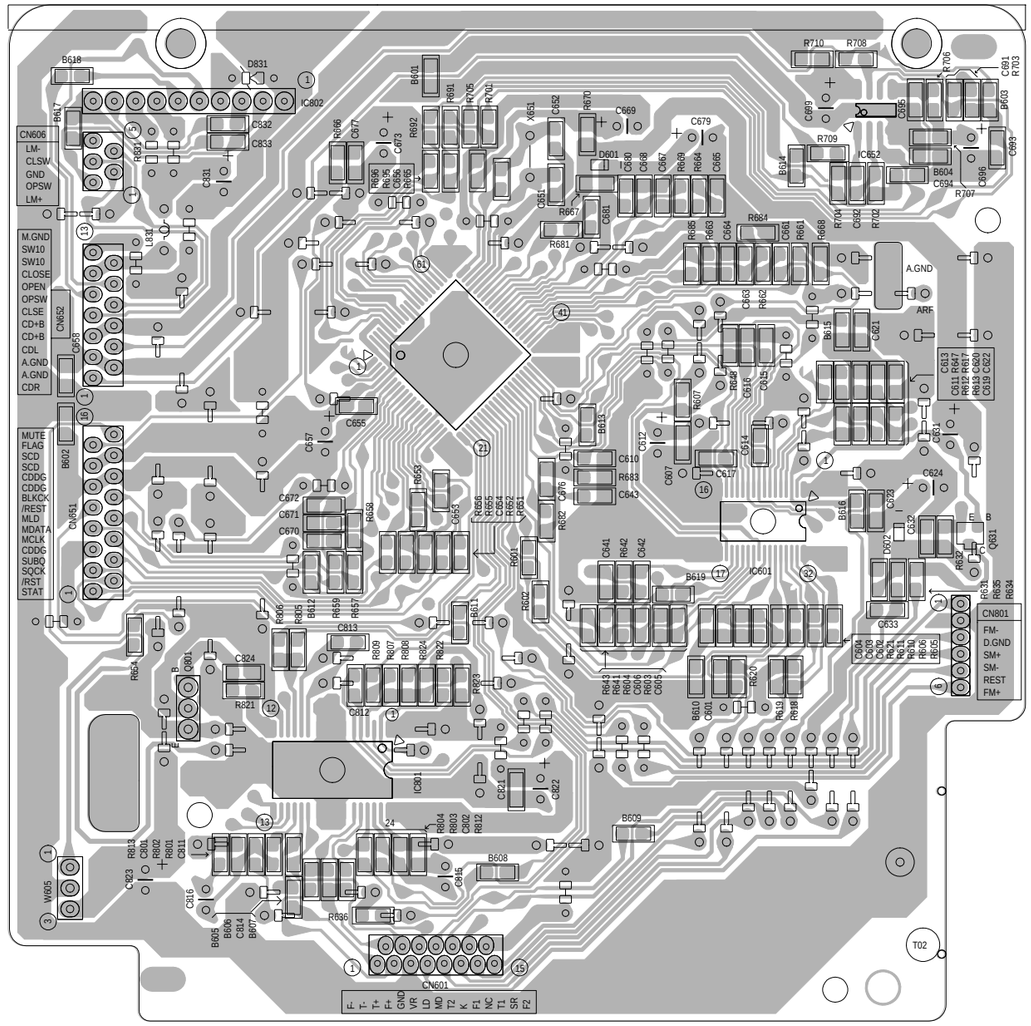
■Main board Block No. 01



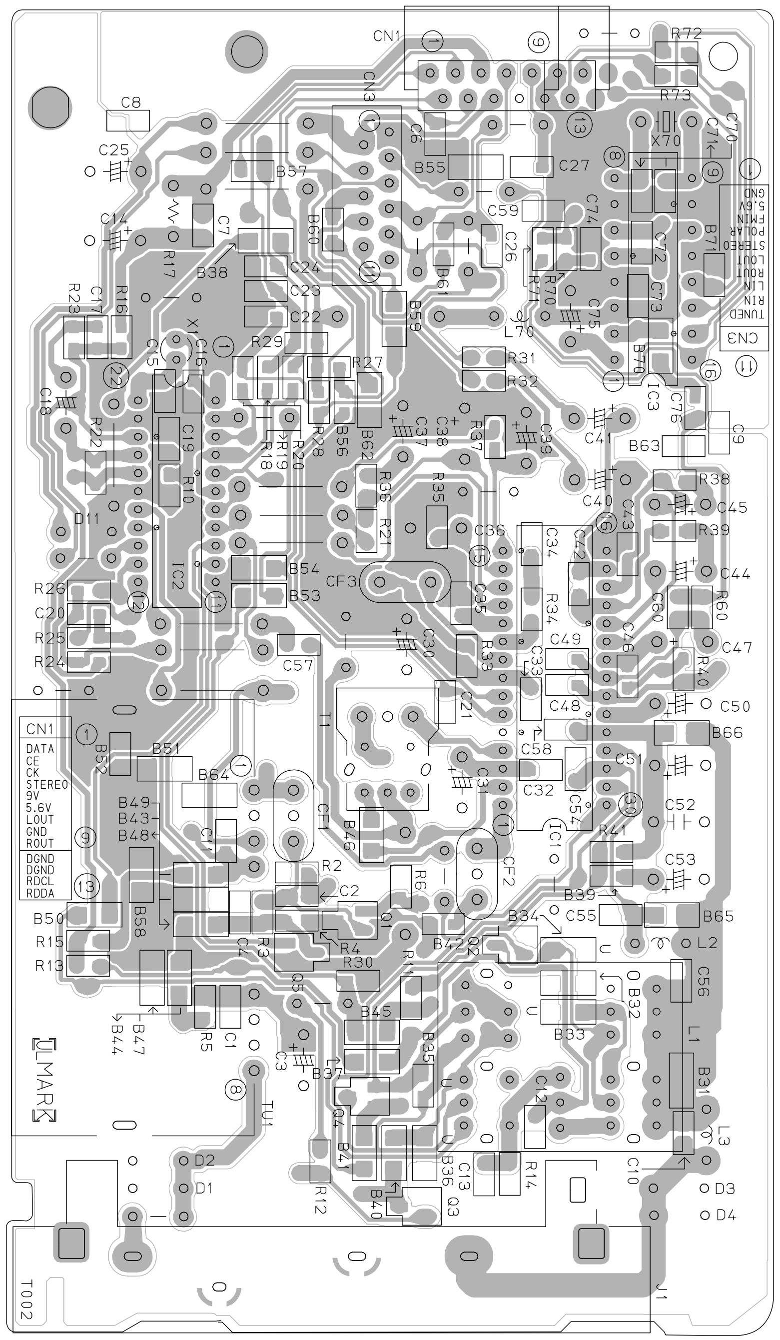
■ Front board Block No. 02



