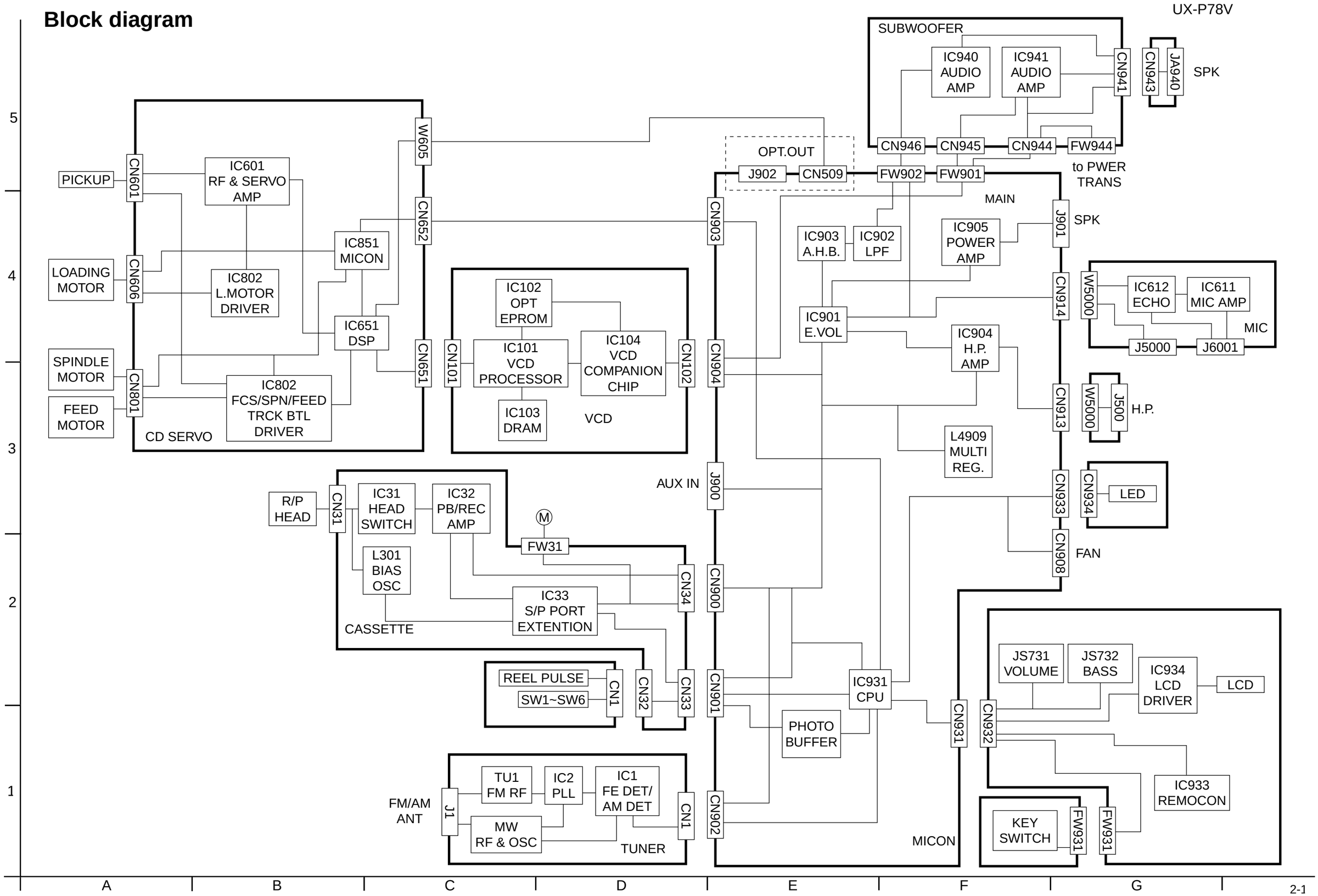
Block diagram

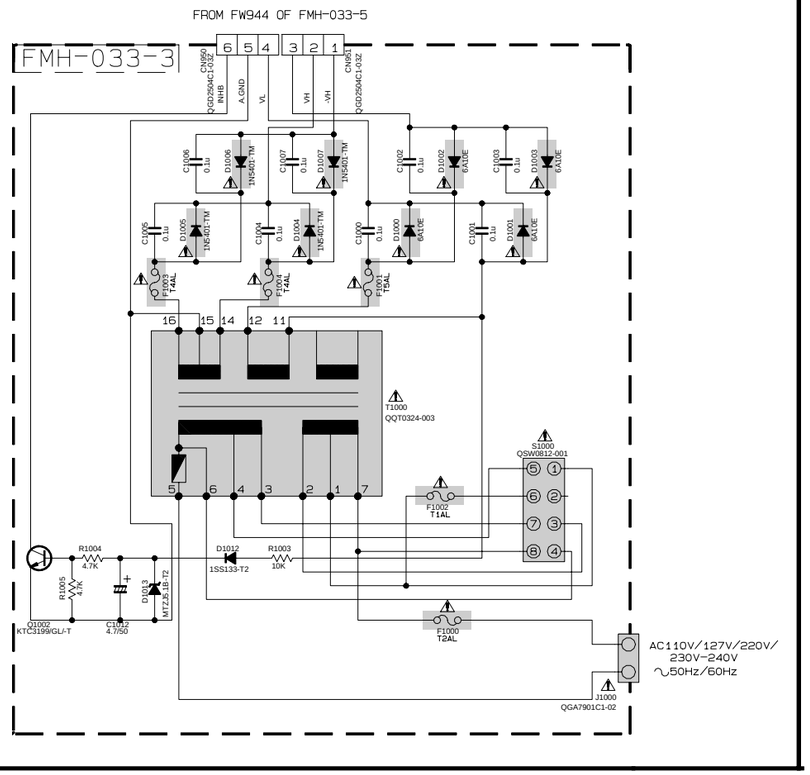


Standard schematic diagrams

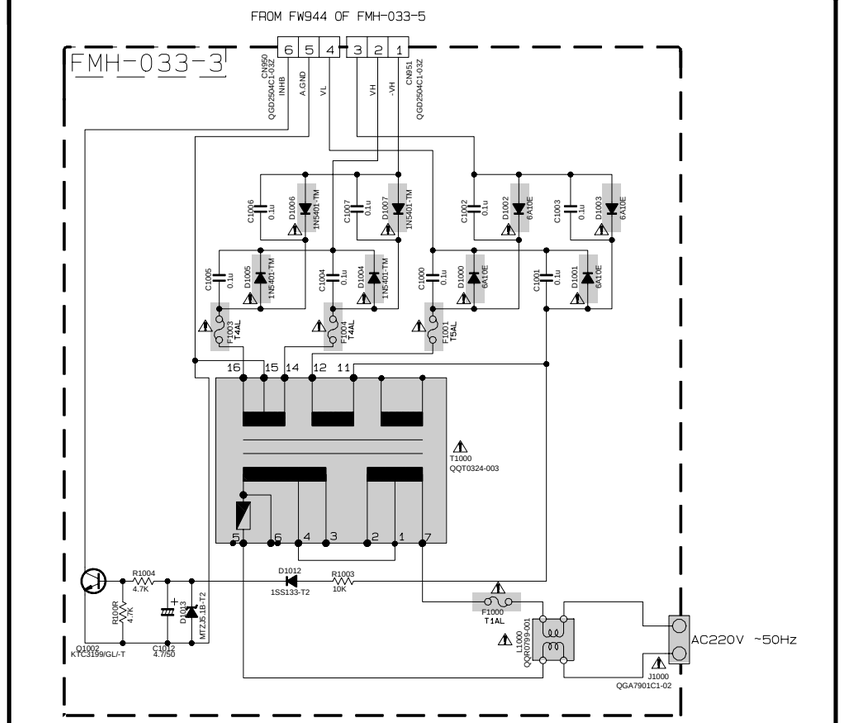
■ Trans section

POWER SUPPLY BLOCK

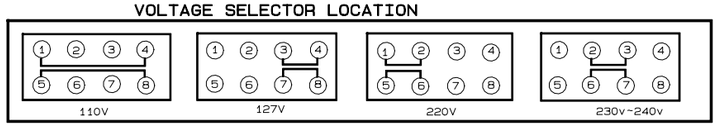
UT/US/UX/UN



UF



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 ·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 ★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).

