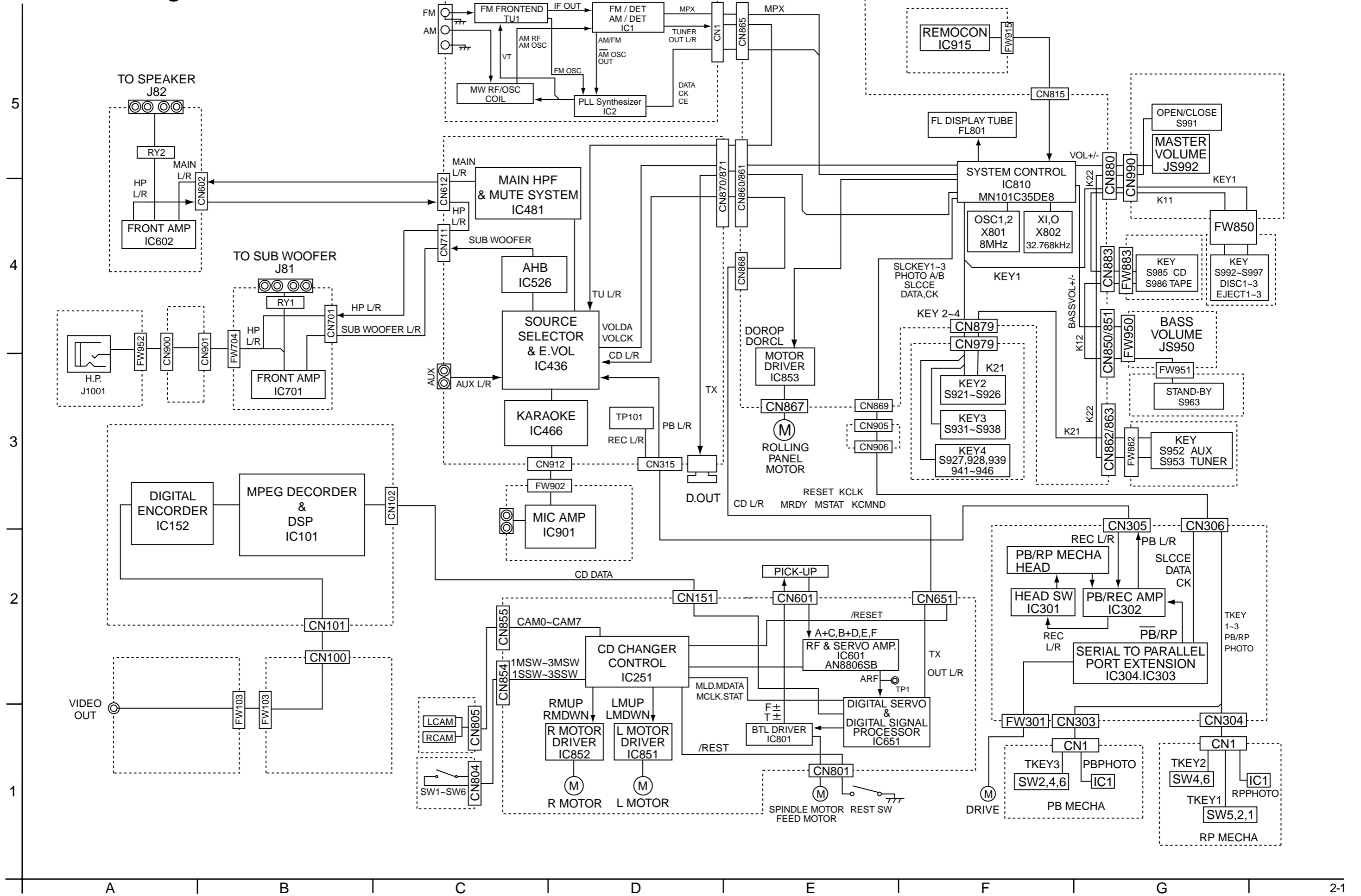


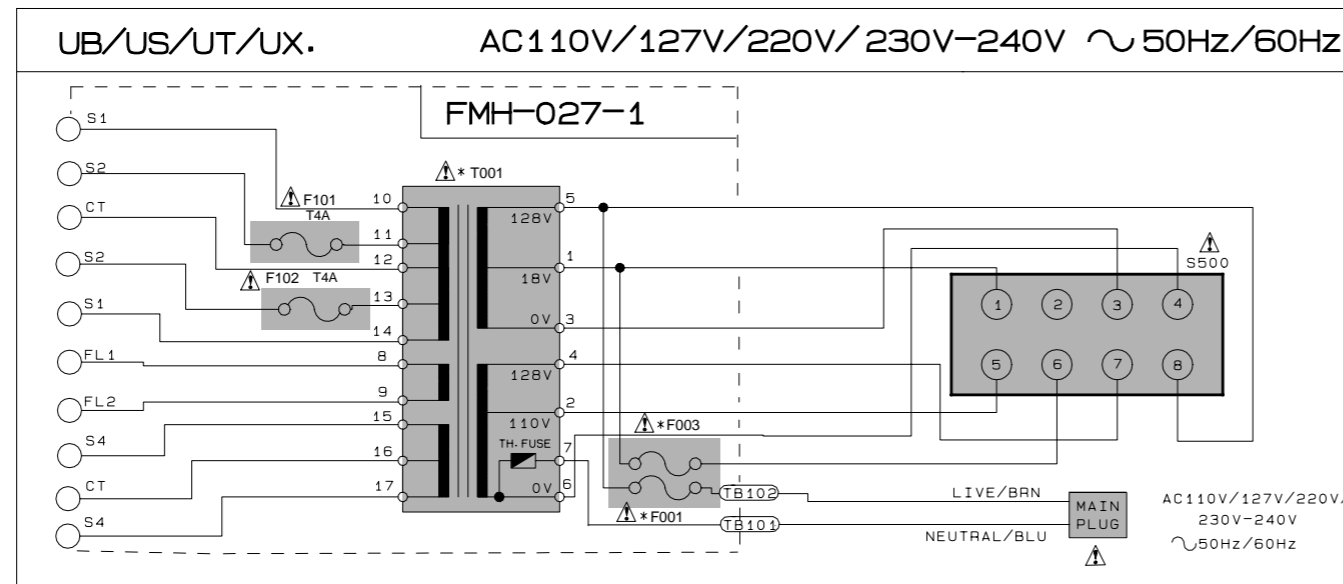
Block diagram



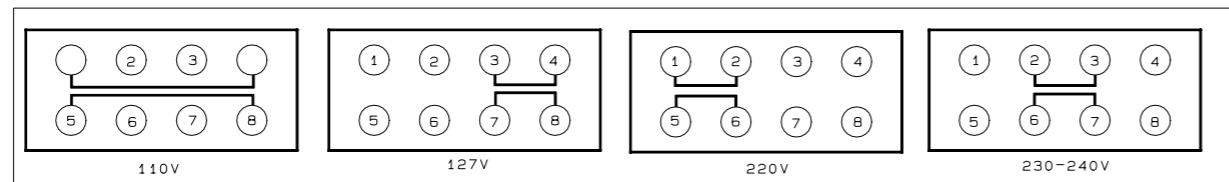
Standard schematic diagrams

Power transformer section

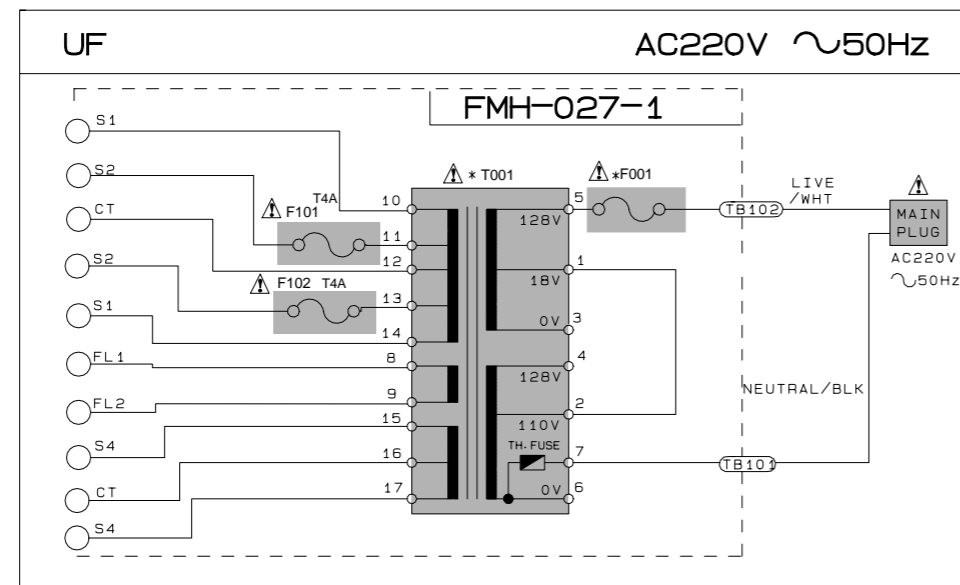
POWER SUPPLY BLOCK



VOLTAGE SELECTOR LOCATION



POWER SUPPLY BLOCK



EXPLANATION OF OVERALL SCHEMATICS

MODEL	
CA-MXJ770V/CA-MXJ880V CA-MXJ970V/CA-MXJ980V	
SHEET NUMBER	CIRCUITS DESCRIPTION
1/10	. PRIMARY WITH MAINS TRANSFORMER
2/10	. DC REGULATORS/AUDIO OUTPUT
3/10	. EXTERNAL INPUT, SOURCE SELECTOR SWITCH
4/10	. FL DISPLAY, SYSTEM CONTROL LSI, USER CONTROL KEYS
5/10	. MIC AMP, ECHO CIRCUIT
6/10	. SVCD SERVO AND SVCD SYSTEM CONTROL . SVCD CHANGER MECHANISM CONTROL
7/10	. TAPE DECK MECHANISM CONTROL . TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
8/10	. TUNER RF/IF/FM MULTIPLEX
9/10	. SVCD REGULATORS
10/10	. SUPER VCD CONTROL CIRCUIT

