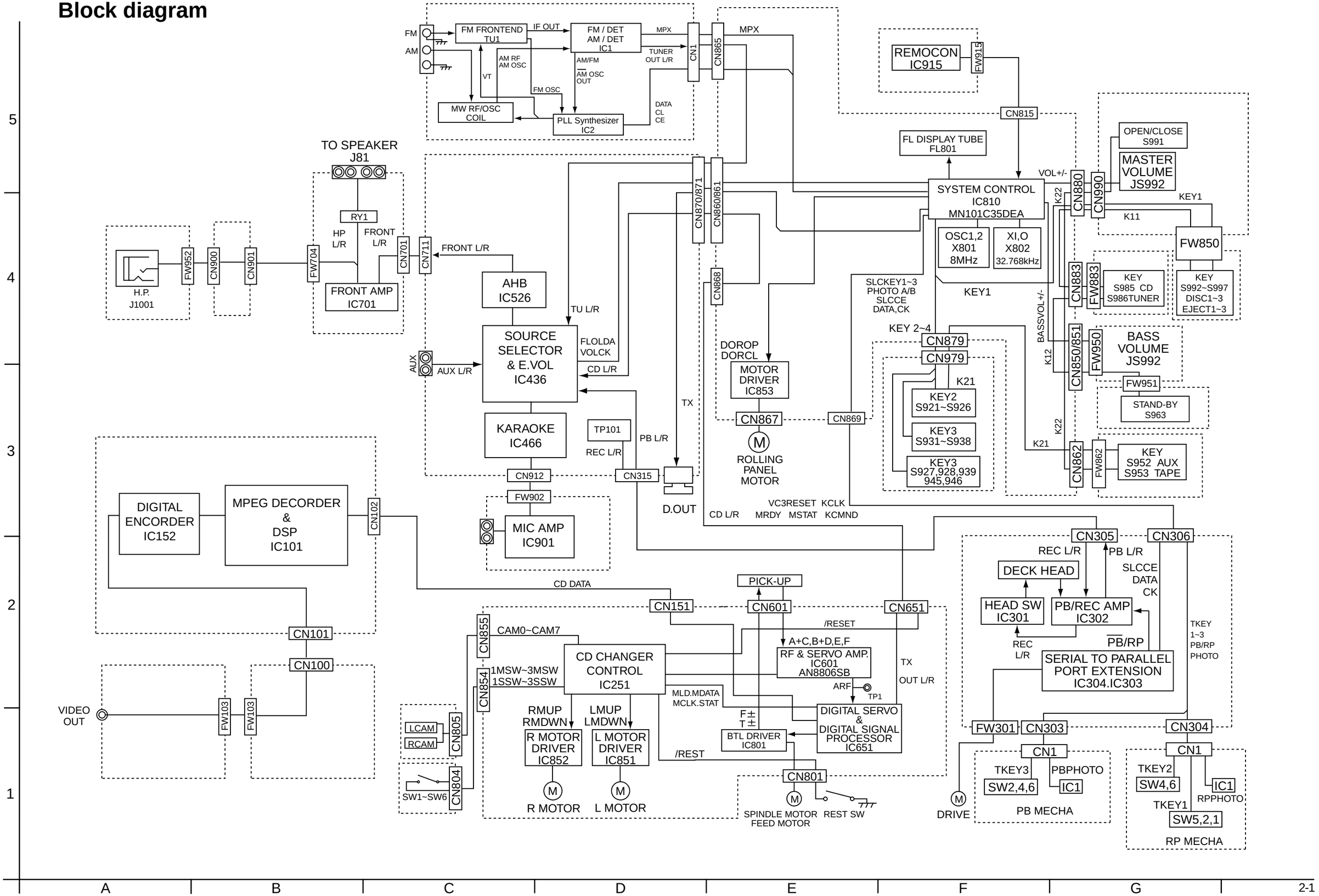
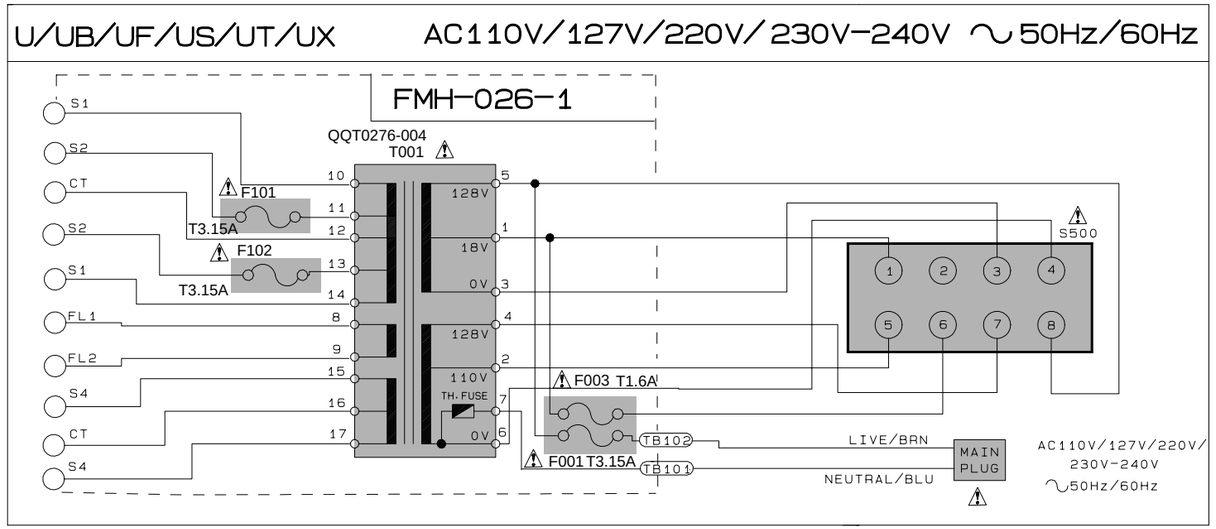
Block diagram

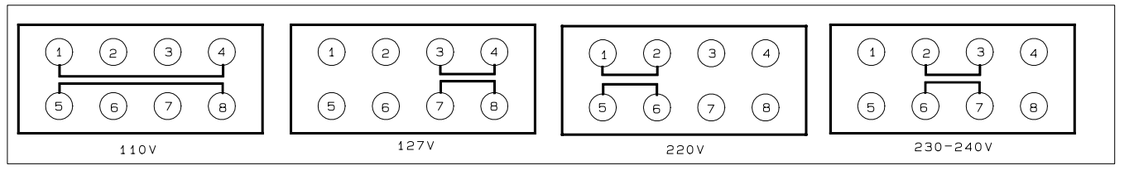


Standerd schematic diagrams

■ Power transformer section



VOLTAGE SELECTOR LOCATION



VERSION CODES

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

EXPLANATION OF OVERALL SCHEMATIC

MODEL MX-J570V/MX-J680V

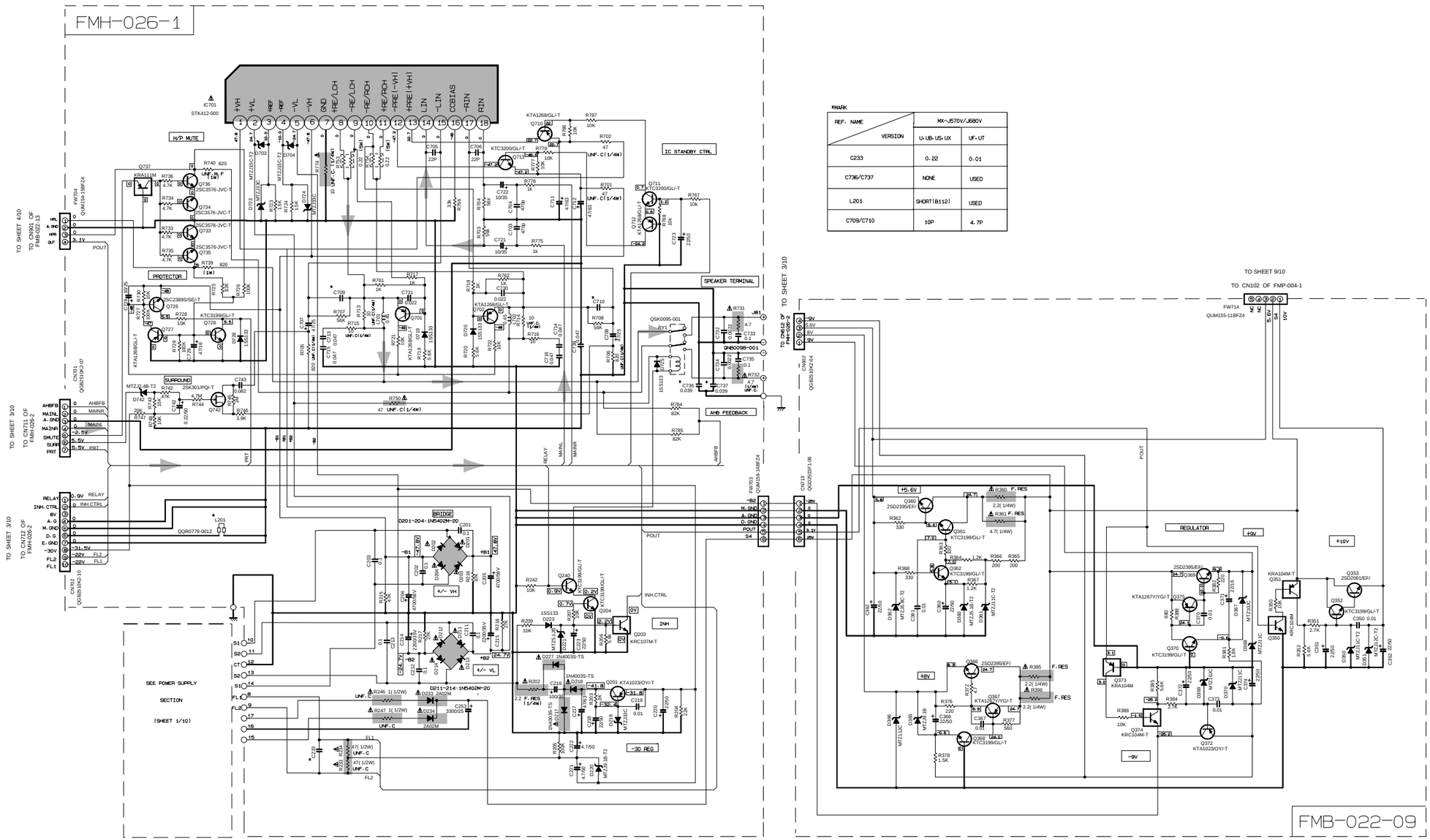
SHEET NUMBER	CIRCUITS DESCRIPTION
1/10	.PRIMARY WITH MAINS TRANSFORMER
2/10	.DC REGULATORS/AUDIO OUTPUT
3/10	.EXTERNAL INPUT, SOURCE SELECTOR SWITCH
4/10	.FL DISPLAY, SYSTEM CONTROL LSI, USER CONTROL KEYS
5/10	.MIC AMP, ECHO CIRCUIT
6/10	.SVCD SERVO AND SVCD SYSTEM CONTROL .SVCD CHANGER MECHANISM CONTOL
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.