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

EXPLANATION OF OVERALL OF SCHEMATIC

MODEL : UX-P78V

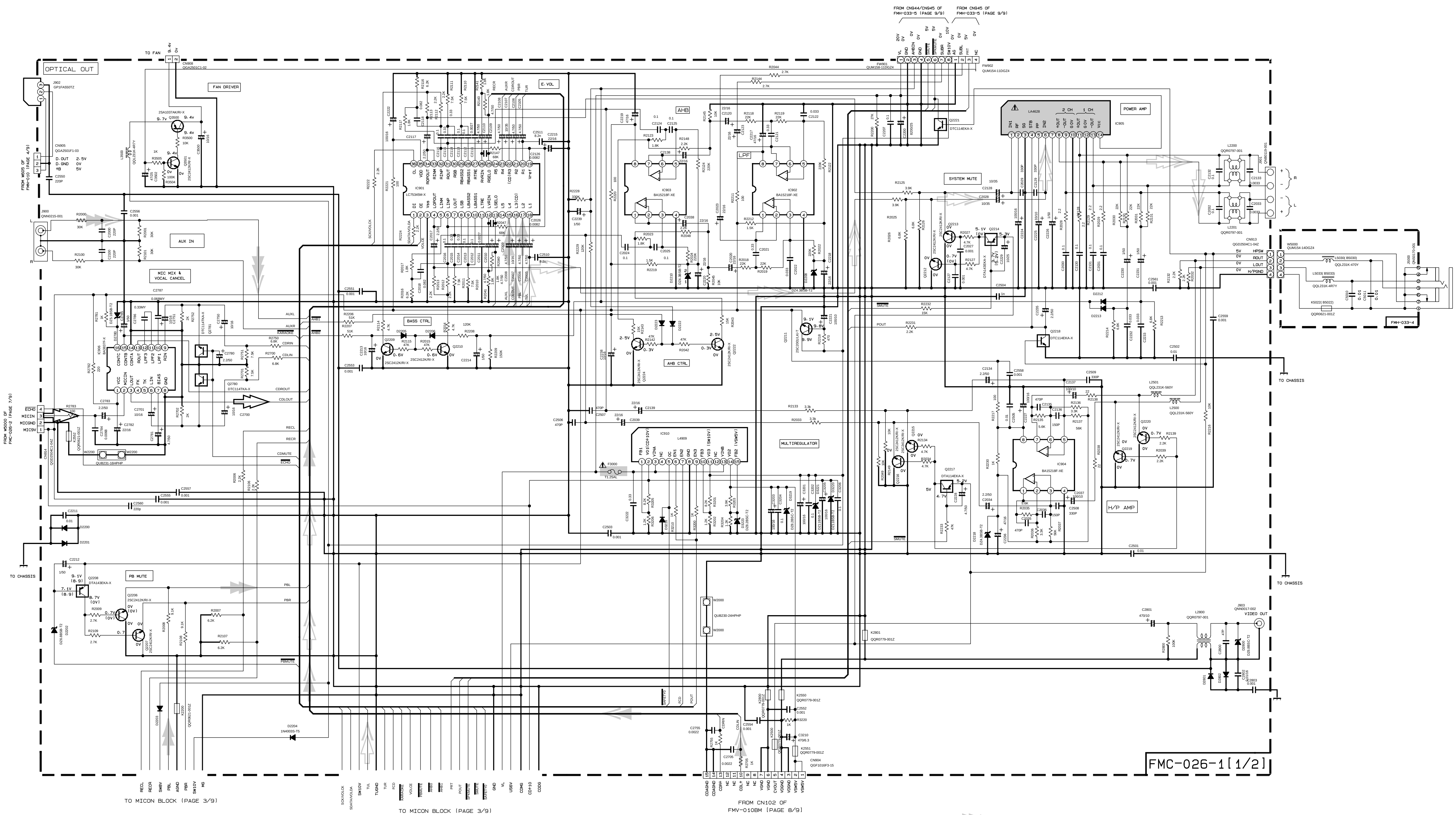
SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/9	UX-P78V	. PRIMARY WITH MAINS TRANSFORMER
2/9	UX-P78V	. DC REGULATOR, AUDIO OUTPUT . EXTERNAL INPUT, SOURCE SELECTOR SWITCH
3/9	UX-P78V	. LCD DISPLAY/SYSTEM CONTROL/USERS KEY CONTROL
4/9	UX-P78V	. CD SERVO AND CD SYSTEM CONTROL . CD CHANGER MECHANISM CONTROL
5/9	UX-P78V	. TAPE DECK MECHANISM CONTROL . TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
6/9	UX-P78V	. TUNER RF/IF/FM MULTIPLEX
7/9	UX-P78V	. MIC AMPLIFIER WITH ALC, ECHO CONTROL CIRCUIT
8/9	UX-P78V	. VIDEO CONTROL CIRCUIT WITH MP3 FEATURE
9/9	UX-P78V	. SUBWOOFER BOARD

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

VERSION CODES

UF :CHINA
UN :INDONESIA
UT :TAIWAN
UX :SAUDI ARABIA
US :SINGAPORE AND UNIVERSAL EXCEPT ALL OF ABOVE

■Main section

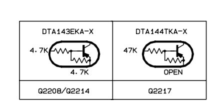


1. ALL VALUES ARE MEASUED IN VOLTS ---- CD STOP MODE.

IC \ PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
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
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				
IC906	8.7	4.4	4.4	4.4	4.4	4.4	4.4	0	4.4	4.4	4.4	4.4	4.4	0	5.1	5		
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			

IC \ PIN NO.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
IC901	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																		
IC903																		
IC904																		
IC905																		
IC906																		
IC910																		