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

* MARK

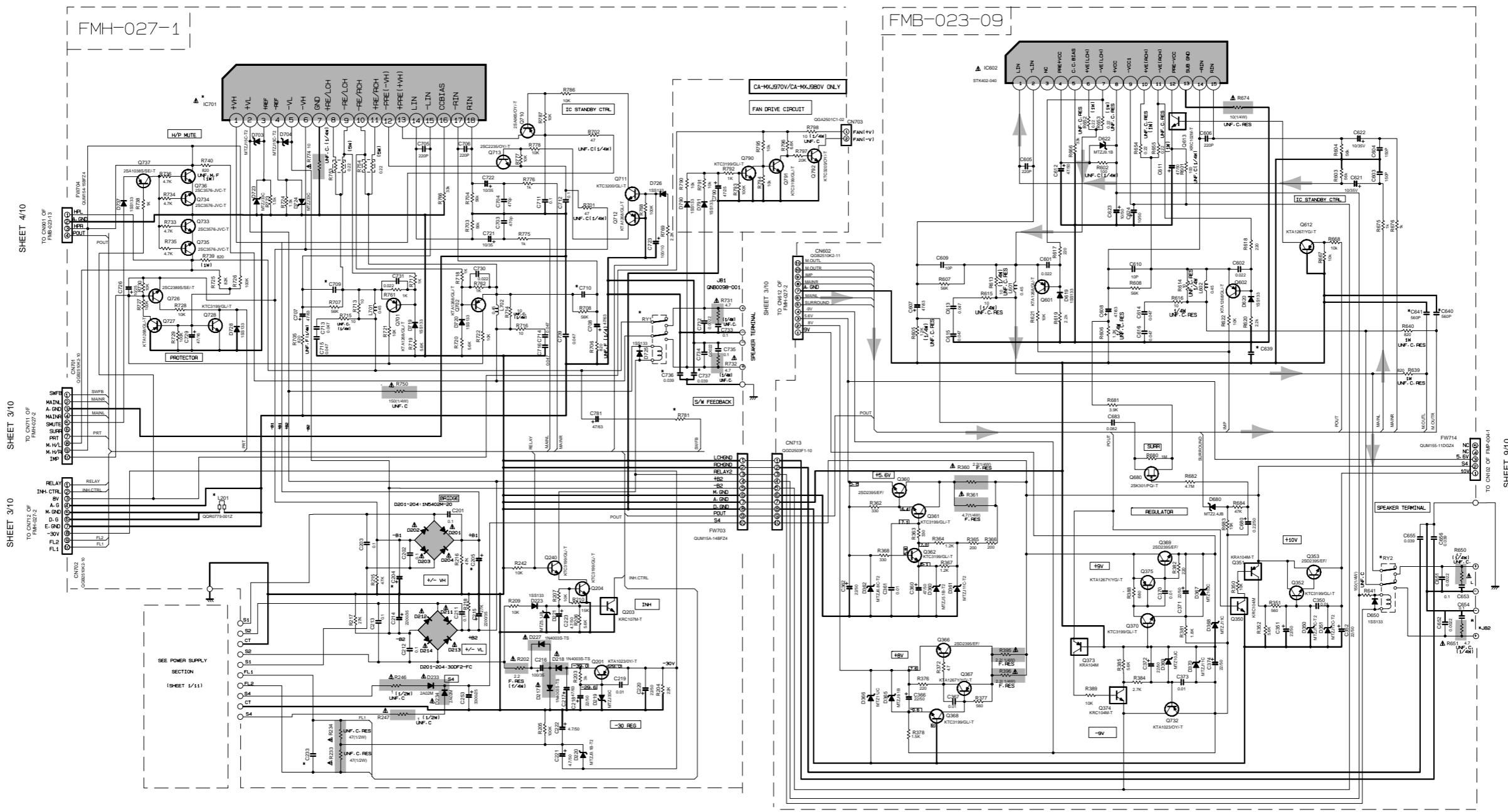
REF NAME/MODEL	CA-MXJ770V/ CA-MXJ880V.	CA-MXJ970V/ CA-MXJ980V.
F001	T3. 15A	T4A
F003	T1. 6A	T2A
T001	QGT0277-004	QGT0278-004

VERSION CODES

UB : HONG KONG
UF : CHINA
UT : TAIWAN
UX : SAUDI ARABIA
US : SINGAPORE AND UNIVERSAL
EXCEPT ALL OF ABOVE

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

Power amplifier & regulator section



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

#MARK

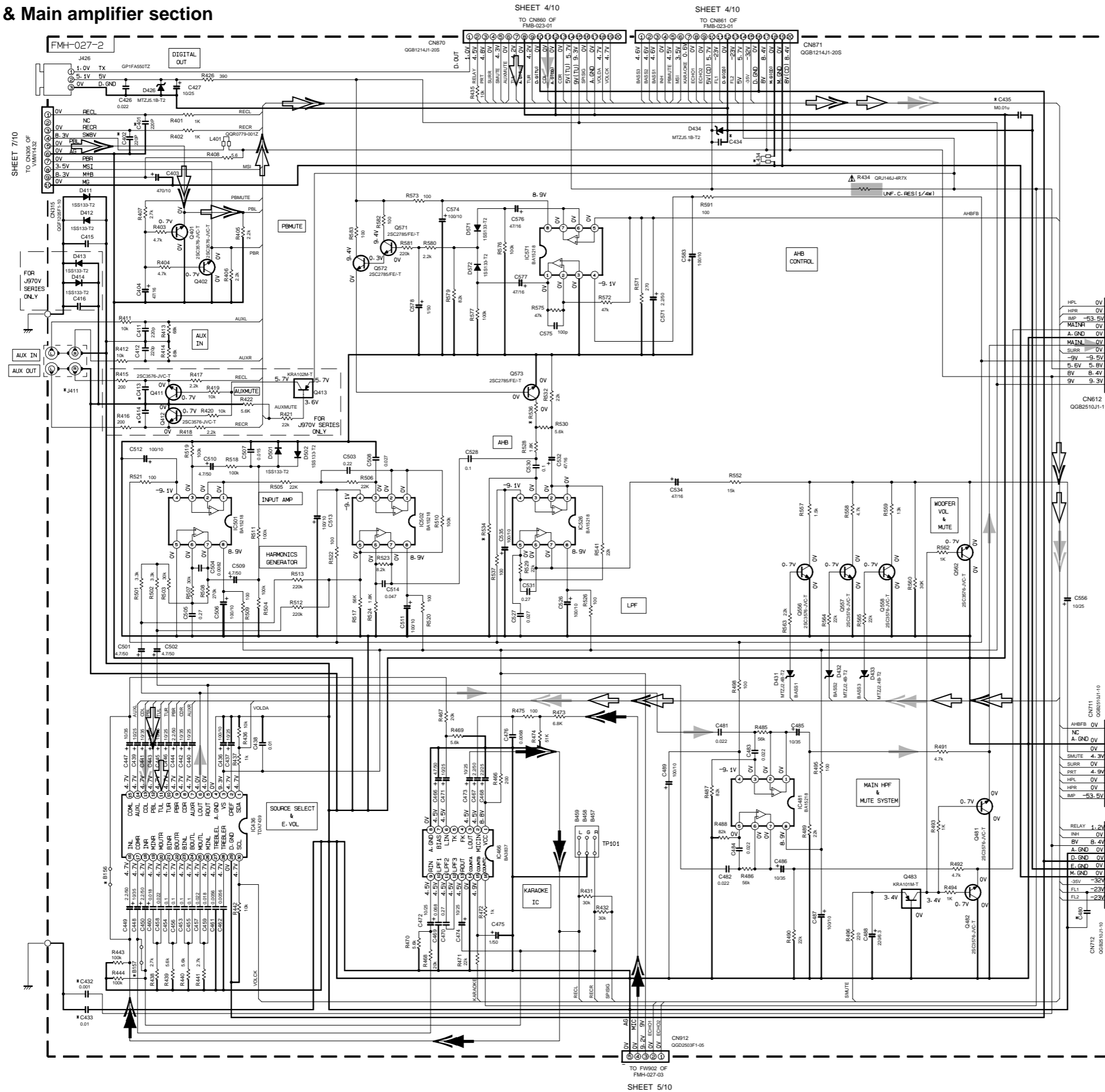
REF. NAME / VERSION	CA-MX_J770V UB-US-UX	CA-MX_J880V US	CA-MX_J880V UF-UT	CA-MX_J770V UB-US-UX	CA-MX_J880V US	CA-MX_J880V UF-UT
L201	SHORT (B112)	SHORT (B112)		SHORT (B112)	SHORT (B112)	USE
IC701	STK412-000	STK412-000	STK412-000	STK412-010	STK412-010	STK412-010
C233	0.22	0.22	0.01	0.22	0.22	0.01
RY1-RY2	GSK0109-001	GSK0109-001	GSK0109-001	GSK0057-001	GSK0057-001	GSK0057-001
C204/C205	4700/50	4700/50	4700/50	4700/63	4700/63	4700/63
C640/C641 C736/C737	NONE	NONE	USED	NONE	NONE	USED
R781	4.7K	4.7K	4.7K	5.6K	5.6K	5.6K
C709/C710	10p	10p	4.7p	10p	10p	4.7p
J82	QNB0097-001	QNB0097-001	QNB0097-002	QNB0097-001	QNB0097-001	QNB0097-002
C639	0.01u	0.01u	0.047u	0.01u	0.01u	0.047u

NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — 40% RMS VOL. HDN. BASE OFF
2. UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 1/4W 1% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN PPF(pF).
ALL INDUCTANCE VALUES ARE IN MH(MH).
ALL ELECTROLYTIC CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (UF)/RATED VOLTAGE (V).
ALL DIMENSIONS ARE IN MM.

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

➔ MAIN signal

Function & Main amplifier section



MARK	MODEL	CA-MXJ770V	CA-MXJ880V	CA-MXJ570V	CA-MXJ880V		
	VERSION	UB-US-UX	UF-UT	US	UB-US-UX	UF-UT	US
EPC	C401	NONE	USED	NONE	NONE	USED	NONE
	C402	NONE	USED	NONE	NONE	USED	NONE
	C415	1000p	0.0022	1000p	1000p	0.0022	1000p
	C416	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
	C432	NONE	USED	NONE	NONE	USED	NONE
	C433	NONE	USED	NONE	NONE	USED	NONE
OTHERS	J411	0N0117-001		0N0132-001			
	R534	180k		220k			
	R536	15k		12k			

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

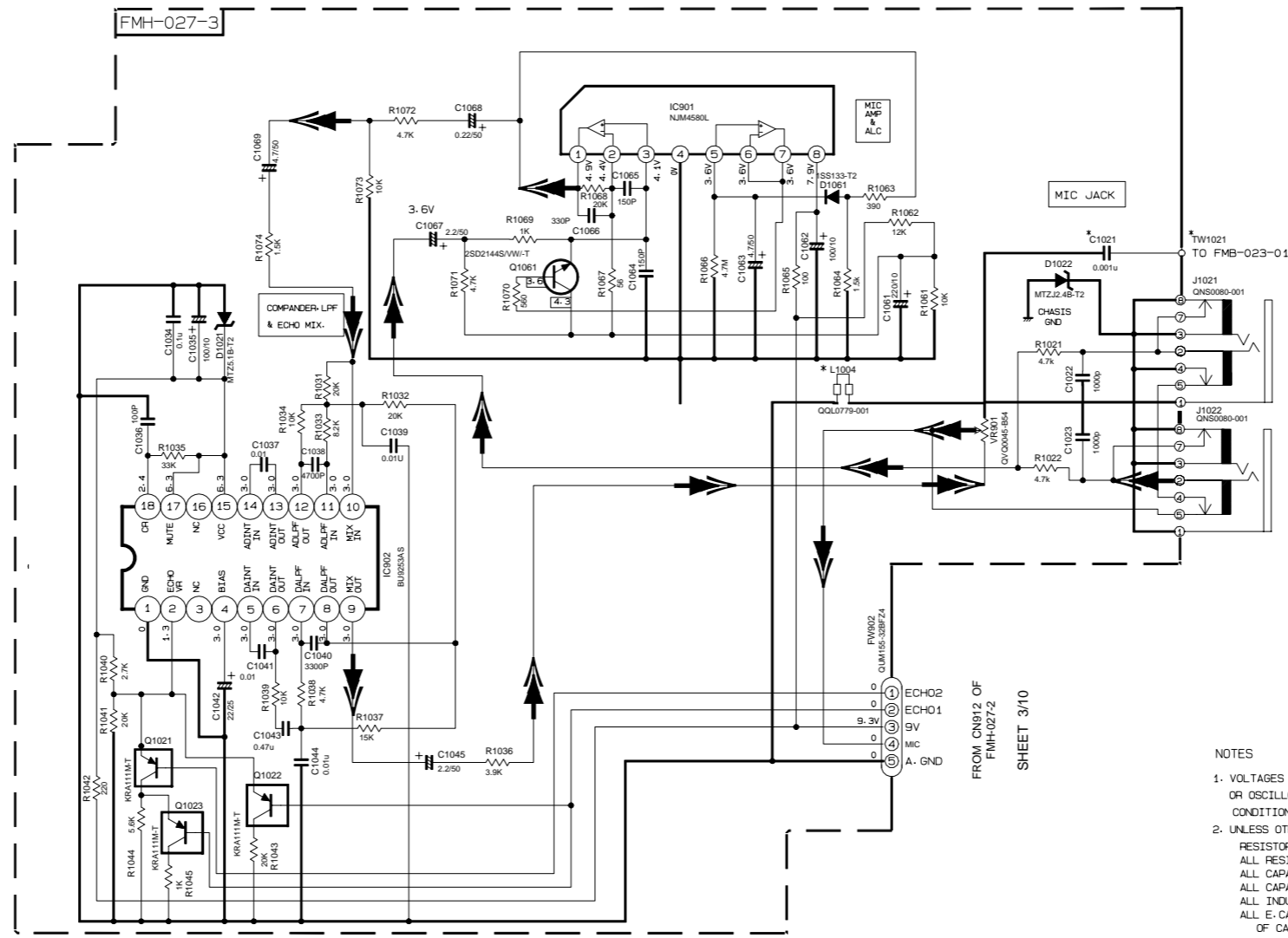
- ➡ CD signal
- ➡ TAPE P.B. signal
- ➡ TUNER signal
- ➡ MAIN signal
- ➡ MIC signal

NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION — AUX MODE, VOL MIN, SLEWFOVER VOL. 1.
- UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHMS (Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN pF (pF).
ALL INDUCTANCE VALUES ARE IN mH (mH).
ALL ELECTROLYTIC CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1S1333.

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

Microphone amplifier section



* NOTE

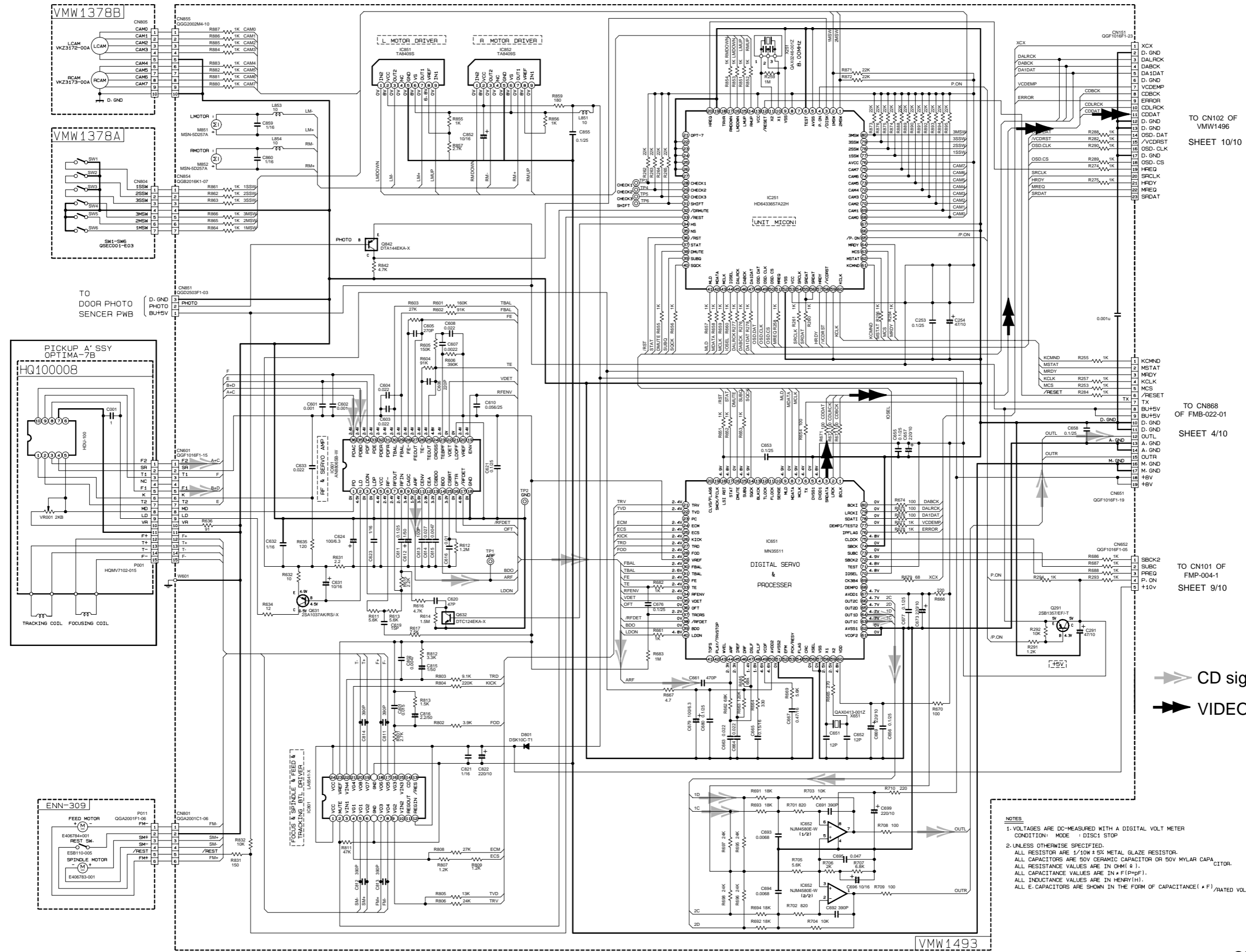
	MX-J570V	MX-J680V	CA-MXJ770V	CA-MXJ880V	CA-MXJ970V	CA-MXJ980V
L1004	SHORT	USE	SHORT	USE	SHORT	USE
C1021	NONE	USE	NONE	NONE	NONE	NONE
TW1021	NONE	USE	NONE	NONE	NONE	USE