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

SHEET 1/10

■ Power amplifier & requlatoe section



*MARK

REF. NAME / VERSION	MX-J570V/J680V	
	U-UB-US-UX	UF-UT
C233	0.22	0.01
C736/C737	NONE	USED
L201	SHORT(B112)	USED
C709/C710	10P	4.7P

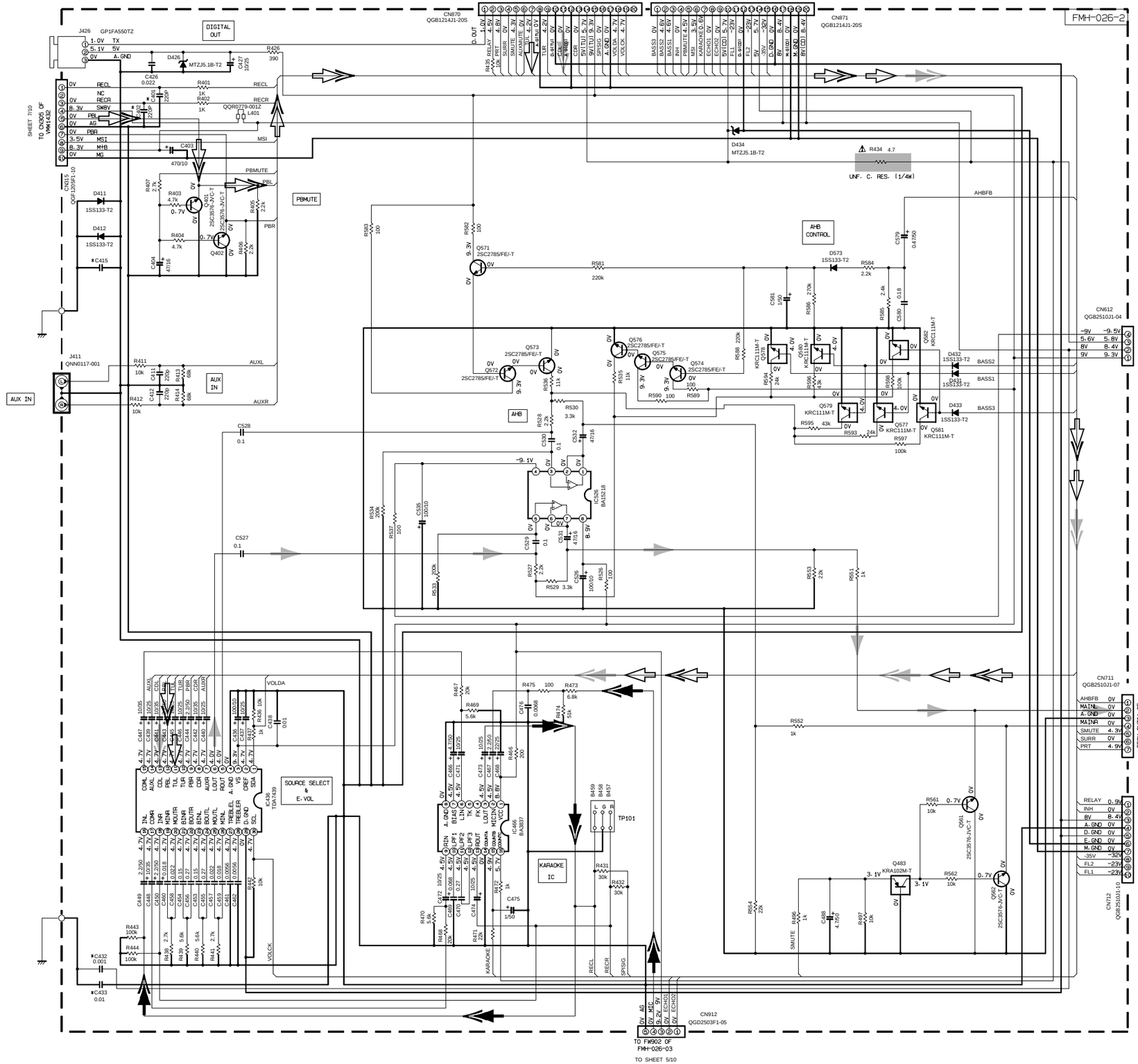
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION ---- AUX MODE, VOL MIN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN Ω(Ω=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).
   ALL DIODES ARE 1SS133

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

→ MAIN signal

■ Function & Main amplifier section



* MARK

	MODEL	MX-J570V		MX-J680V	
	VERSION	UB, US, UX	UT	US	UF, UT
EMC	C401	NONE	USED	NONE	USED
	C402	NONE	USED	NONE	USED
	C415	1000p	0.0022	1000p	0.0022
	C431	NONE	USED	NONE	USED
	C432	NONE	USED	NONE	USED
	C433	NONE	USED	NONE	USED
	L401	NONE	USED	NONE	USED

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION —— AUX MODE, VOL MIN, BASS OFF
2. 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 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

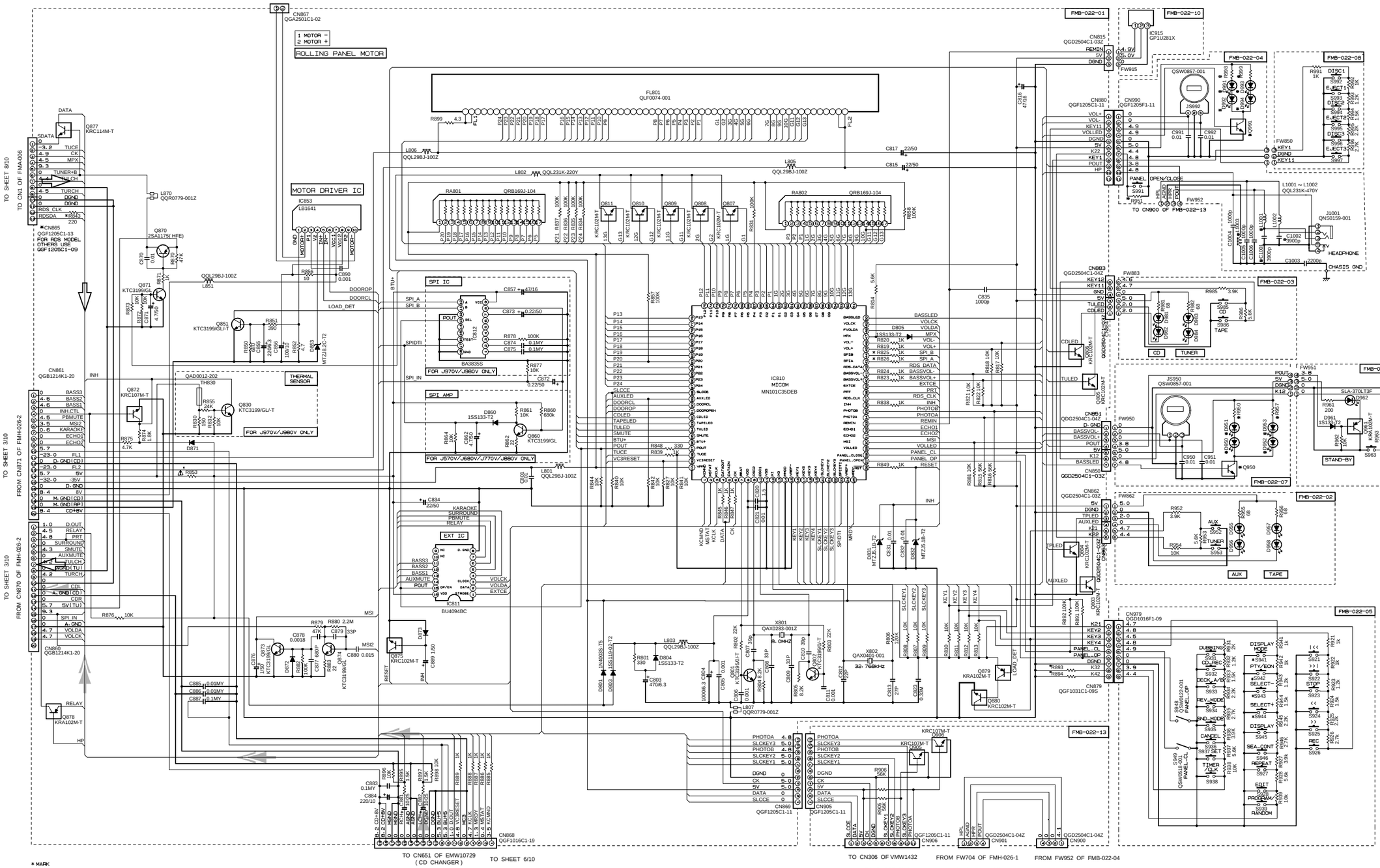
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified.