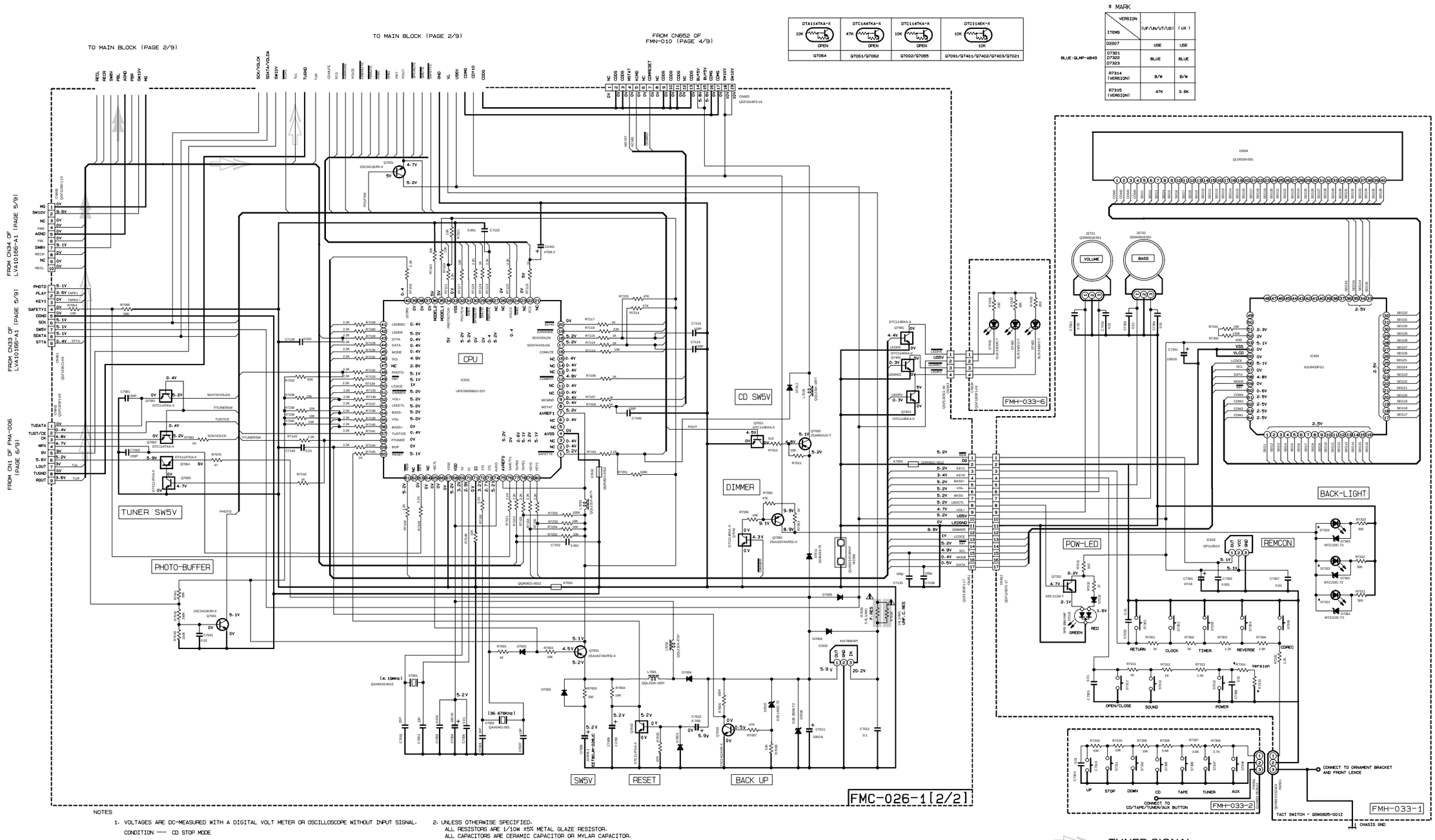
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED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



MAIN SIGNAL
AUX IN SIGNAL
TUNER SIGNAL
CD/CD-RW SIGNAL
TAPE SIGNAL
MIC SIGNAL

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

■Micon section



DTA114TKA-X	DTC144TKA-X	DTC114TKA-X	DTC114EK-X
10K OPEN	47K OPEN	10K OPEN	10K 10K
Q7064	Q7061/Q7062	Q7002/Q7065	Q7091/Q7401/Q7402/Q7403/Q7021

* MARK

ITEMS \ VERSION	(UF/UW/UT/US)	(UX)
D2207	USE	USE
D7321 D7322 D7323	BLUE	BLUE
R7314 (VERSION1	B/W	B/W
R7315 (VERSION1	47K	3.6K

BLUE:GLMP-A849

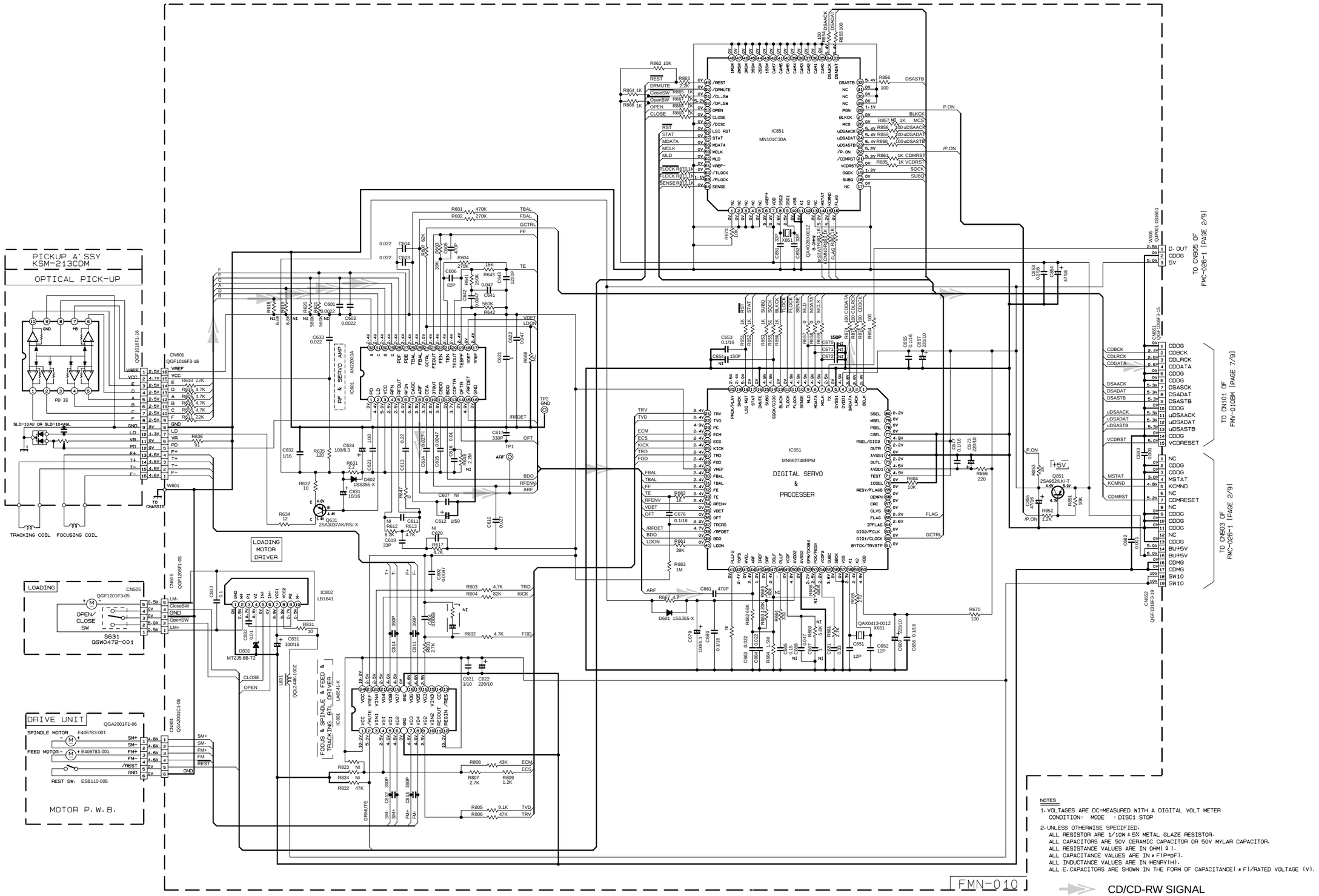
NOTES

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 ±F(F=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.