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION --- AUX MODE- ECHO OFF
 - UNLESS OTHERWISE SPECIFIED
RESISTORS ARE 1/4W ±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).
ALL DIODES ARE 1SS133

➡ MIC signal

CD Servo & CD Mechanism control section

5
4
3
2
1



TO CN102 OF VMW1496 SHEET 10/10

TO CN868 OF FMB-022-01 SHEET 4/10

TO CN101 OF FMP-004-1 SHEET 9/10

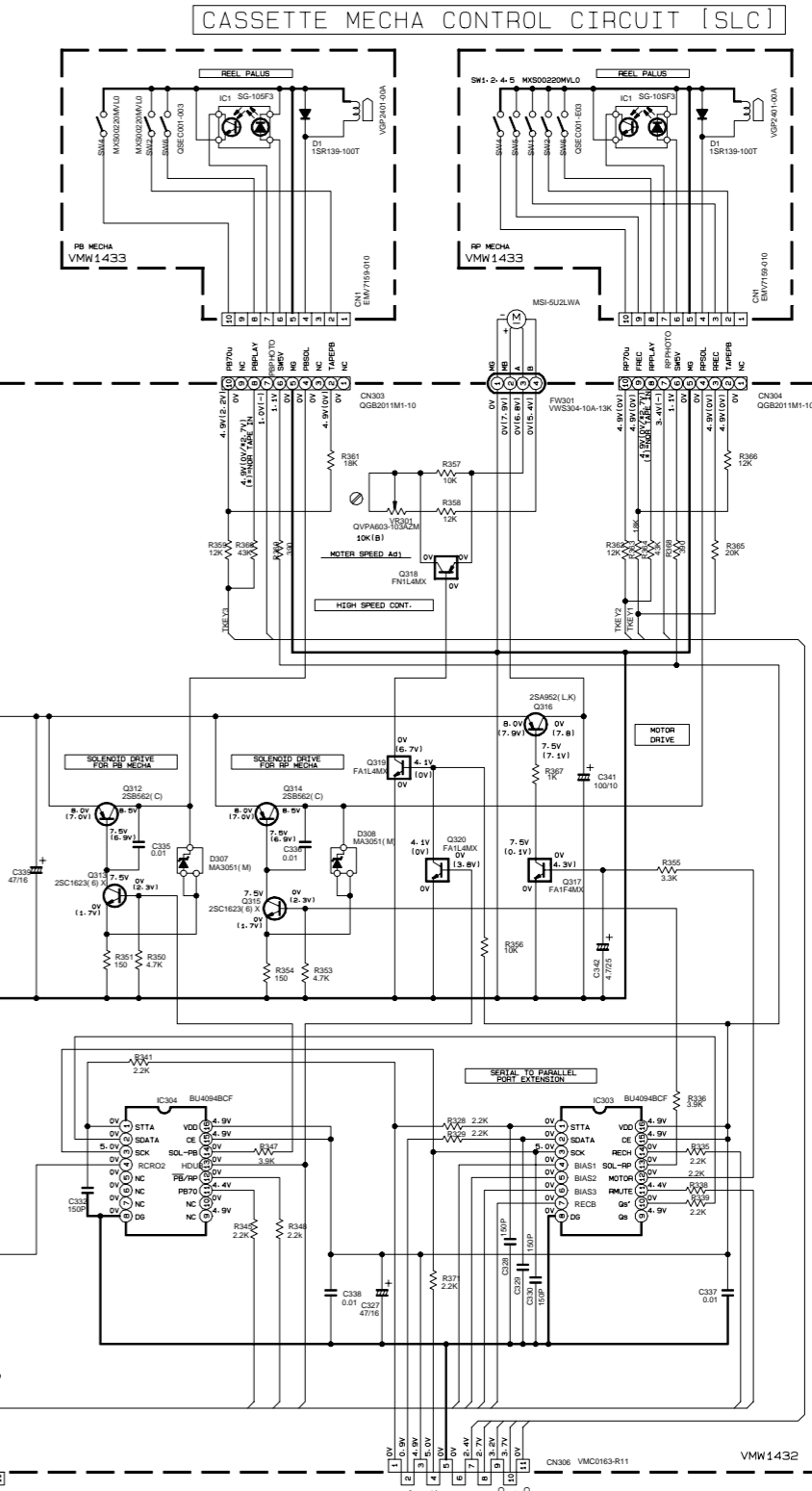
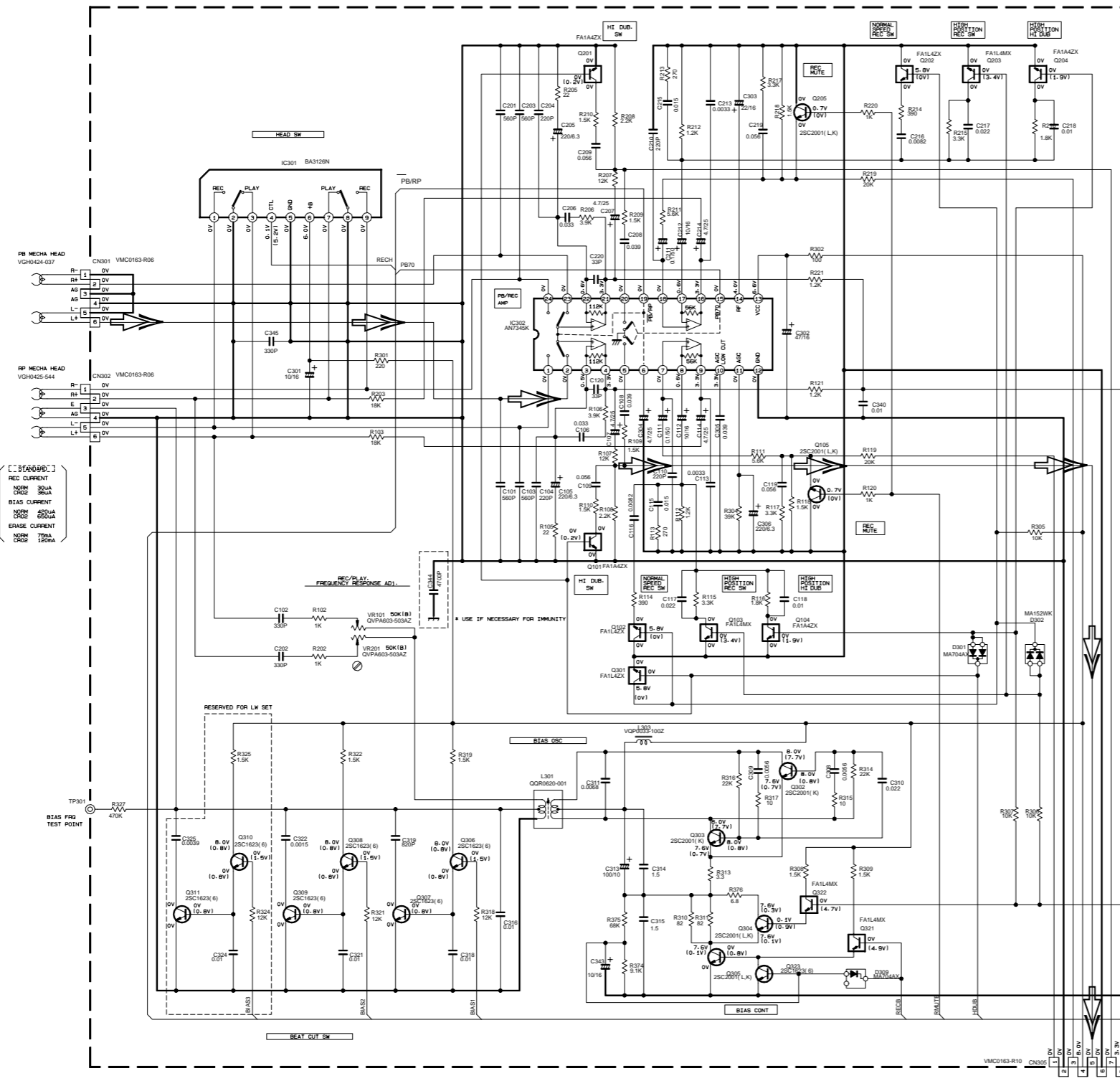
➡ CD signal
➡ VIDEO signal