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

SHEET 3/10

5 4 3 2 1 — A B C 2-4 D E F G H

■ FL Display & system controller section



* MARK

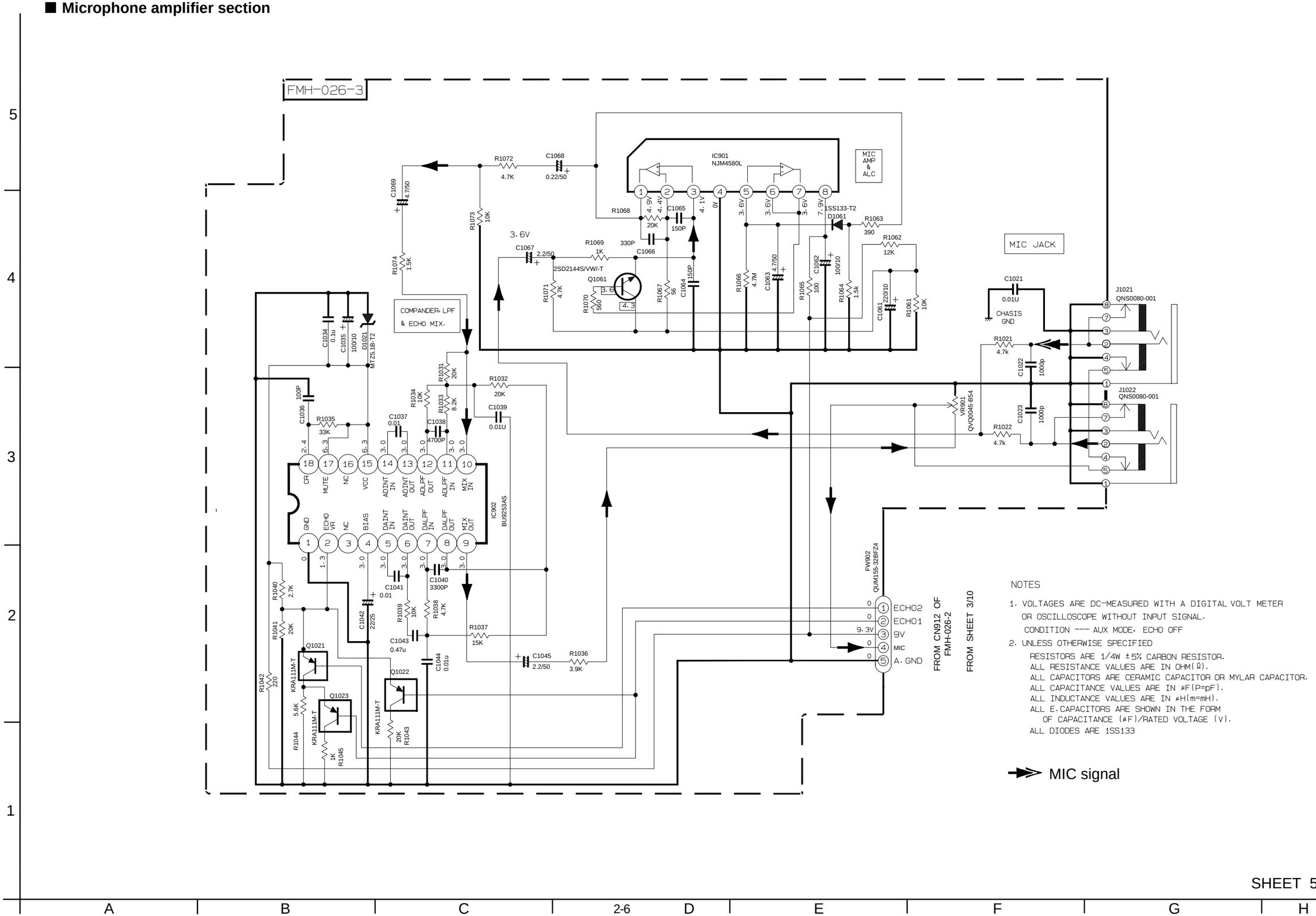
	MX-J570V UB, US, UX	MX-J570V UT	MX-J680V US	MX-J680V UF, UT	CA-MXJ770V UB, US, UX	CA-MXJ880V US	CA-MXJ880V UF, UT	CA-MXJ970V UB, US, UX	CA-MXJ980V US	CA-MXJ980V UF, UT
R825, 826	NONE	NONE	NONE	NONE	NONE	NONE	NONE	1K	1K	1K
R964	330K	330K	330K	330K	75K	75K	75K	18K	18K	18K
R951	18K	18K	18K	18K	18K	18K	18K	18K	18K	18K
R893	75K(UX=18K)	75K	75K	75K	75K(UX=18K)	75K	75K	75K (UX=18K)	75K	75K
R894	330K(UX=18K)	330K	330K	330K	330K(UX=18K)	330K	330K	330K(UX=18K)	330K	330K
D950, D992 D951, D991	NONE	NONE	NONE	NONE	NONE	NONE	NONE	SLA-570JT3F	SLA-570JT3F	SLA-570JT3F
D952, D994 D953, D993	NONE	NONE	NONE	NONE	NONE	NONE	NONE	SLA-570JT3F	SLA-570JT3F	SLA-570JT3F
R950, R957, R998, R999	NONE	NONE	NONE	NONE	NONE	NONE	NONE	75	75	75
Q950, Q991	NONE	NONE	NONE	NONE	NONE	NONE	NONE	KRC-102M-T	KRC-102M-T	KRC-102M-T
X801	QAX0416-001Z	QAX0416-001Z	QAX0416-001Z	QAX0416-001Z	QAX0416-001Z	QAX0416-001Z	QAX0416-001Z	QAX0283-001Z	QAX0283-001Z	QAX0283-001Z
L1001, L1002	SHORT	QQL231K-470Y	SHORT	QQL231K-470Y	SHORT	SHORT	QQL231K-470Y	SHORT	SHORT	QQL231K-470Y
C1001, C1002	NONE	0.001u	NONE	0.001u	NONE	NONE	0.001u	0.001u	NONE	0.001u
L1003	QQL231K-2R2Y	QQR0779-001Z	QQL231K-2R2Y	QQR0779-001Z	QQL231K-2R2Y	QQL231K-2R2Y	QAX0416-001Z	QQR0779-001Z	QQL231K-2R2Y	QQR0779-001Z
R853	2.2 F.RES (1/4W)	2.2 F.RES (1/4W)	2.2 F.RES (1/4W)	2.2 F.RES (1/4W)	2.2 F.RES (1/4W)	2.2 F.RES (1/4W)	2.2 F.RES (1/4W)	ICP-N15-T	ICP-N15-T	ICP-N15-T

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION: ---- AUX MODE, VOL MIN, BASS OFF
2. 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 μF(mμF).
   ALL INDUCTANCE VALUES ARE IN μH(mH).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