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

■CD-RW section



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 ★ F(P=pF).
   ALL INDUCTANCE VALUES ARE IN HENRY(H).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(★ F)/RATED VOLTAGE (V).

■Cassette section

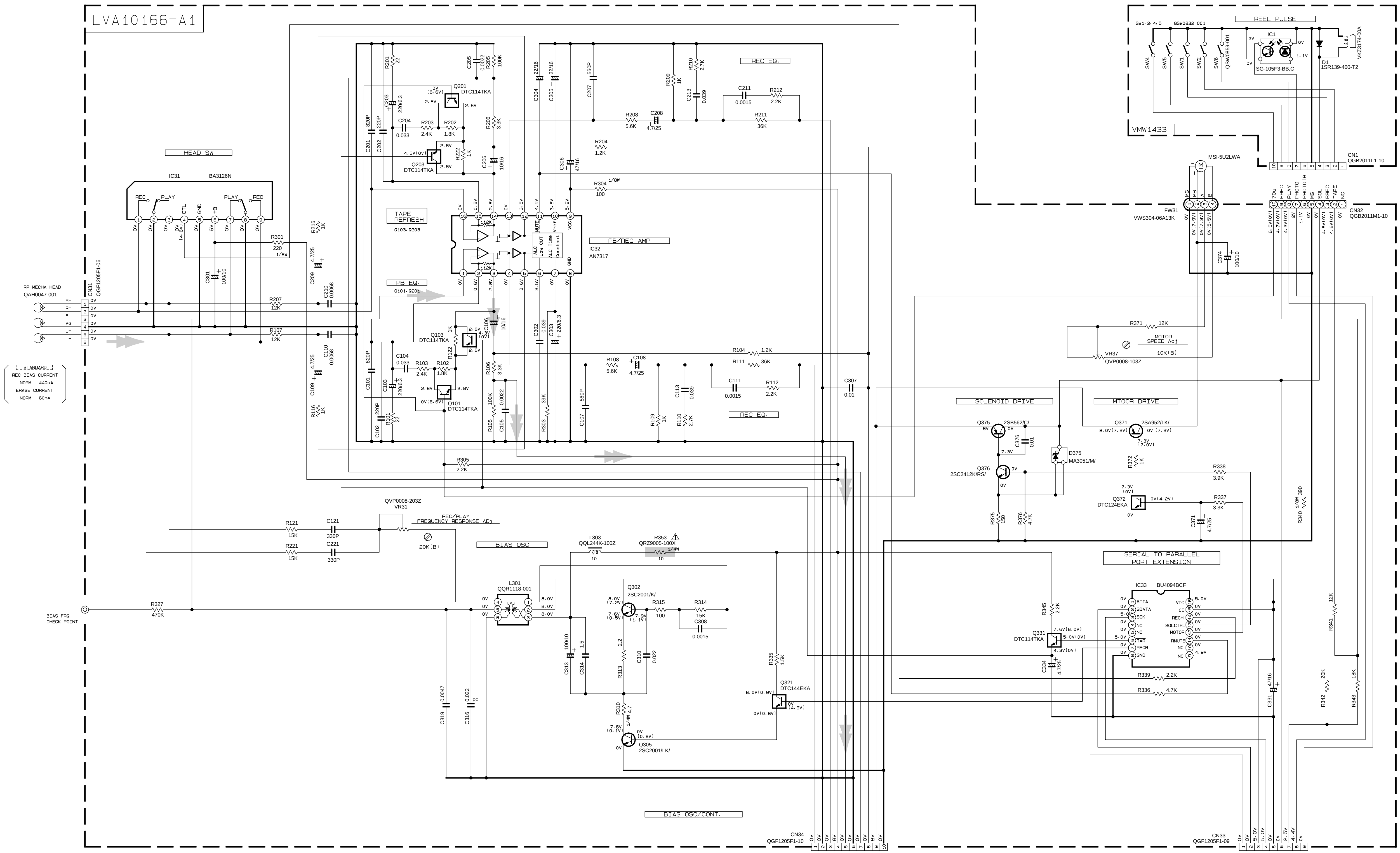
5

4

3

2

1



RECL AG RECR SW8V PBL AG PBR MS MB MG

GUARD GND NOT CONNECT TO SET

TO CN900 OF FMC-026-1

STTA SDATA SW5V SCK DG SOL KEY1 PLAY PHOTO

TO CN901 OF FMC-026-1

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 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).
POLYPROPYLENE CAPACITOR

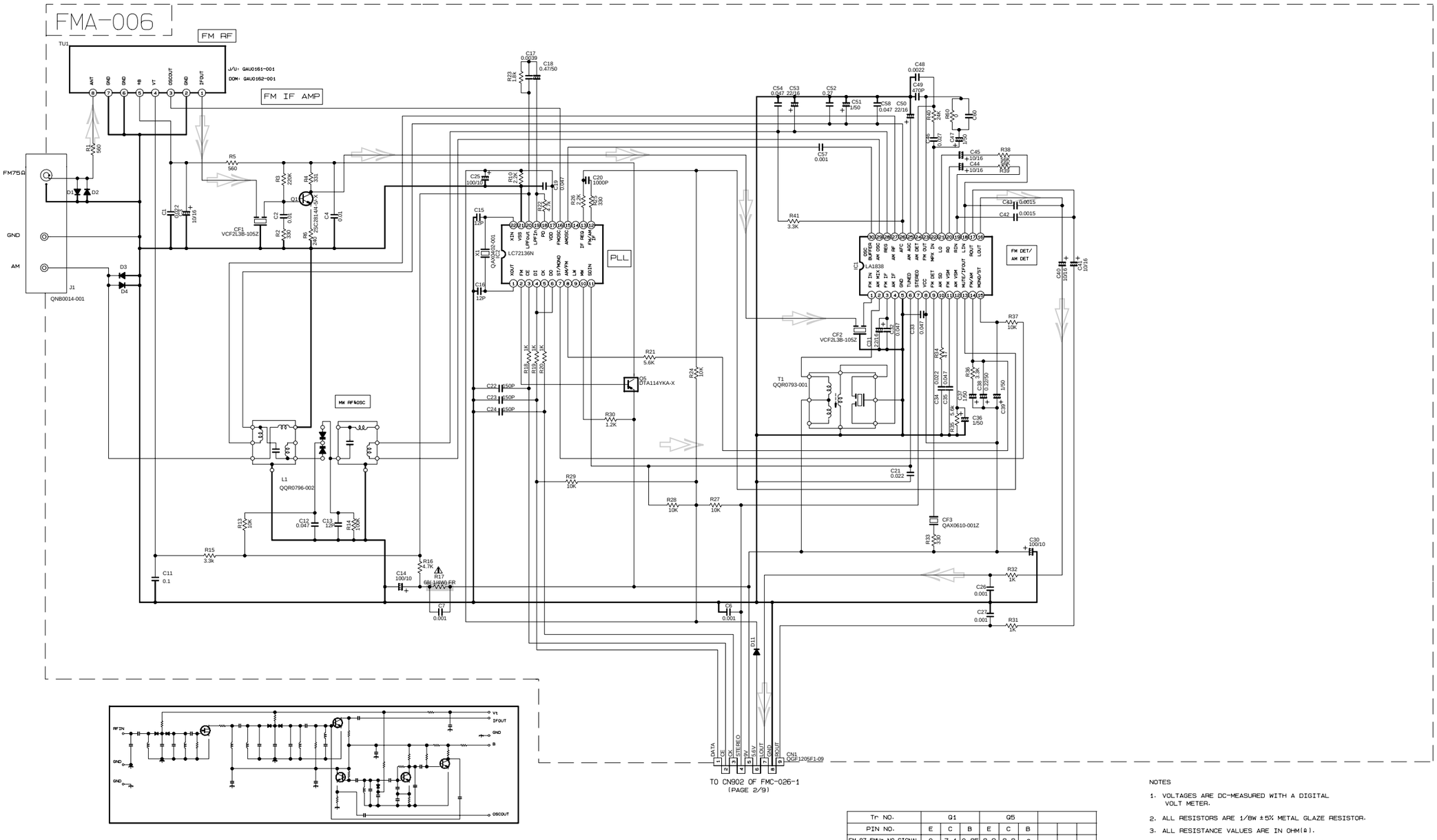
PARTS	NAME	REF.NO
10K	FA1A4Z or DTC114TKA	Q101, Q201 Q103, Q203 Q331
47K 47K	FA1L4M or DTC144EKA	Q321
22K 22K	FA1F4M or DTC124EKA	Q372