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 CAPA. CTOR.
ALL RESISTANCE VALUES ARE IN OHM (Ω).
ALL CAPACITANCE VALUES ARE IN μF (μF).
ALL INDUCTANCE VALUES ARE IN HENRY (H).
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (* F) / RATED VOLTAGE (V).

VMW1493

Head amplifier & mechanism control section



NOTES
 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. () IS INVERT MODE
 2. UNLESS OTHERWISE SPECIFIED
 ALL RESISTANCE VALUES ARE IN OHM(Ω)
 ALL CAPACITORS ARE CERAMIC 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

TABLE 1. DIGITAL TR LIST

PART. NO.	CONSTRUCTION	REF. NO.	PART. NO.	CONSTRUCTION	REF. NO.
FN1L4H		Q318	FA1F4M		Q317
FA1A4Z		G101/G204	FA1L4M		G103/G203
FA1L4Z		G104/G204			G319
					G320/G321/G322
					G301

FROM PRE-AMP CIRCUIT
 FROM CN315 OF FMH-026-2
 SHEET 3/10

FROM MICON CIRCUIT
 FROM CN906 OF FMH-022-13
 SHEET 4/10

TAPE P.B. signal

5
4
3
2
1

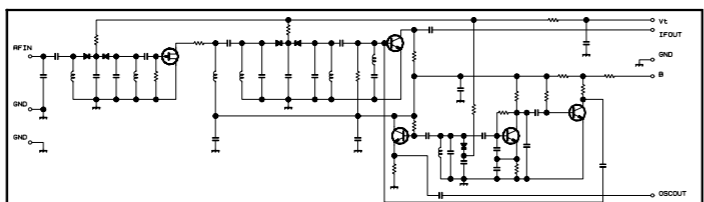
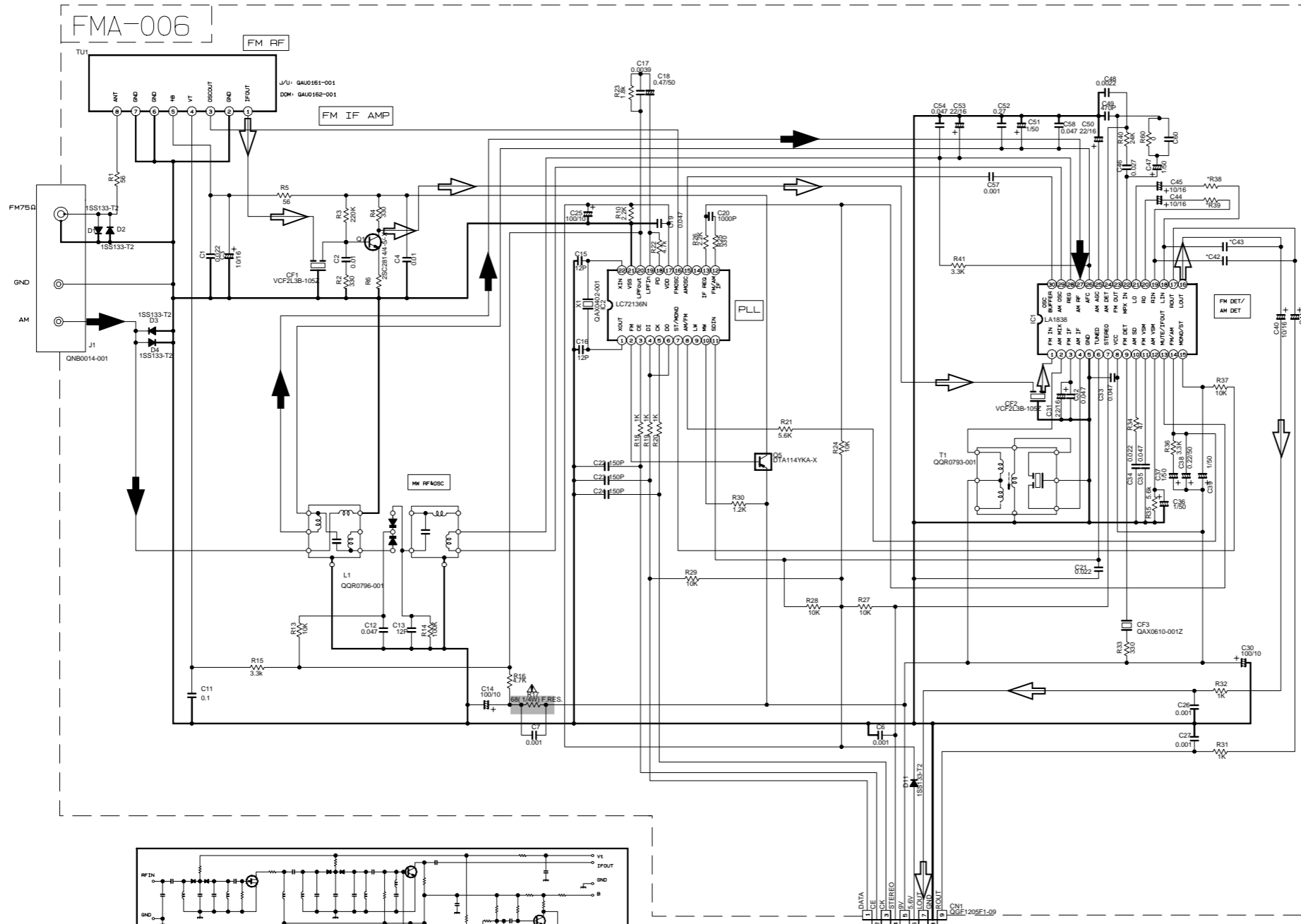
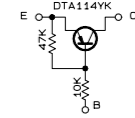
A B C D E F G H

Tuner section

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 Ω(M).
4. ALL CAPASITANCE VALUES ARE IN P(F)=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-B/-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	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 60GB 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
	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.	Q1	Q5
PIN NO.	E C B E C B	E C B E C B
FM 87.5MHz NO SIGNAL	0 7.1 0.85	B.9 B.8 0
AM 522KHz 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 E C B	
AM 522KHz NO SIGNAL	0 0 0 0.7 0	0 0 0.7 0	3.6 0.7
AM 144KHz NO SIGNAL	0 0 0 0.3 0	0.3 0.3 3.6	3.6 3.6