SHEET 4/10

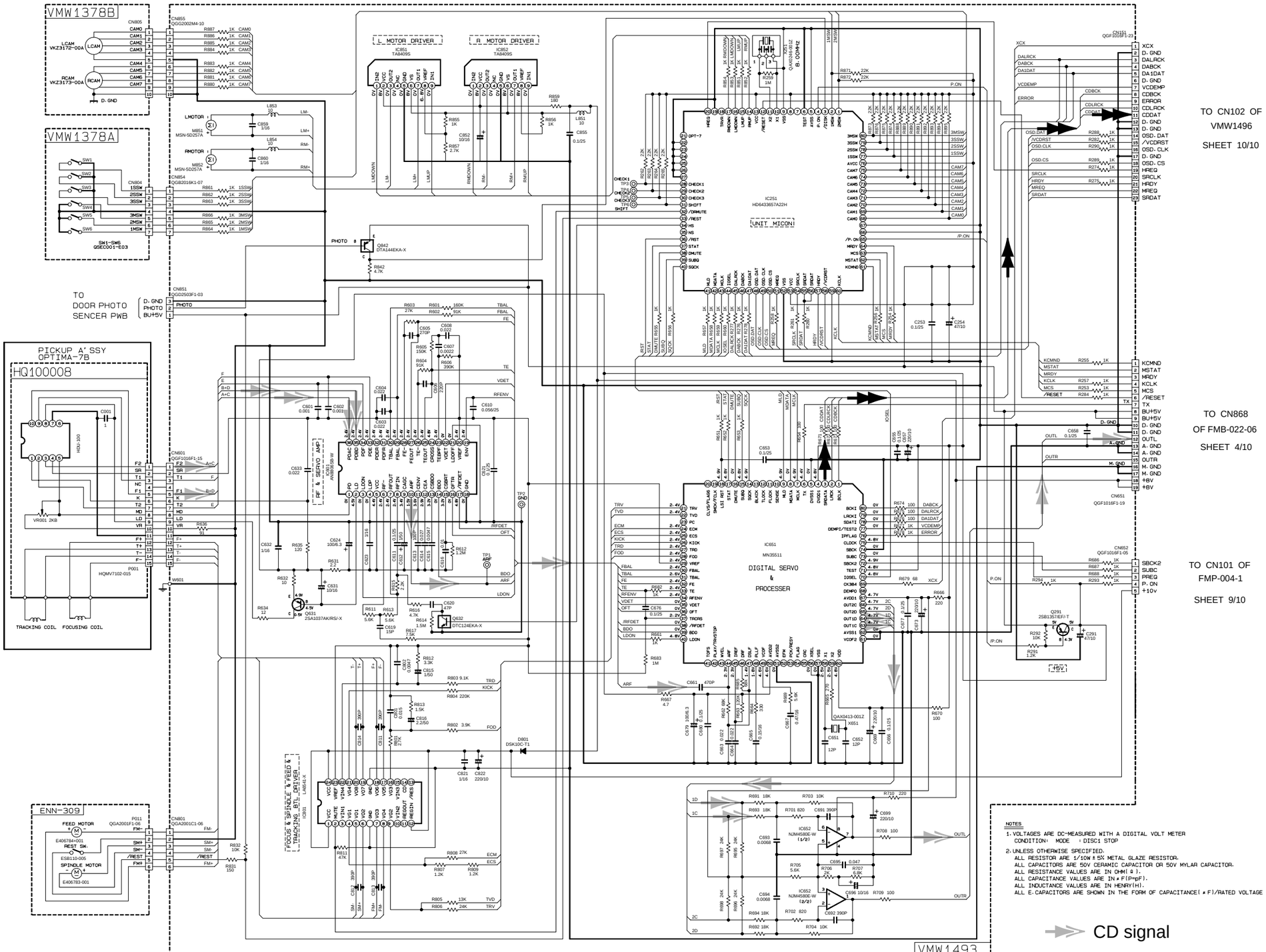
■ Microphone amplifier section



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- AUX MODE. ECHO OFF
2. 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 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

■ CD Servo & CD Mechanism control section

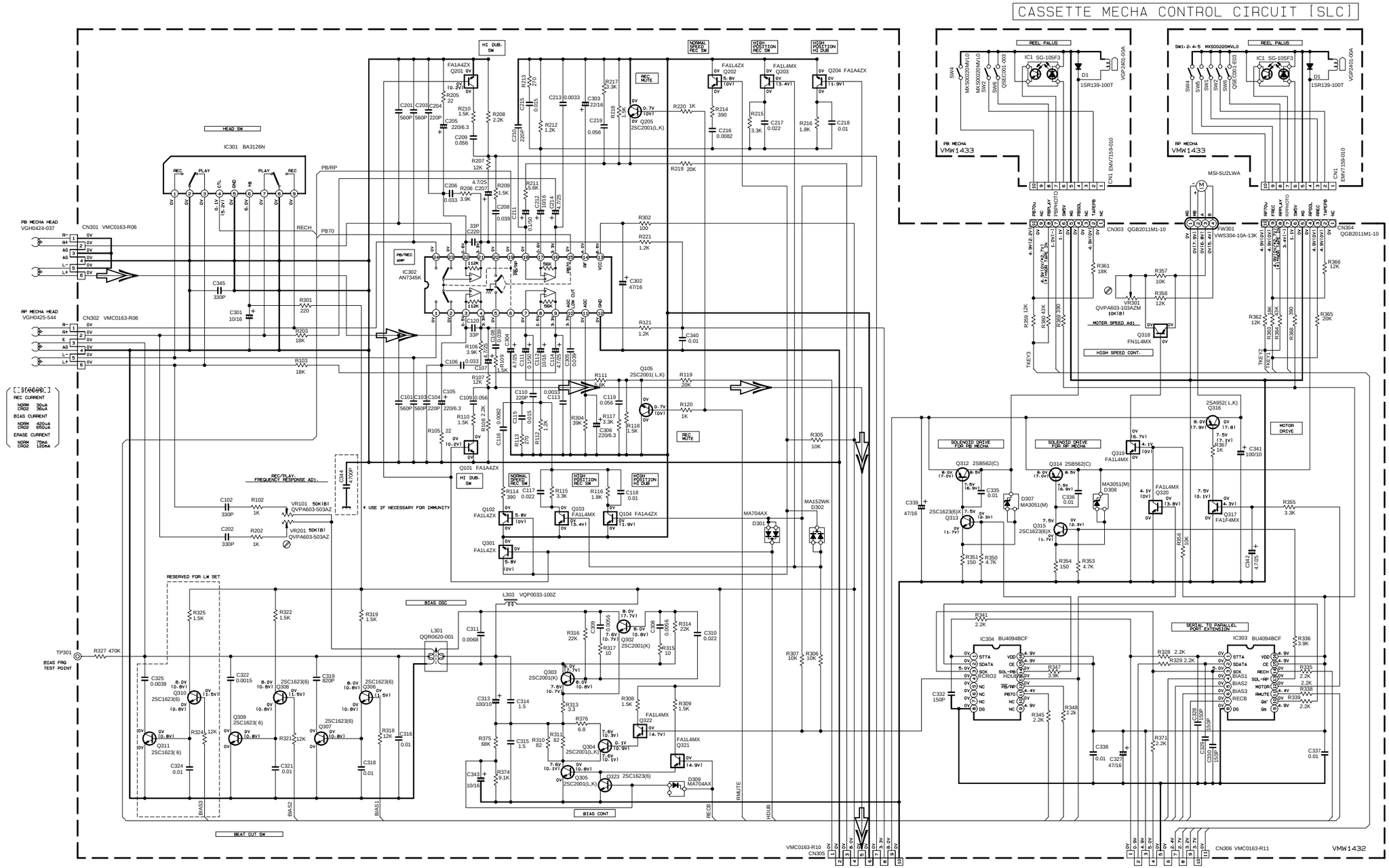


NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
   CONDITION: MODE : DISC: 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 μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN HENRY(H).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

SHEET 6/10

■ Head amplifier & mechanism cotntrol 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 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).
   PP PLYPROPYLENE CAPACITOR

TABLE 1. DIGITAL TR LIST

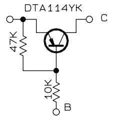
PART NO	CONSTRUCTION	REF NO	PART NO	CONSTRUCTION	REF NO
FN1L4M	47K 47K	Q318	FA1F4M	22K 22K	Q317
FA1A4Z	10K	Q101/Q201 Q104/Q204	FA1L4M	47K 47K	Q103/Q203 Q319 Q320/Q321/Q322
FA1L4Z	47K	Q102/Q202 Q301			