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

TAPE SIGNAL

A B C D E F G

■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	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								

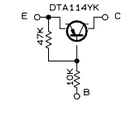
Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz NO SIGNAL	0	7.1	0.85	8.9	8.8	0			
AM 522KHz NO SIGNAL	0	0	0	9.0	0	8.9			
Tr NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

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

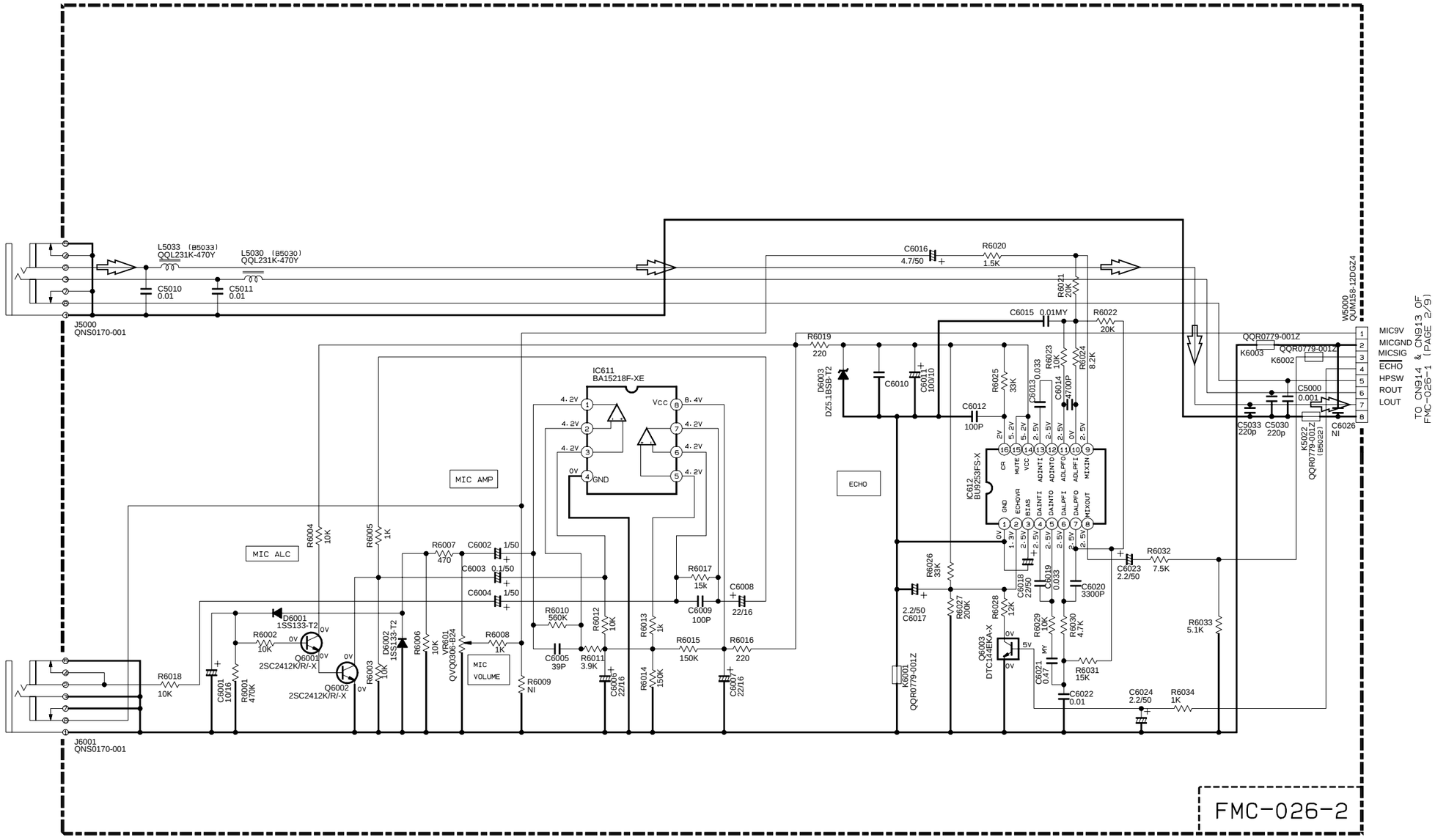
TUNER SIGNAL

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.