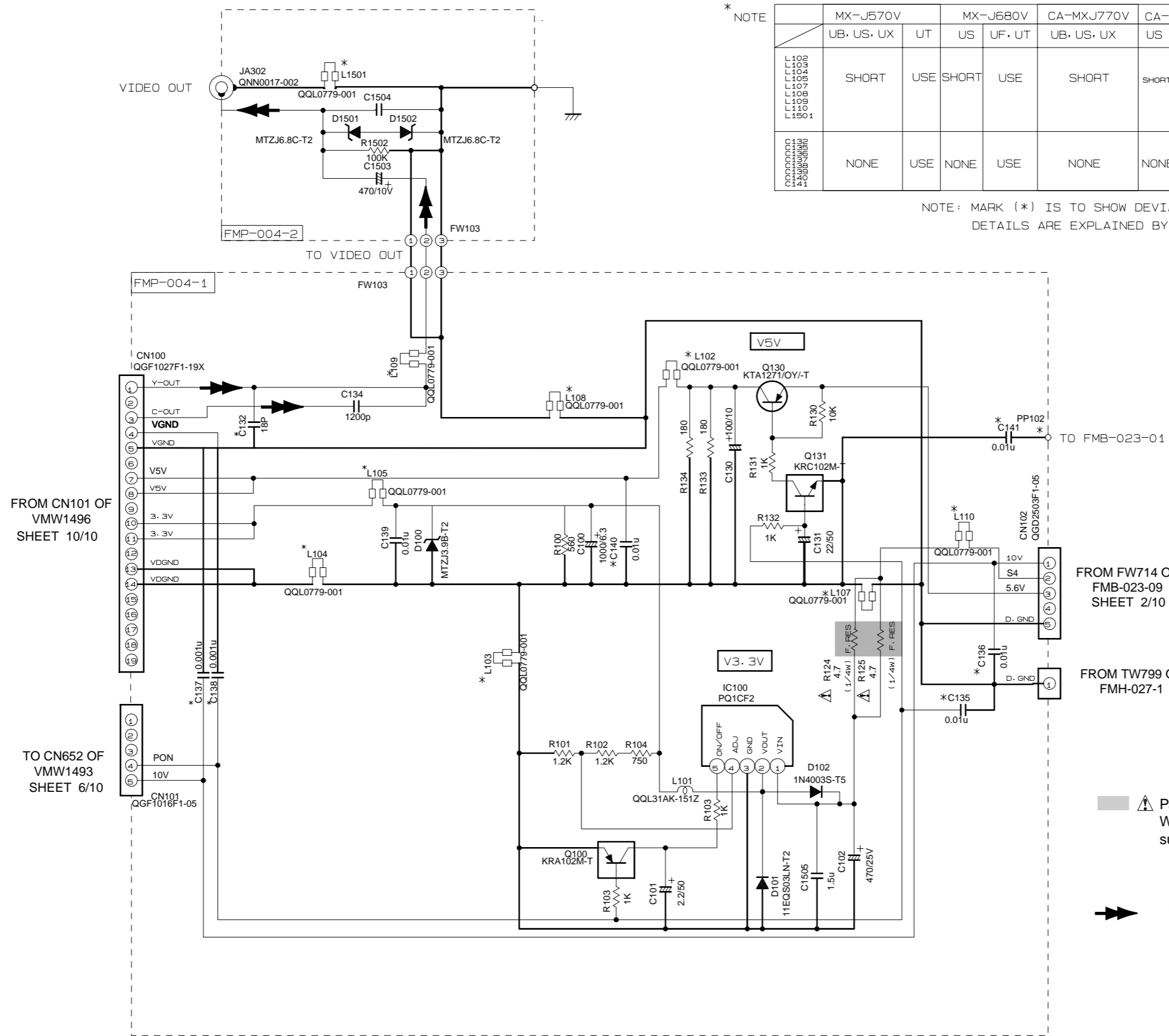
	VERSION		
	J/C	User's	JOB MODEL
R38	563	563	563
R39	563	563	563
C42	0.0022	0.0015	0.0015
C43	0.0022	0.0015	0.0015
R4	331	331	221
R5	560	560	270
R6	240	240	270

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

FM / TUNER signal
AM signal

5
4
3
2
1

Video CD regulator section



* NOTE

	MX-J570V		MX-J680V		CA-MXJ770V		CA-MXJ880V		CA-MXJ970V		CA-MXJ980V	
	UB · US · UX	UT	US	UF · UT	UB · US · UX	US	UF · UT	UB · US · UX	US	UF · UT	US	UF · UT
L102												
L103												
L104												
L105												
L106												
L107												
L108												
L109												
L110												
L1501												
C101												
C102												
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C136												
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C138												
C1503												
C1504												

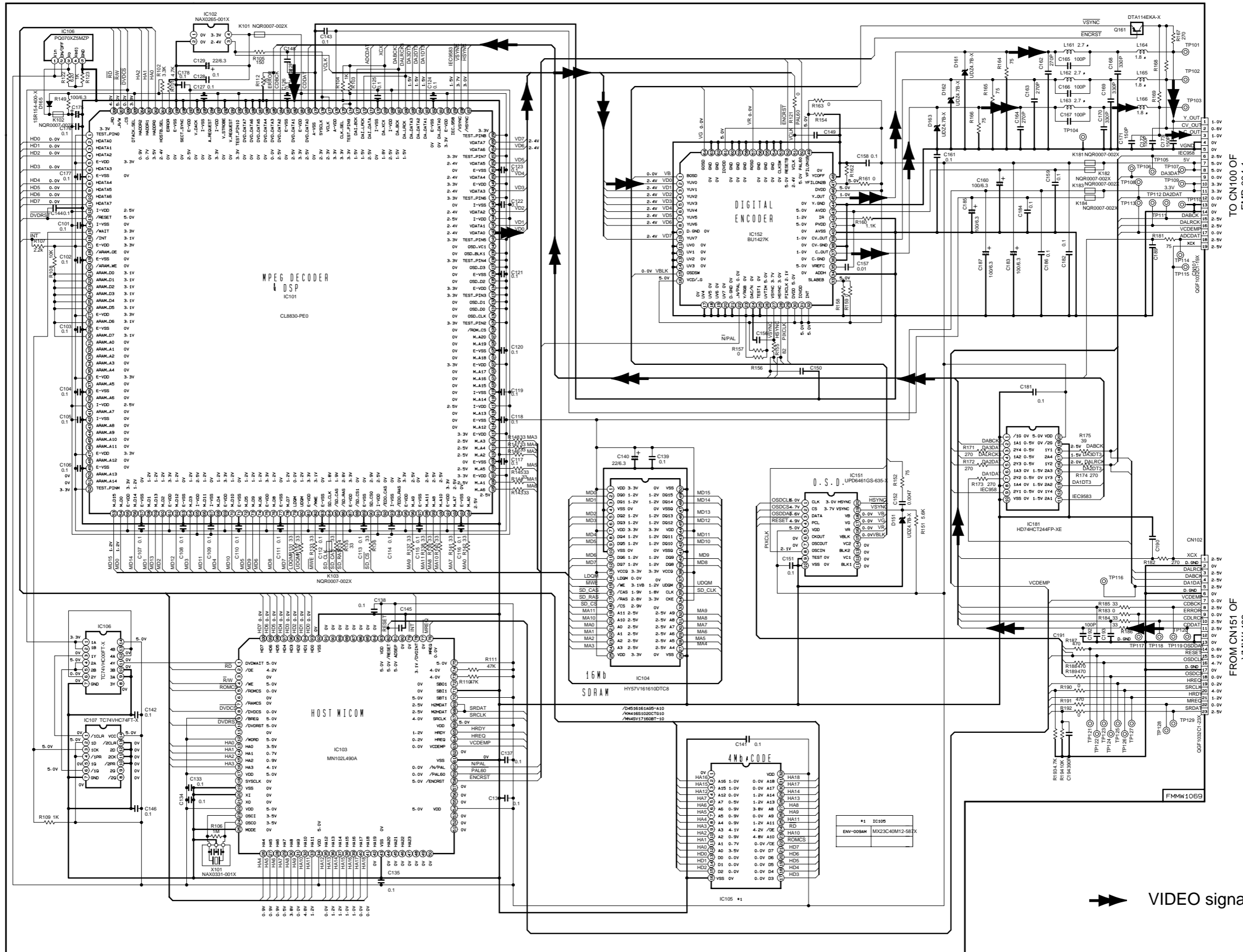
NOTE: MARK (*) IS TO SHOW DEVIATION IN VERSIONS
DETAILS ARE EXPLAINED BY MARK.