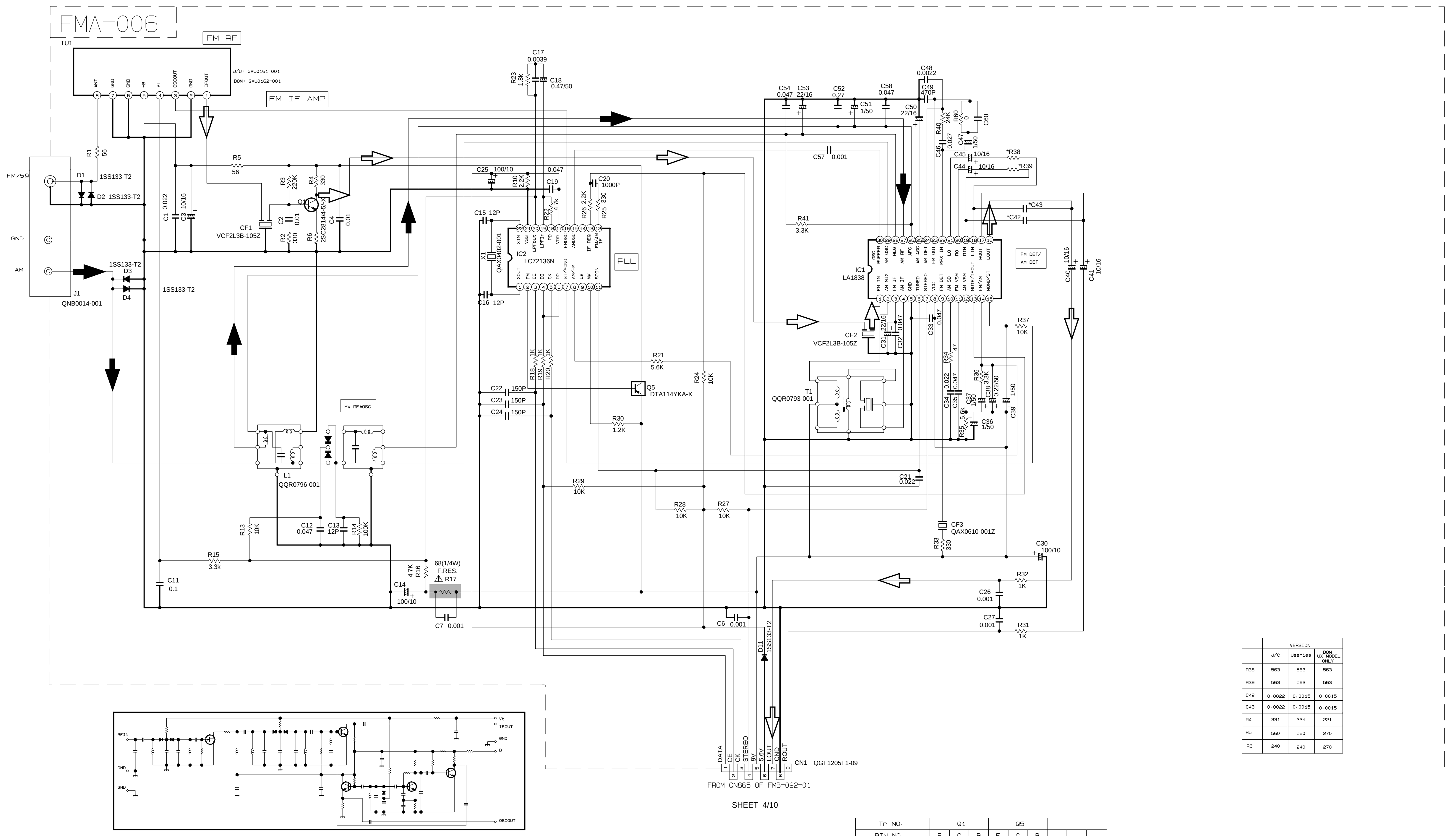
■ Tuner section

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

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								

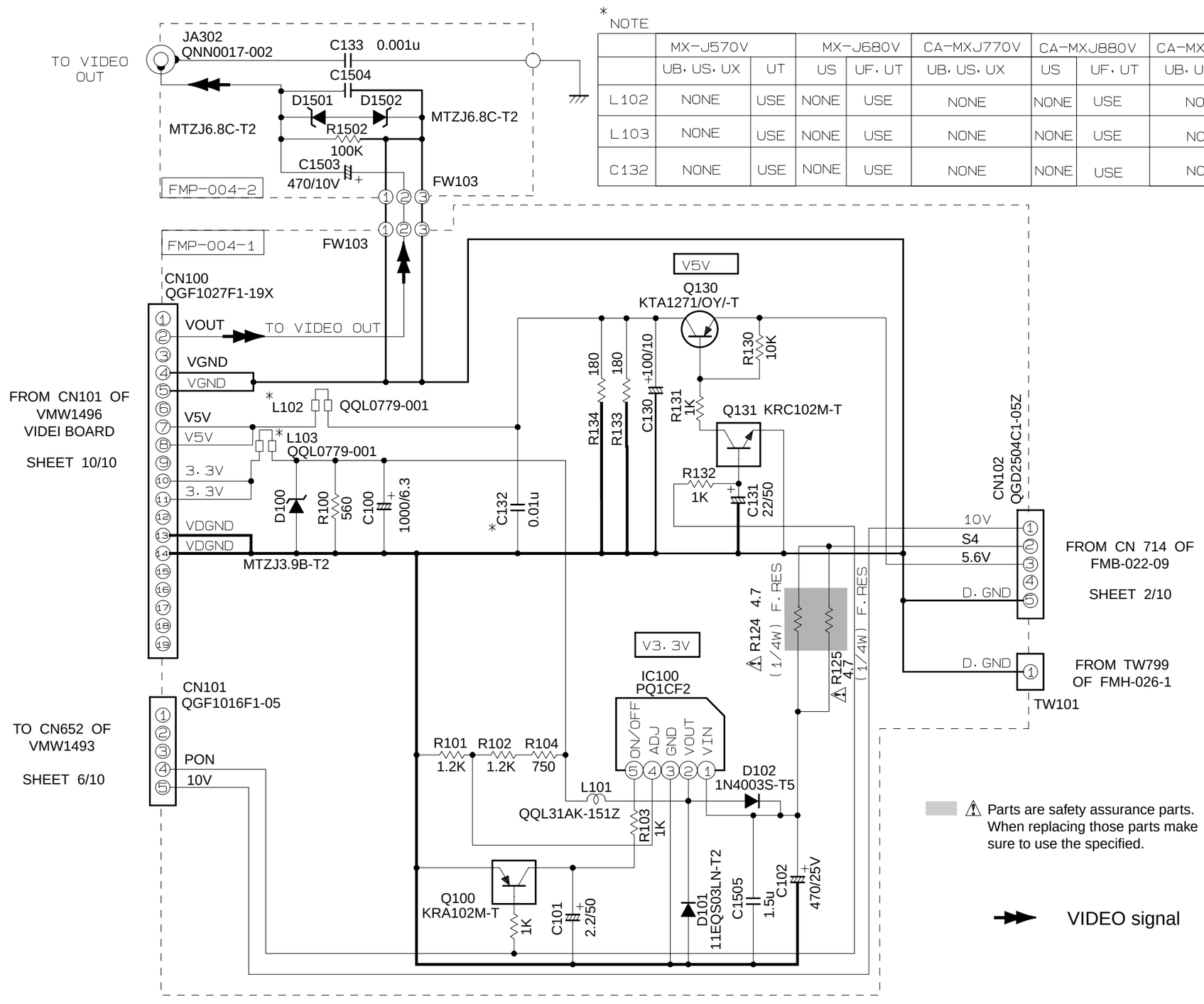
Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz NO SIGNAL	0	7.1	0.85	8.9	8.8	0			
AM 522KHz NO SIGNAL	0	0	0	9.0	0	8.9			
Tr NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

	VERSION		
	J/C	Useries	DOM UX MODEL ONLY
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

⇨ FM / TUNER signal
➡ AM signal

SHEET 8/10

■ Video CD regulator section

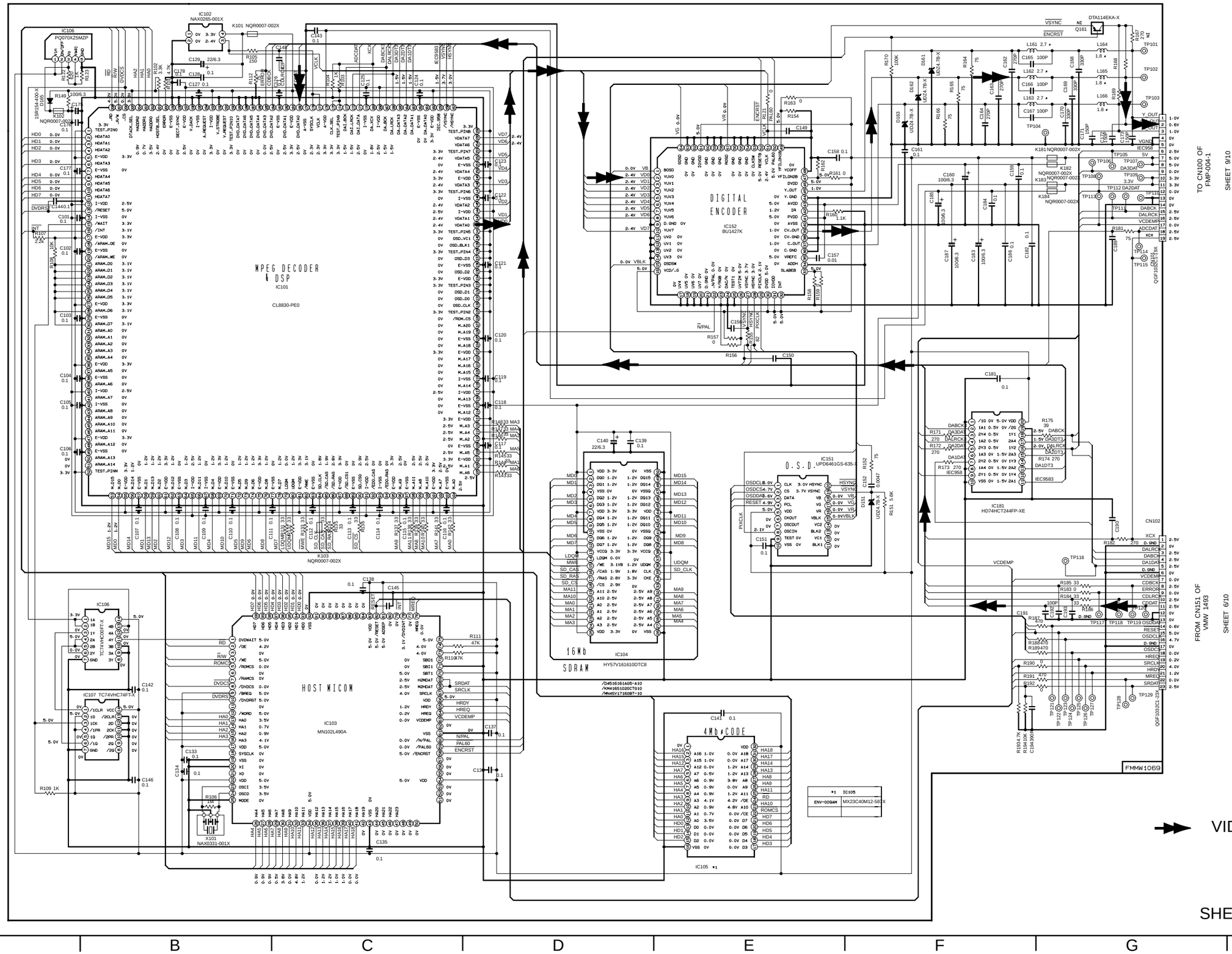


* NOTE

	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
L102	NONE	USE	NONE	USE	NONE	NONE	USE	NONE	NONE	USE
L103	NONE	USE	NONE	USE	NONE	NONE	USE	NONE	NONE	USE
C132	NONE	USE	NONE	USE	NONE	NONE	USE	NONE	NONE	USE