■Mic section

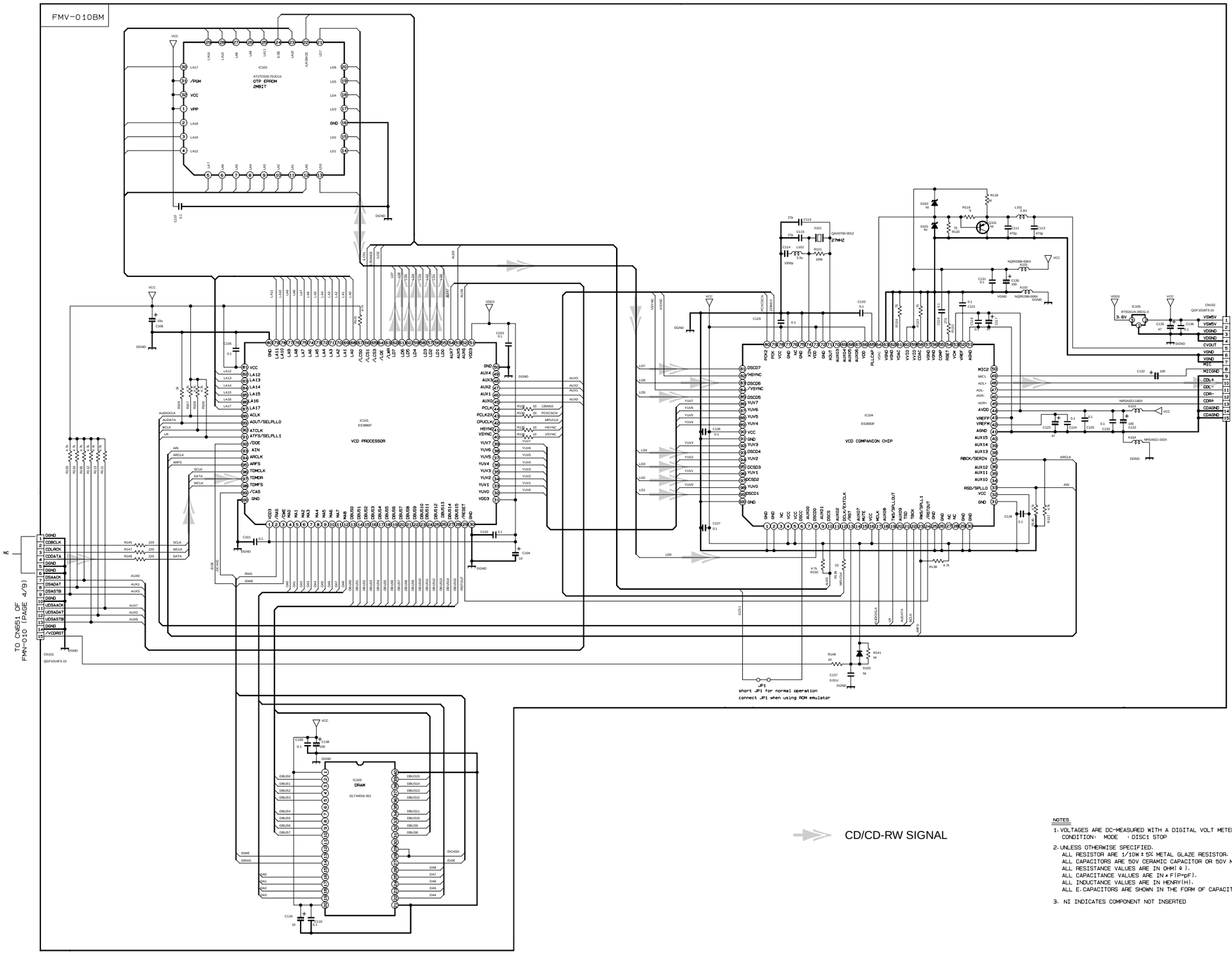


MIC SIGNAL

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).

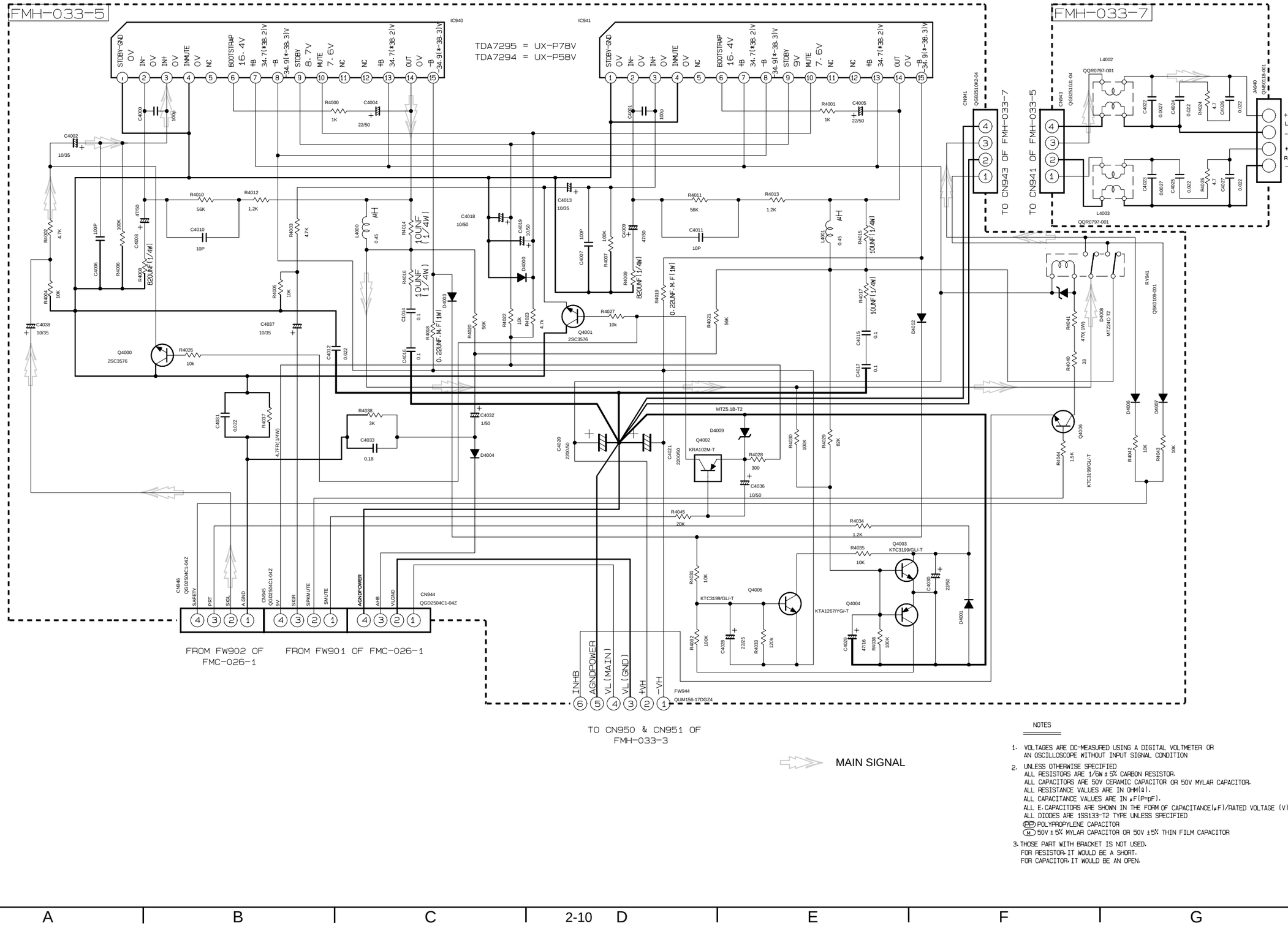
■VCD section



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 ± F(P=pF).
   ALL INDUCTANCE VALUES ARE IN HENRY(H).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(± F)/RATED VOLTAGE (V).
3. NI INDICATES COMPONENT NOT INSERTED