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

VIDEO signal

Super Video CD control section

5
4
3
2
1



TO CN100 OF FMP-004-1 SHEET 9/10

FROM CN151 OF VMW1493 SHEET 6/10

Printed circuit boards

■ Power supply & input/output board

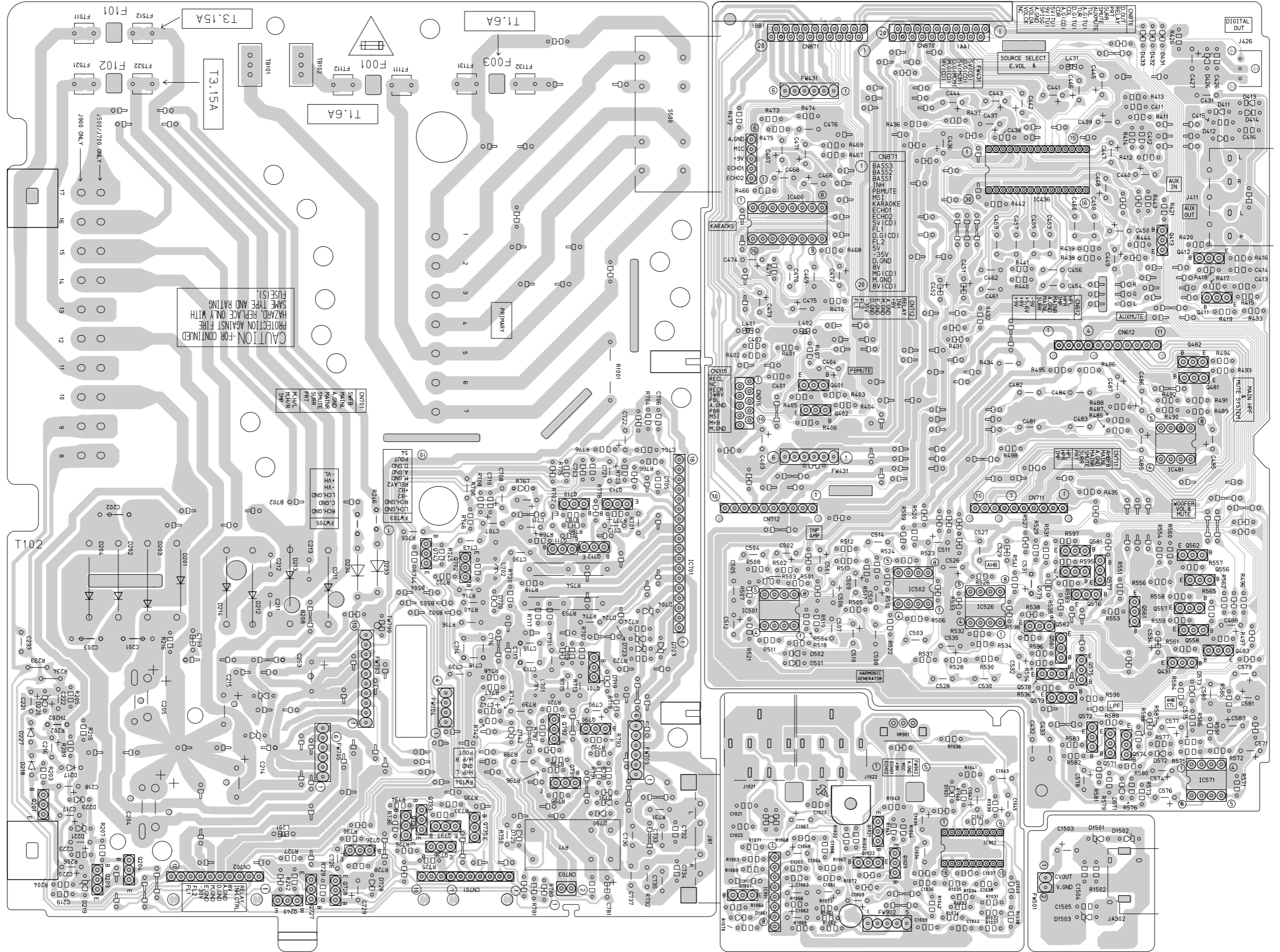
5

4

3

2

1



A

B

C

2-12

D

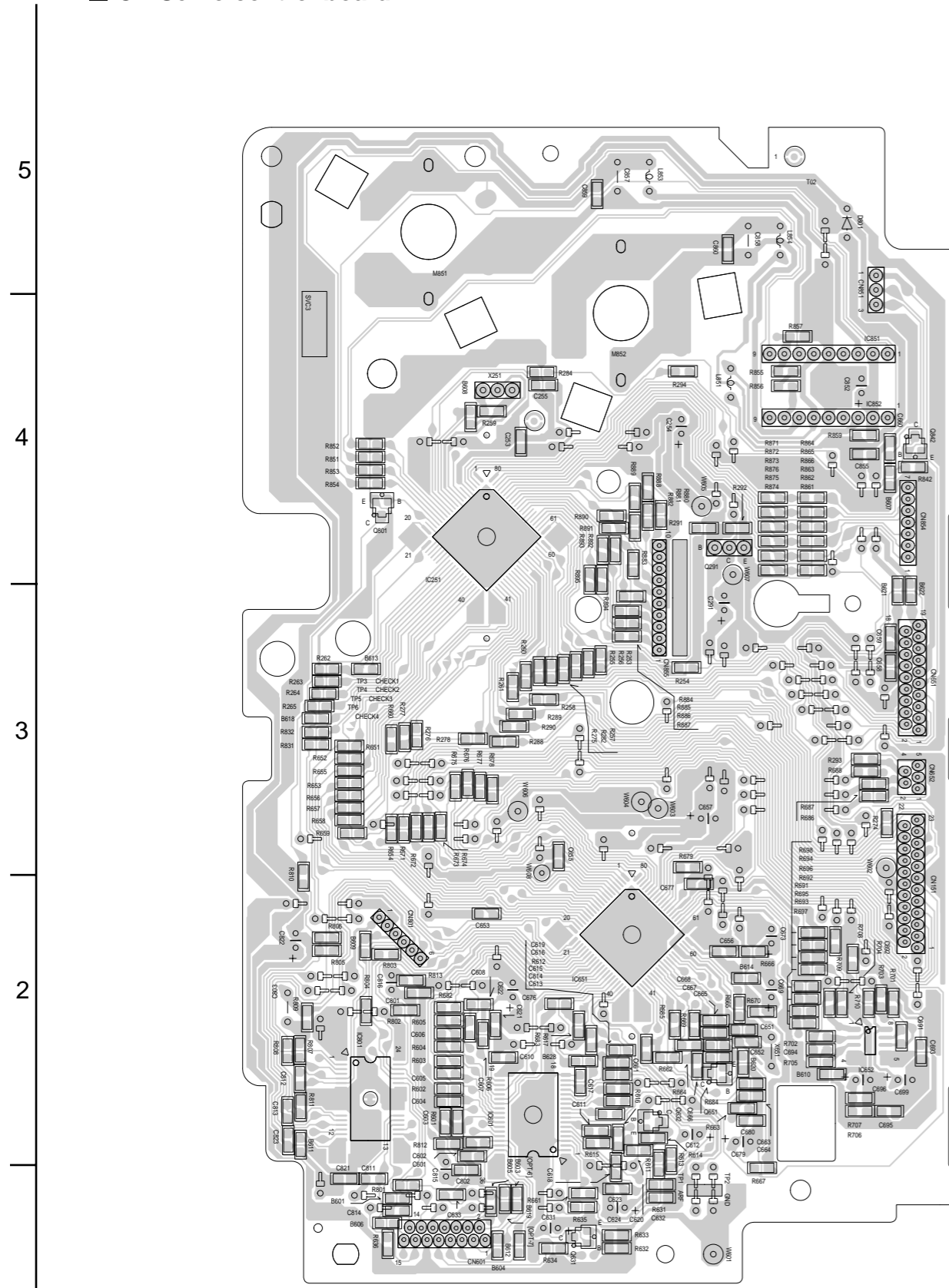
E

F

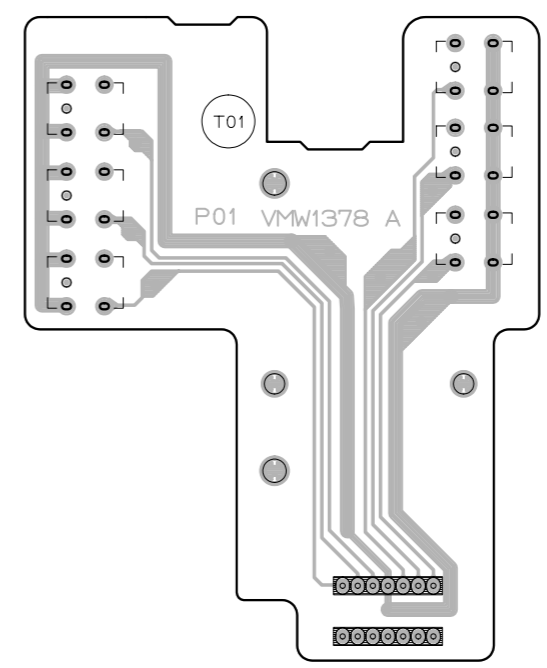
G

H