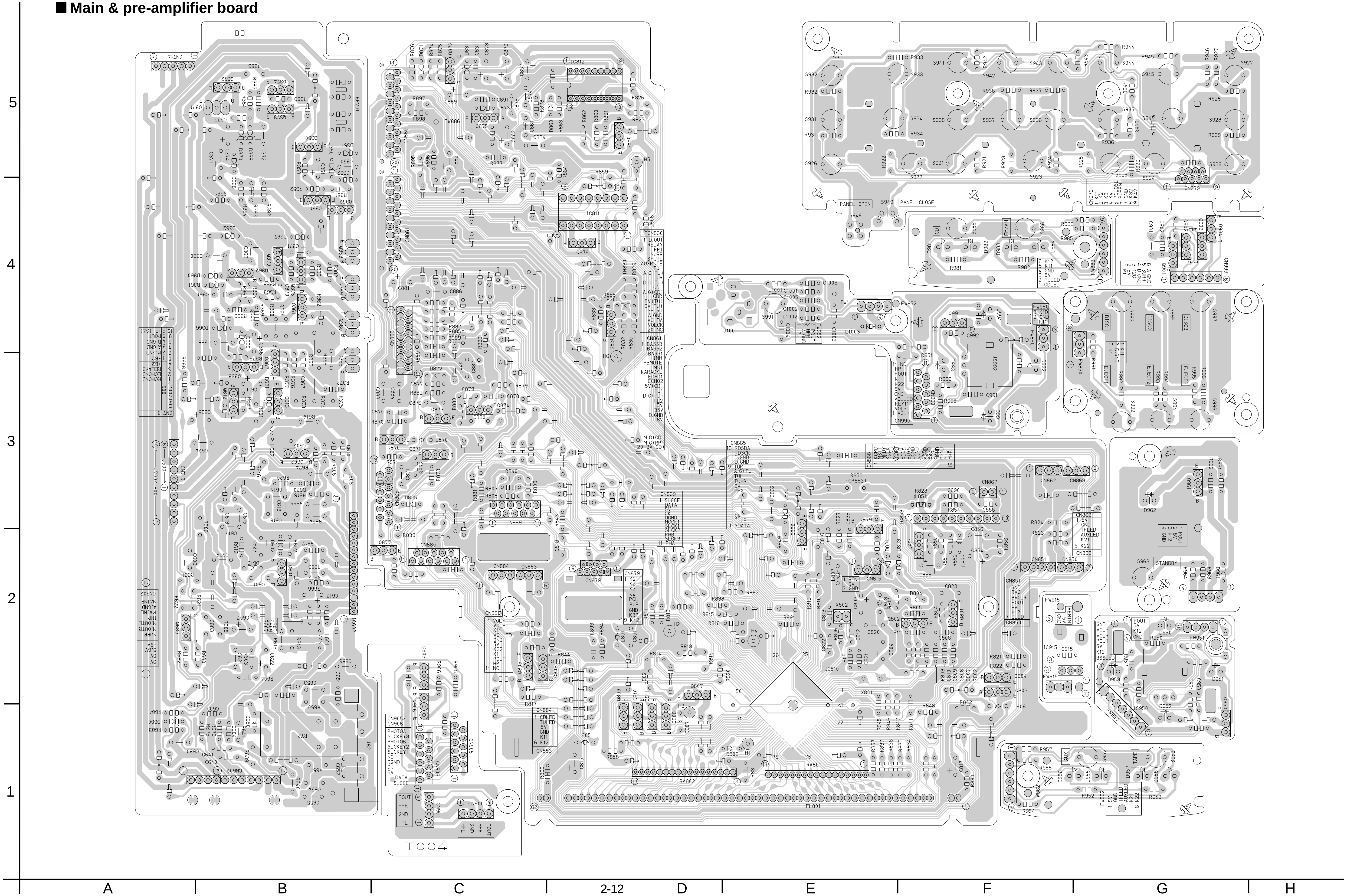
SHEET 9/10

■ Super VCD control section

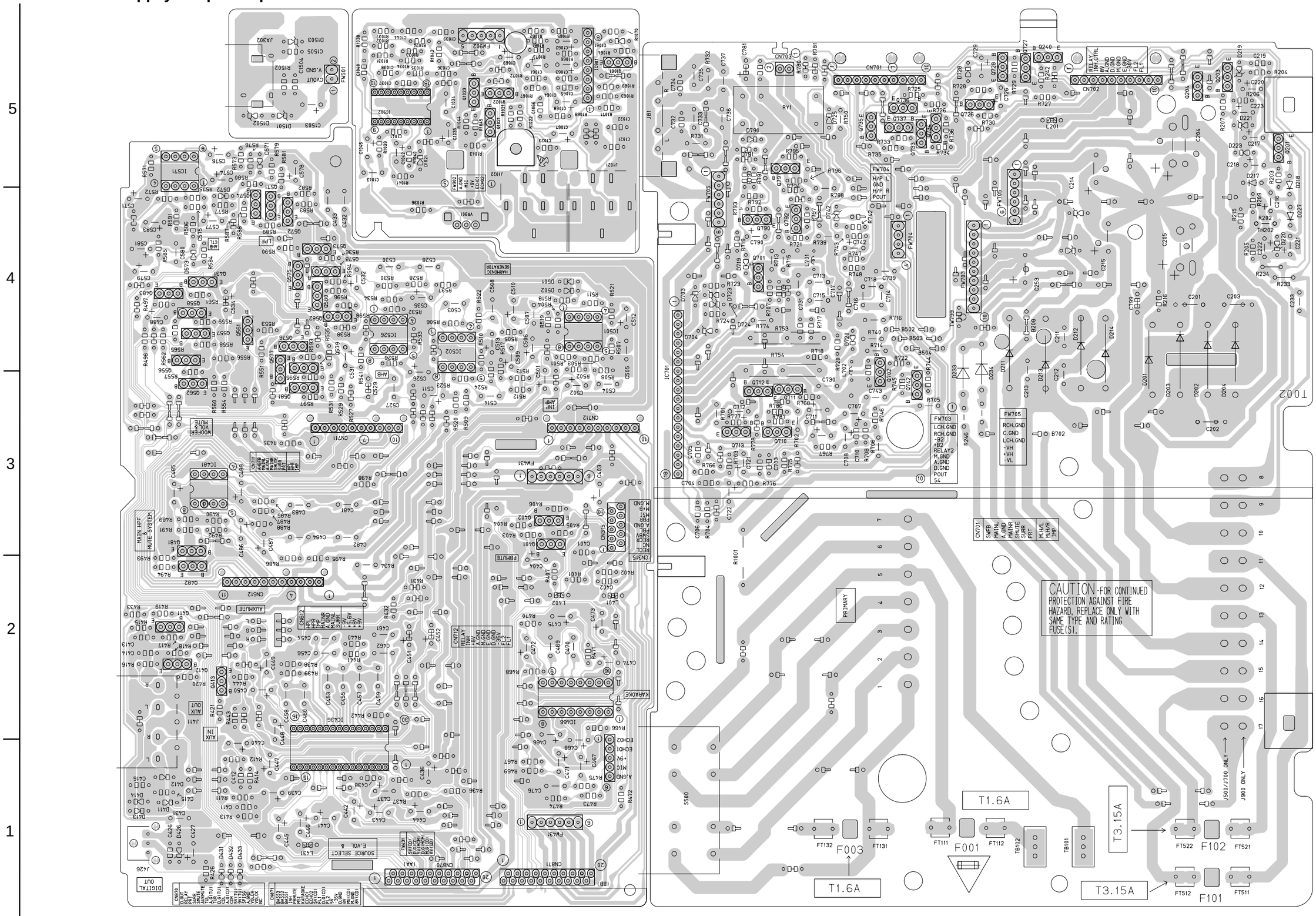


Printed circuit boards

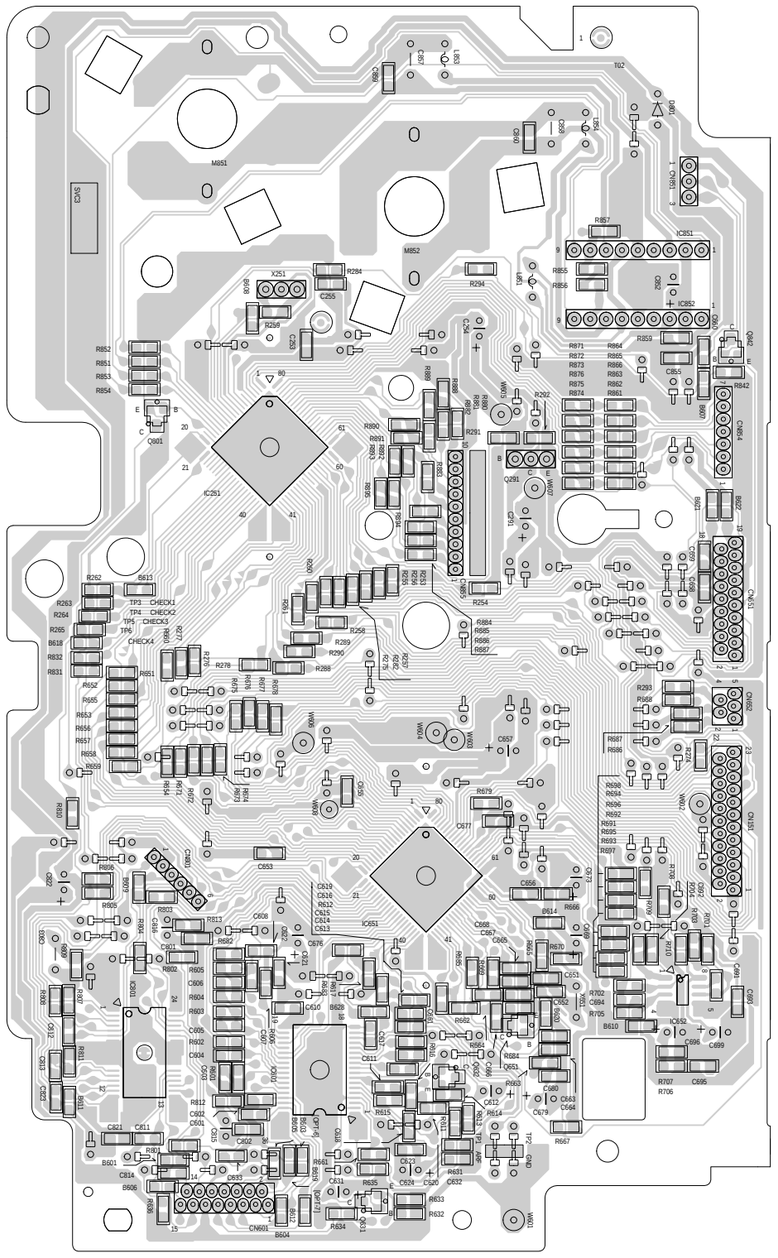
■ Main & pre-amplifier board



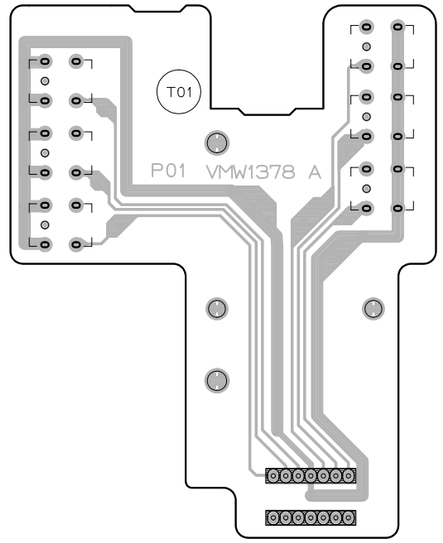
■ Power supplly & input/output board