■ Subwoofer section

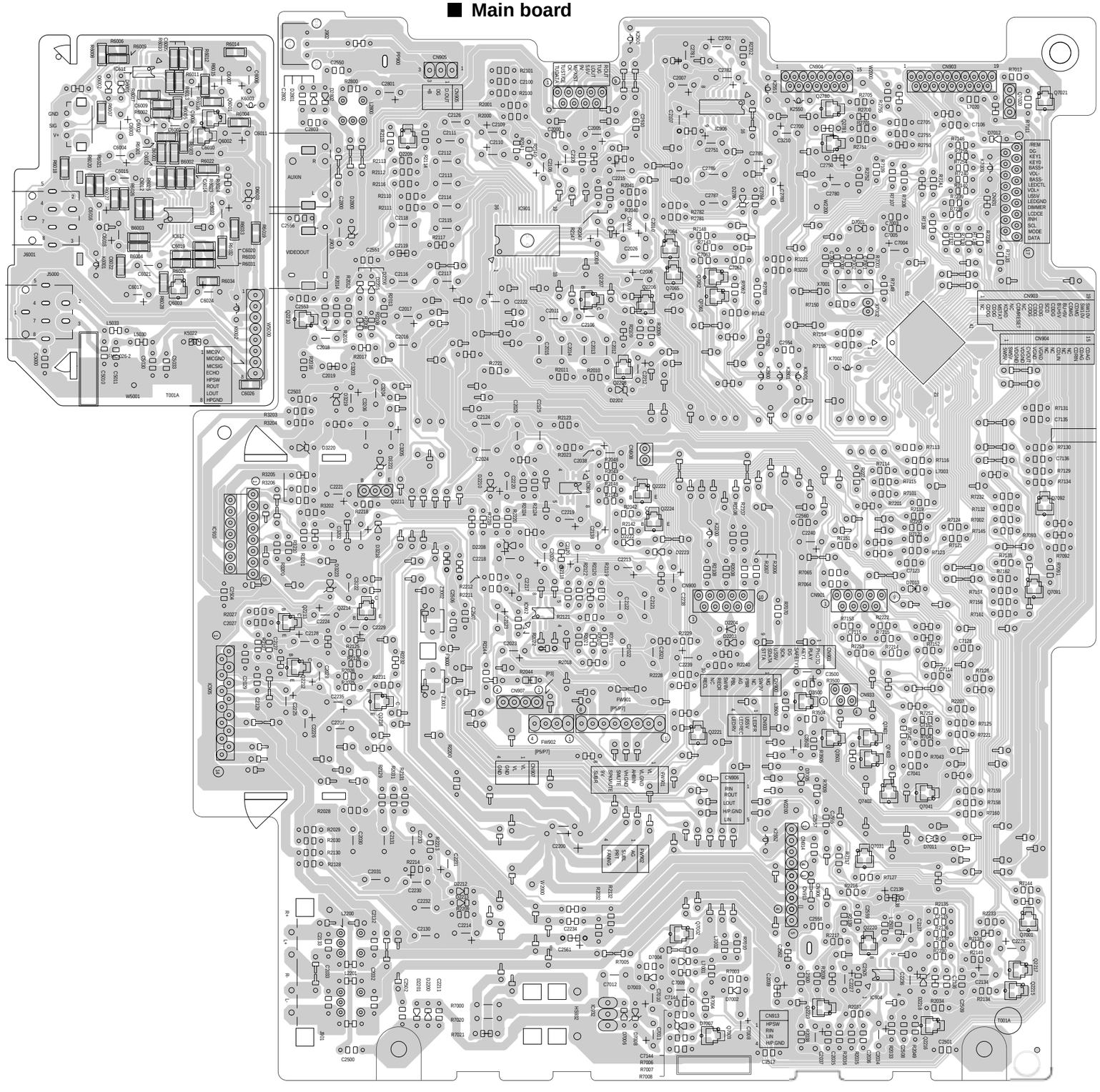


NOTES

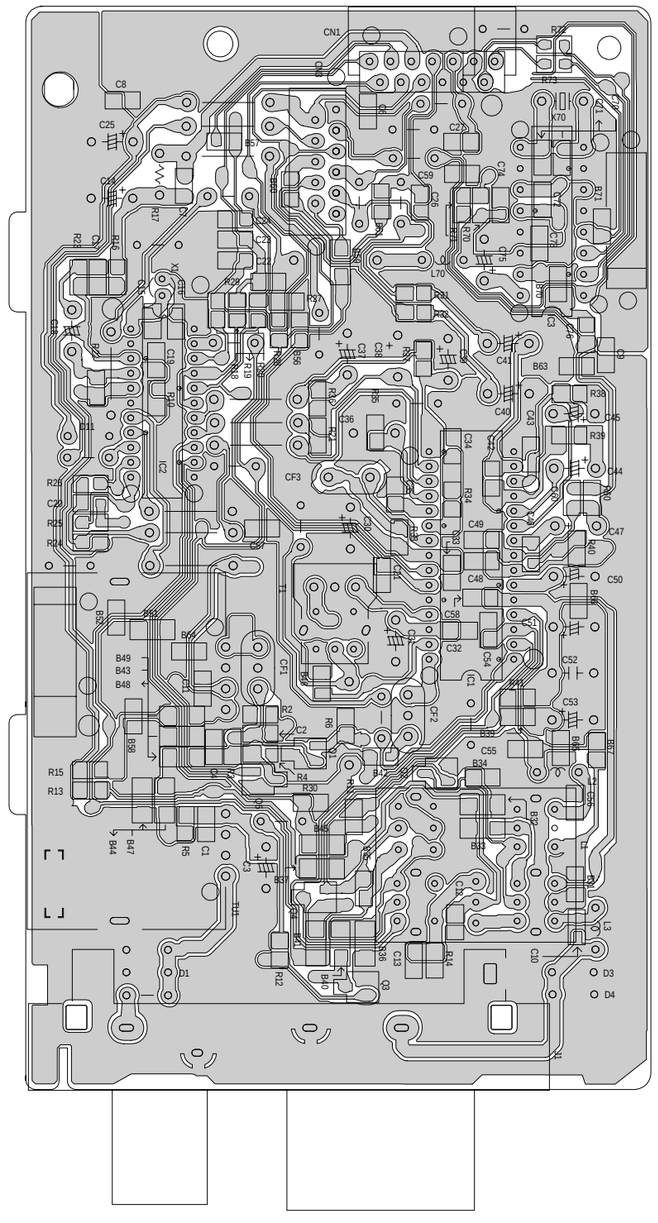
1. VOLTAGES ARE DC-MEASURED USING A DIGITAL VOLTMETER OR AN OSCILLOSCOPE WITHOUT INPUT SIGNAL CONDITION
2. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS ARE 1/6W ± 5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133-T2 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.