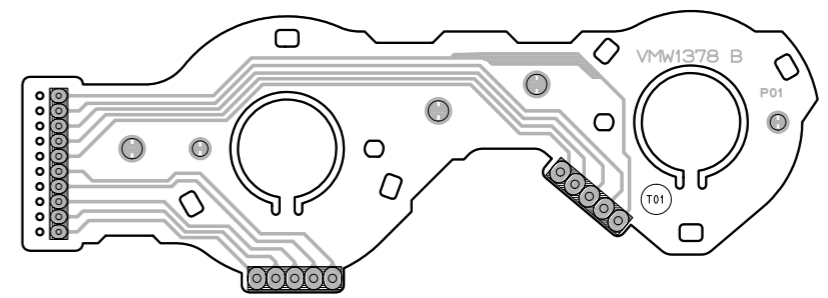
■ CD Servo control board



■ CD Tray section switch board

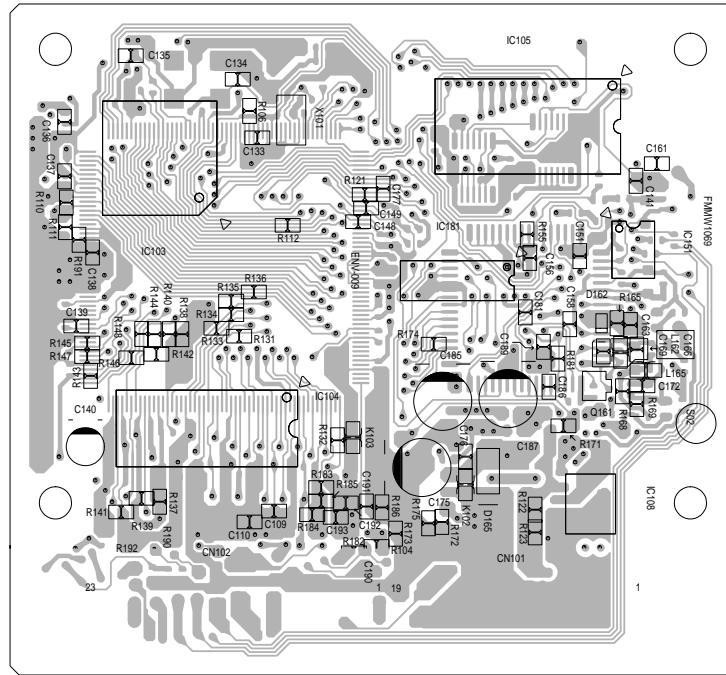


■ Can switch board

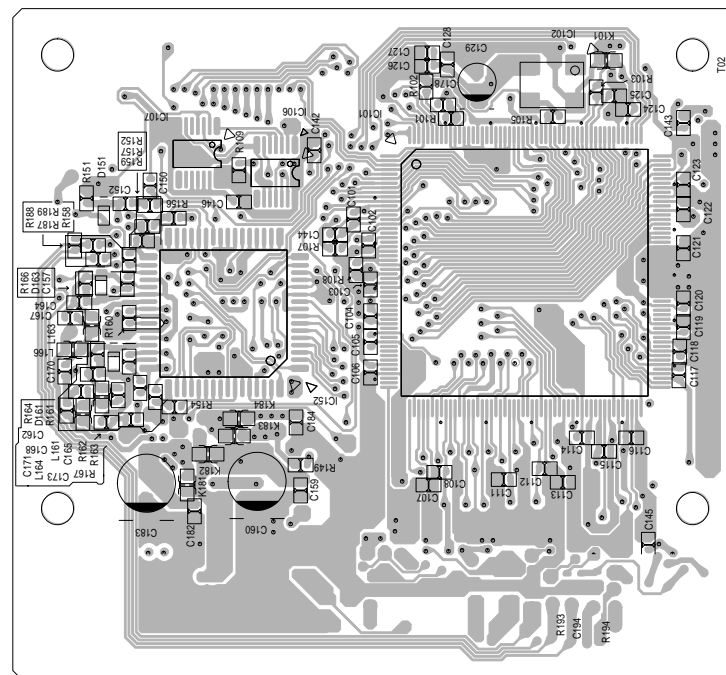


■ Super VCD board

(Forward side)



(Reverse side)



■ VCD board

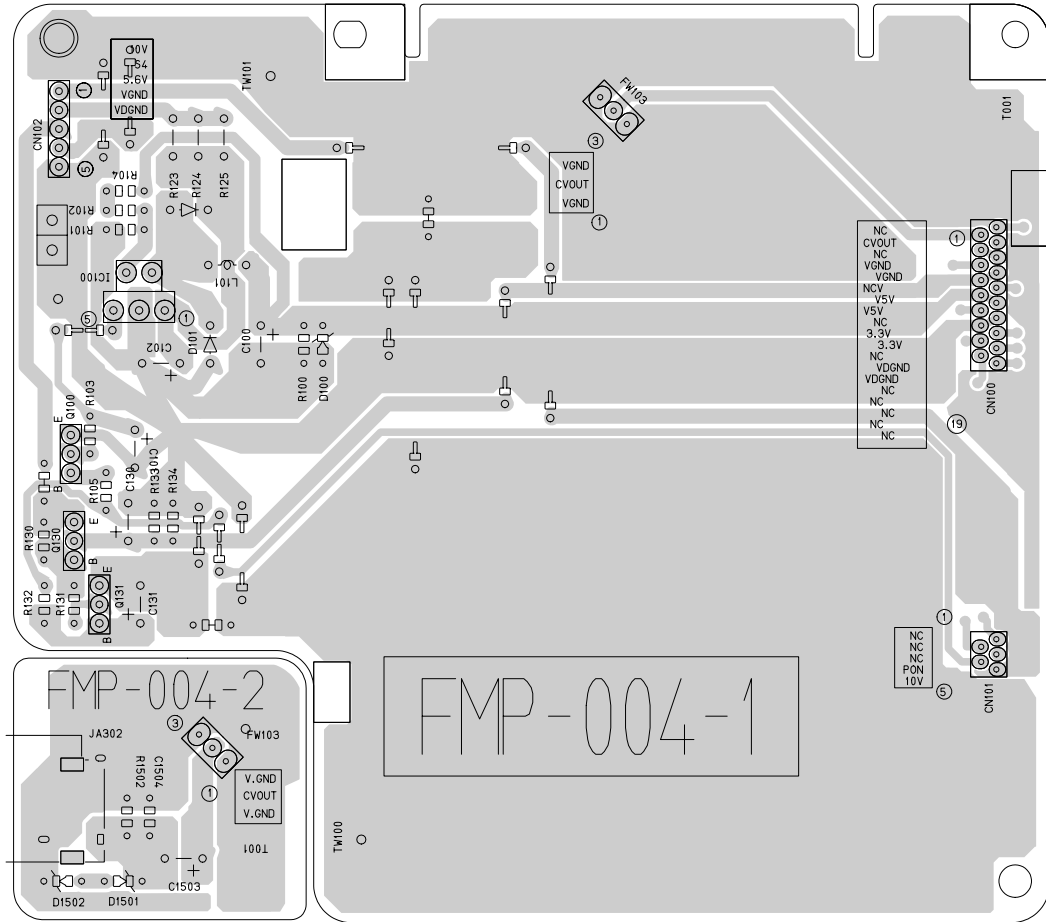
5

4

3

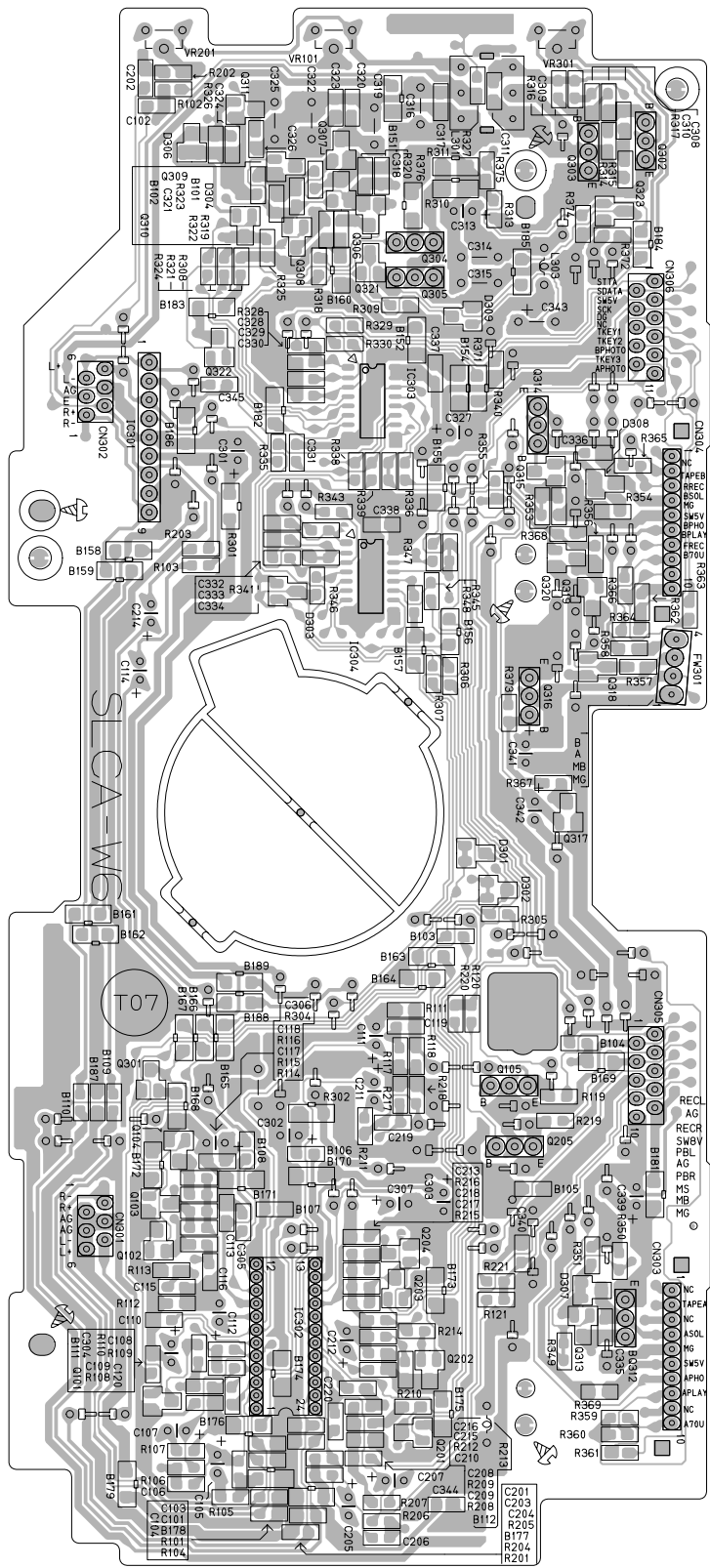
2

1



■ Cassette mechanism board

5
4
3
2
1



A B C

■ Tuner board