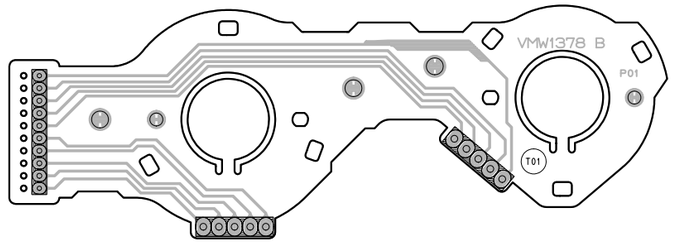
■ CD servo control board



■ CD select switch board

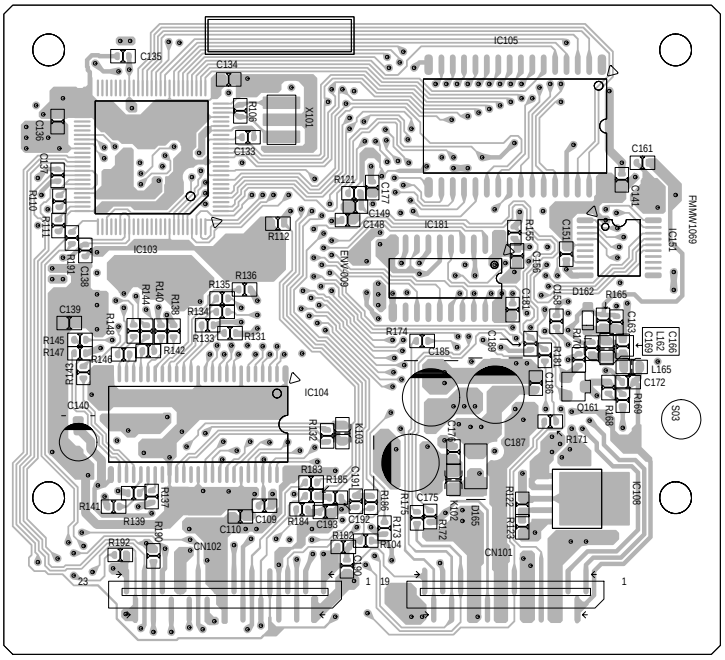


■ Cam switch board

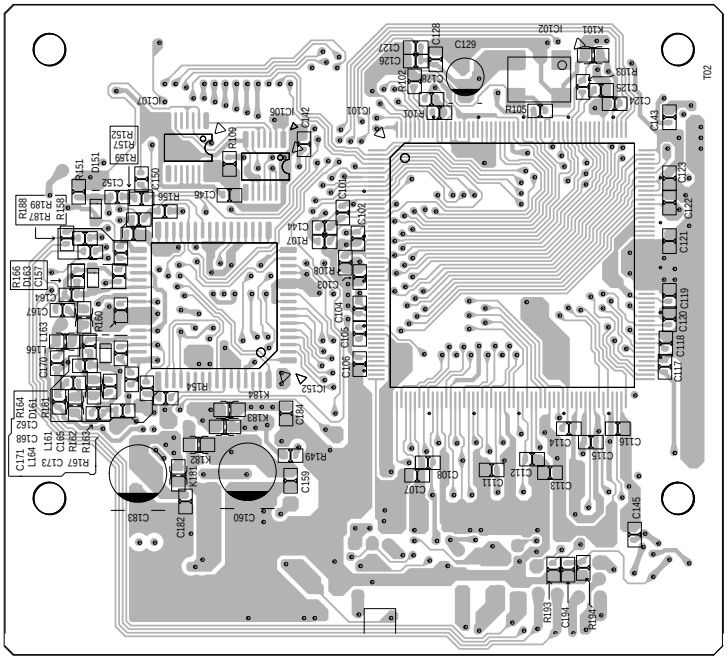


■ Video CD board

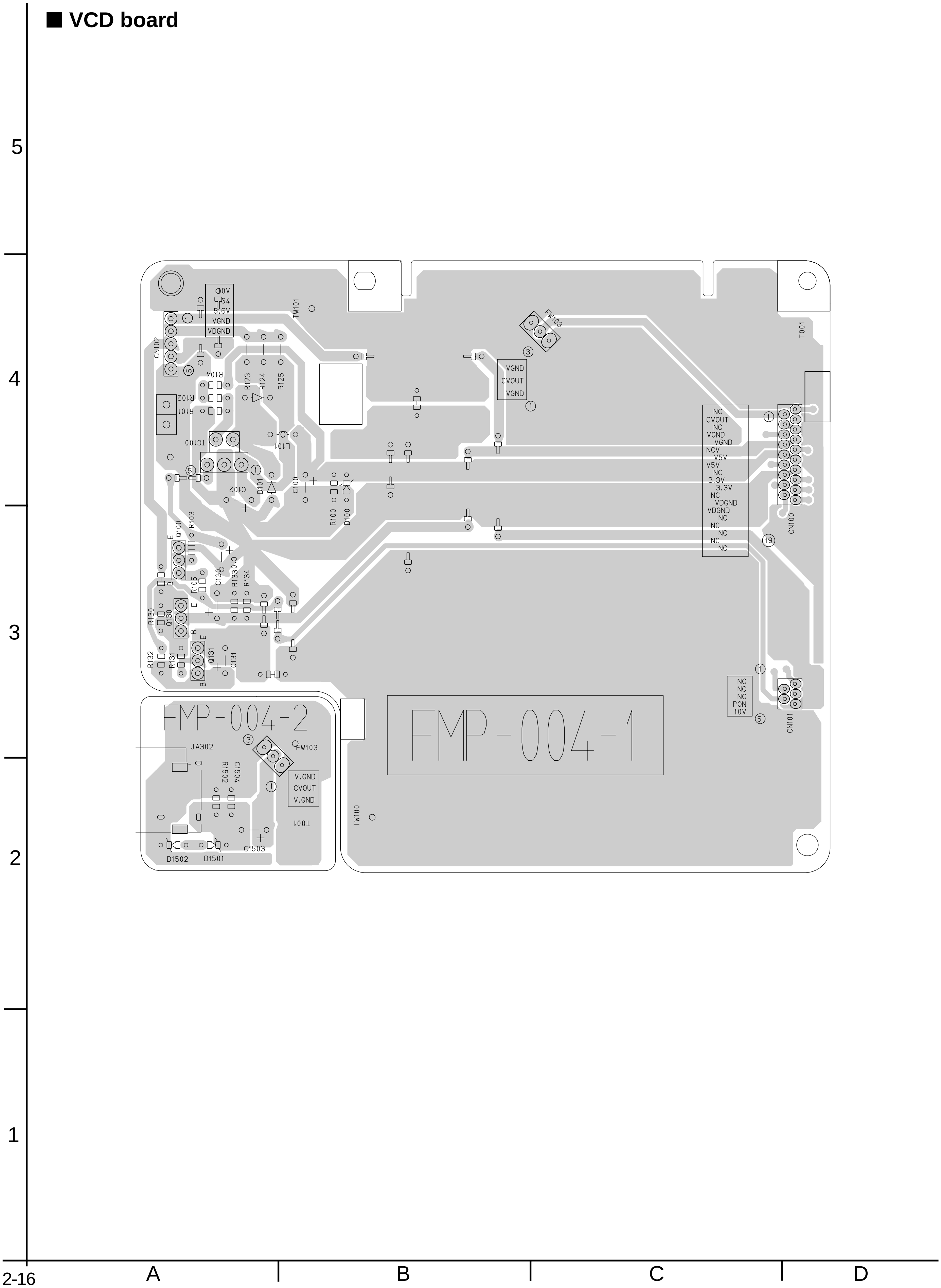
(Forward side)