Printed circuit boards

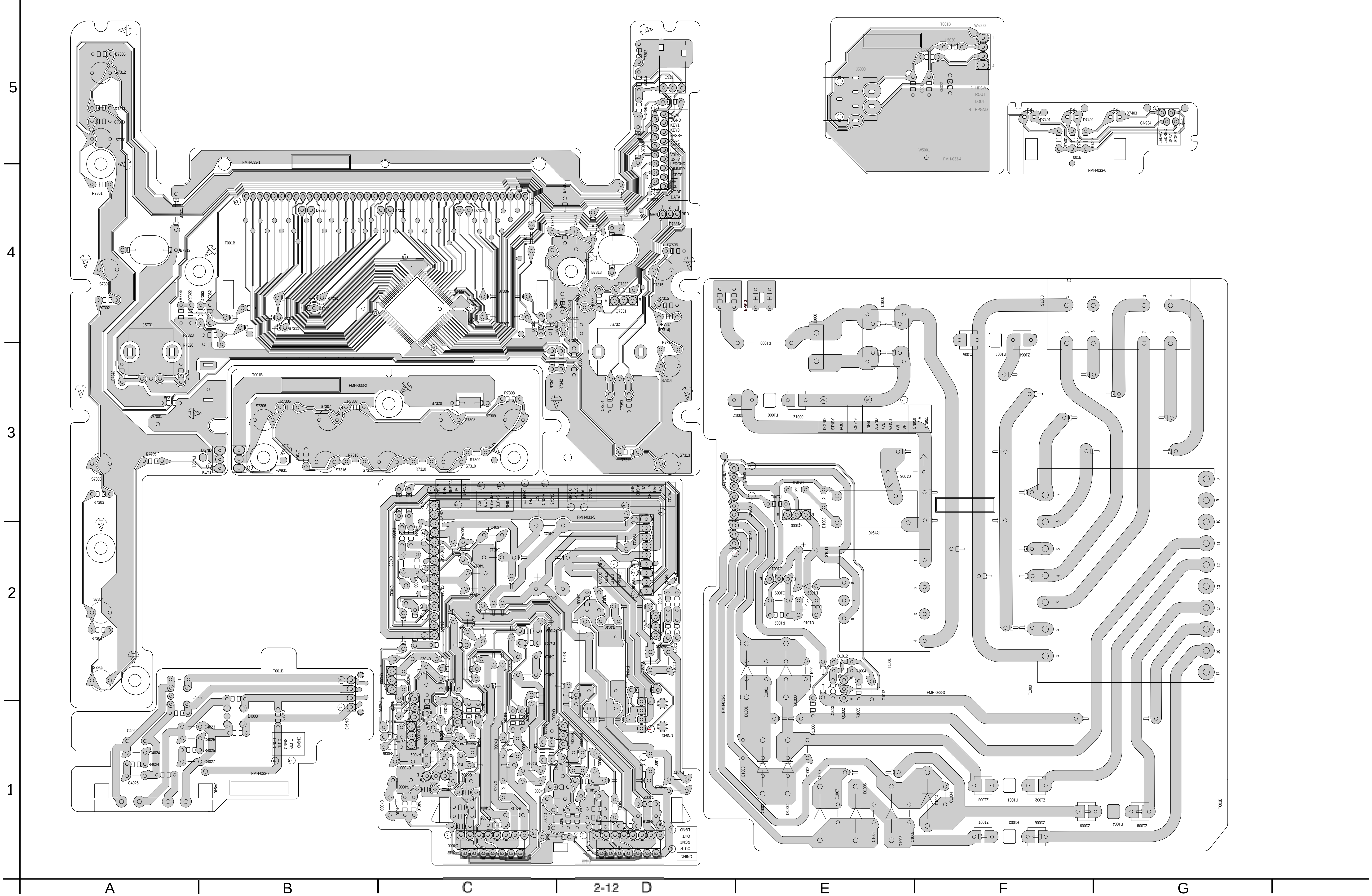
■ Main board



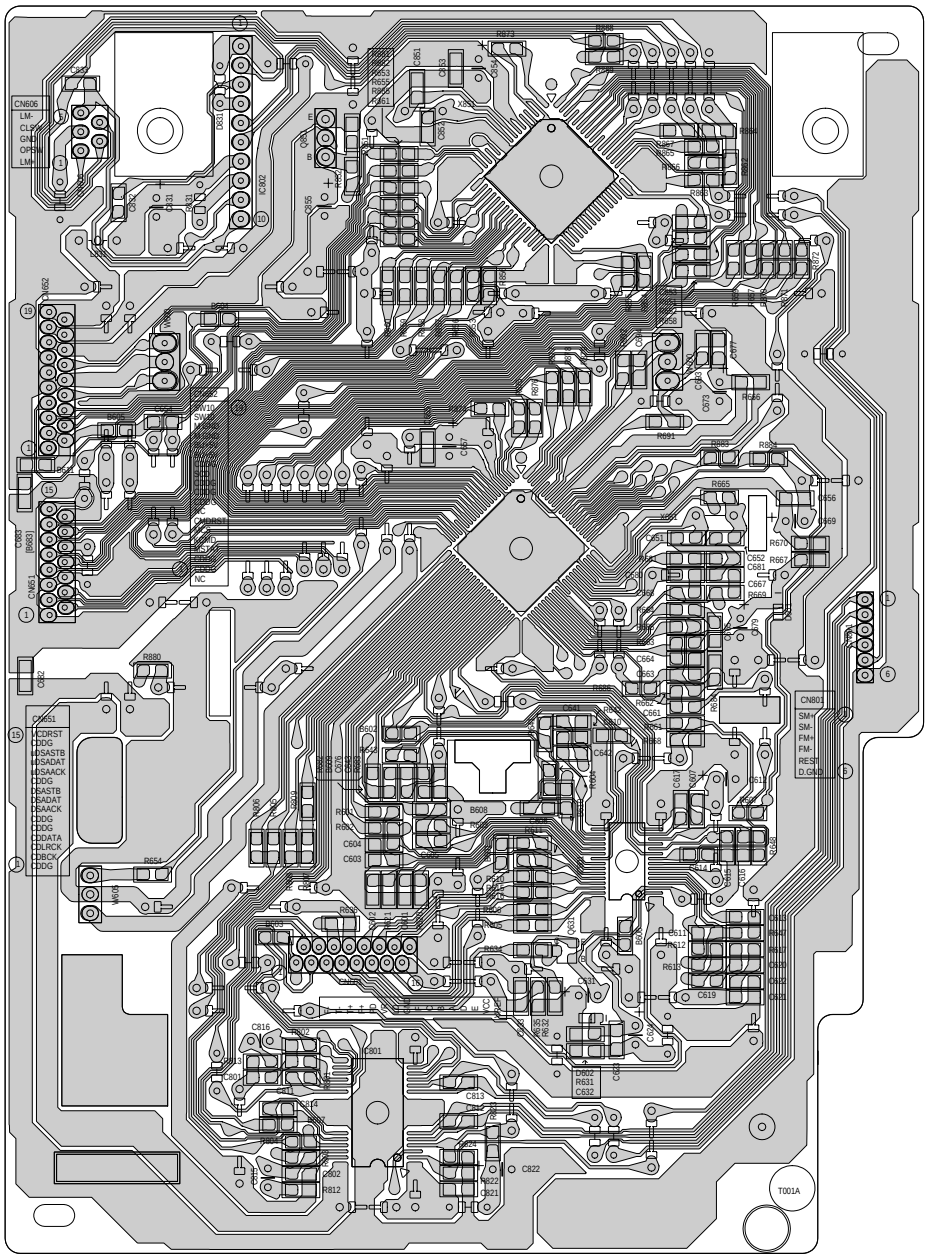
■ Tuner board



■ Front board


FMH-033-1
FMH-033-2
FMH-033-3
FMH-033-4
FMH-033-5
FMH-033-6
FMH-033-7
T001B
CN932
REM
DGND
KEY1
KEY0
BASS+
VOL-
BASS-
LEDCTL
VOL+
US5V
LEDGND
DIMMER
LCDCE
INH
SCL
MODE
DATA
GRN
RED
D7331
D7332
Q7331
JS731
JS732
IC933
IC934
S7301
S7302
S7303
S7304
S7305
S7306
S7307
S7308
S7309
S7310
S7311
S7312
S7313
S7314
S7315
S7316
DGND
KEY1
FW931
W7001
CN934
LEDRV
LEDREC
US5V
LEDFR
D7401
D7402
D7403
W5000
W5001
J5000
L5030
HPSW
ROUT
LOUT
HPGND
CN943
OUTR
RGND
OUTL
LGND
JA940
L4002
L4003
CN941
CN944
CN945
CN946
CN947
FW944
FW945
RY941
RY940
CN949
CN950
CN951
D.GND
STNBY
POUT
INHB
A.GND
+VL
+VH
-VH
EP940
R1000
J1000
L1000
S1000
T1000
T1001
F1000
F1001
F1002
F1003
F1004
Z1000
Z1001
Z1002
Z1003
Z1004
Z1005
Z1006
Z1007
Z1008
Z1009
Q1000
Q1001
Q1002
A
B
C
D
E
F
G
1
2
3
4
5

■ Micon board



■ VCD board