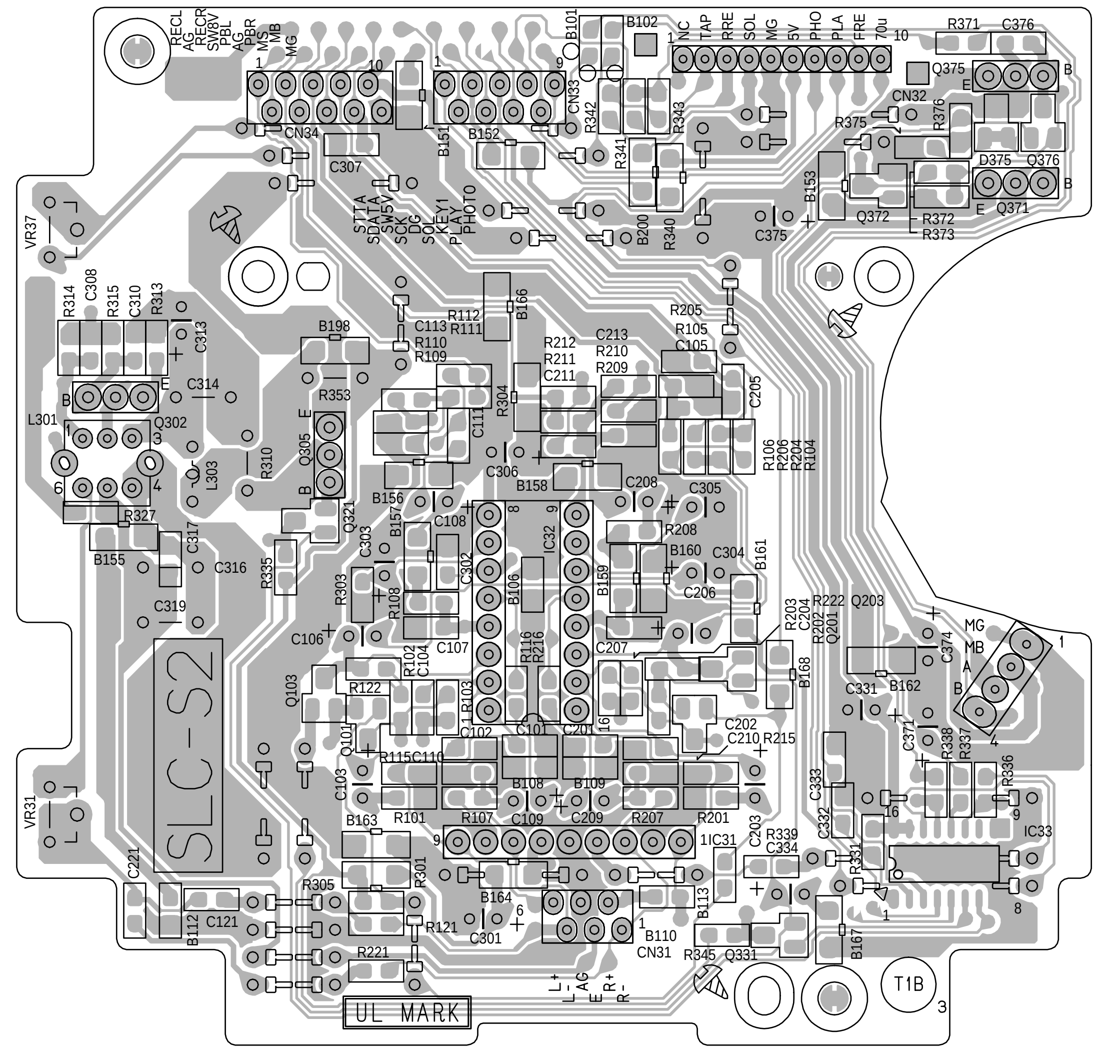
■ CD servo board Block No. 03



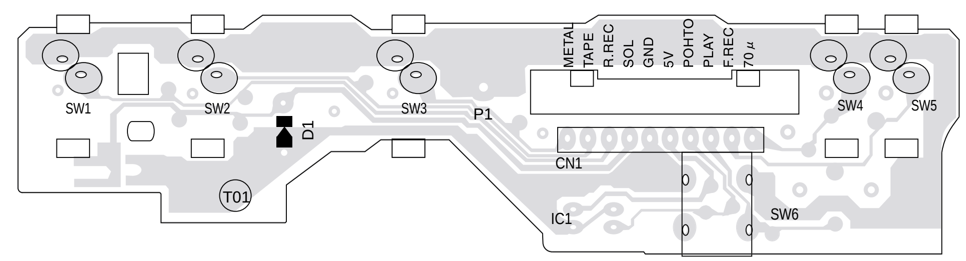
■ Tuner board Block No. 04



■ Head amplifier board Block No. 05



■ Cassett switch board Block No. 06



UX-P3R UX-P3R

<<MEMO>>