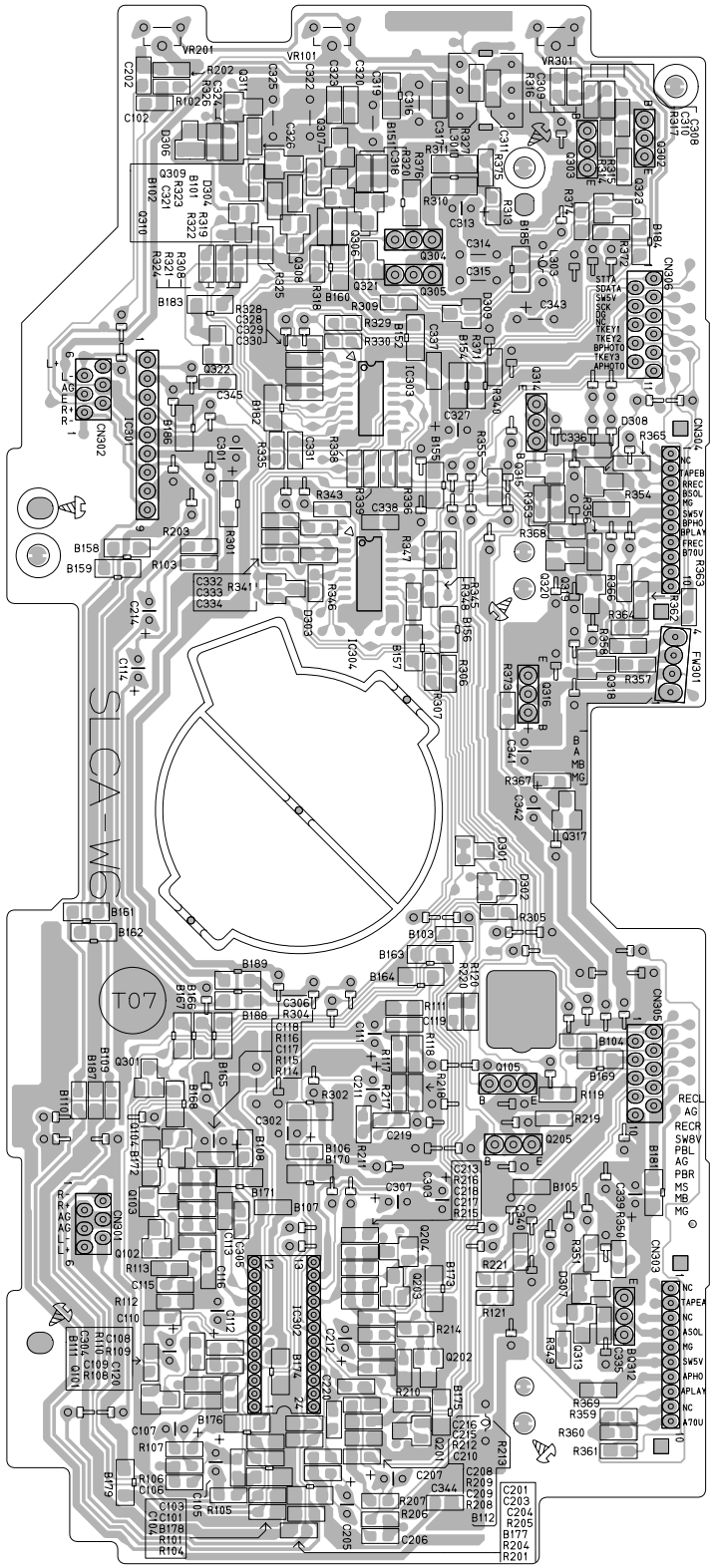
(Reverse side)



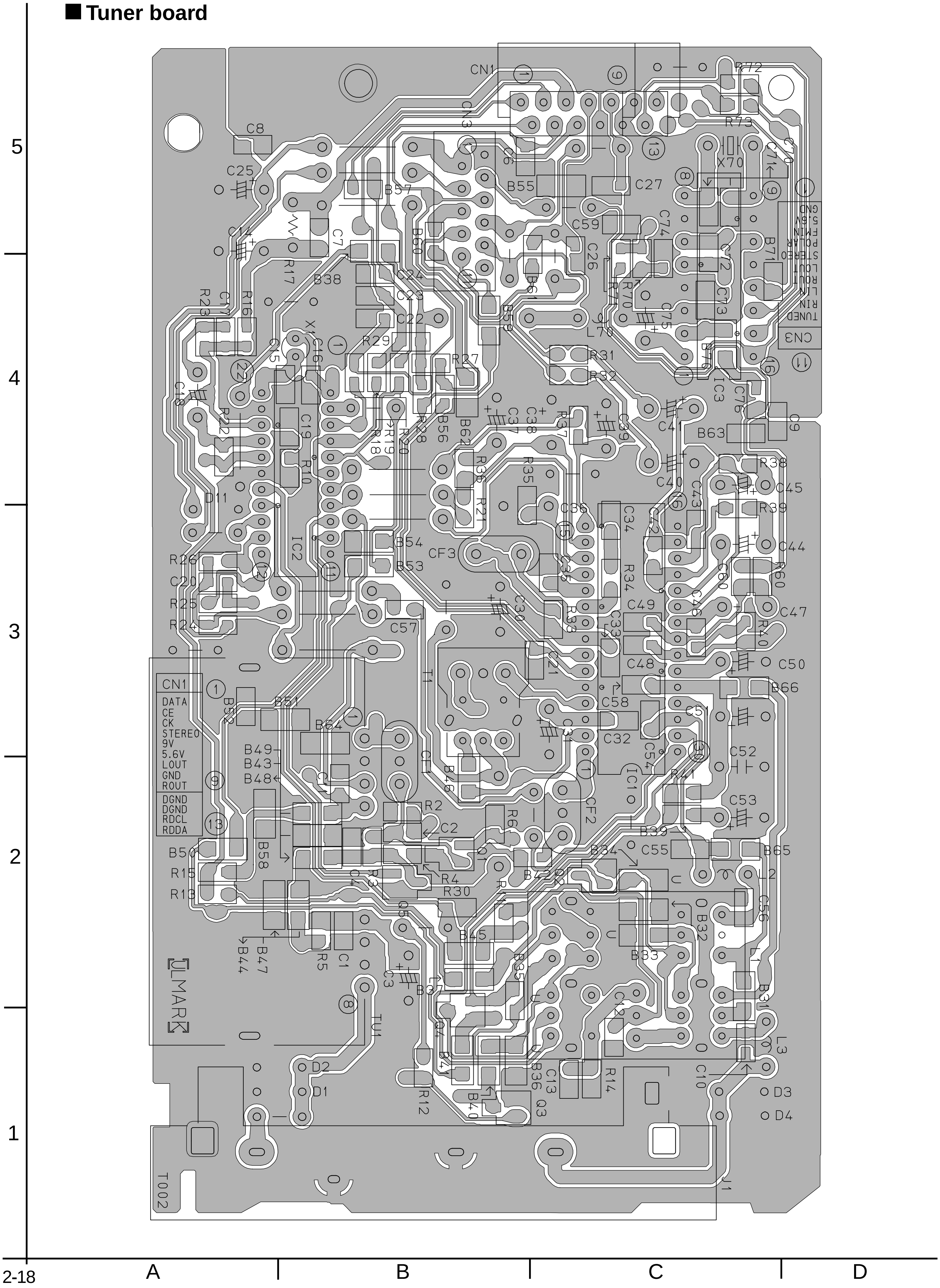
■ VCD board


FMP-004-1
FMP-004-2
CN102
CN100
CN101
IC100
FW103
JA302
TW100
TW101
T001
C1503
D1501
D1502
NC
CVOUT
VGND
V5V
3.3V
VDGND
PON
10V

■ Head amplifier board



■ Tuner board


CN1
DATA
CE
CK
STEREO
9V
5.6V
LOUT
GND
ROUT
DGND
DGND
RDCL
RDDA
CN3
GND
5.6V
FMIN
POLAR
STEREO
LOUT
ROUT
LIN
RIN
TUNED
T002
TU1
J1
A
B
C
D
1
2
3
4
5