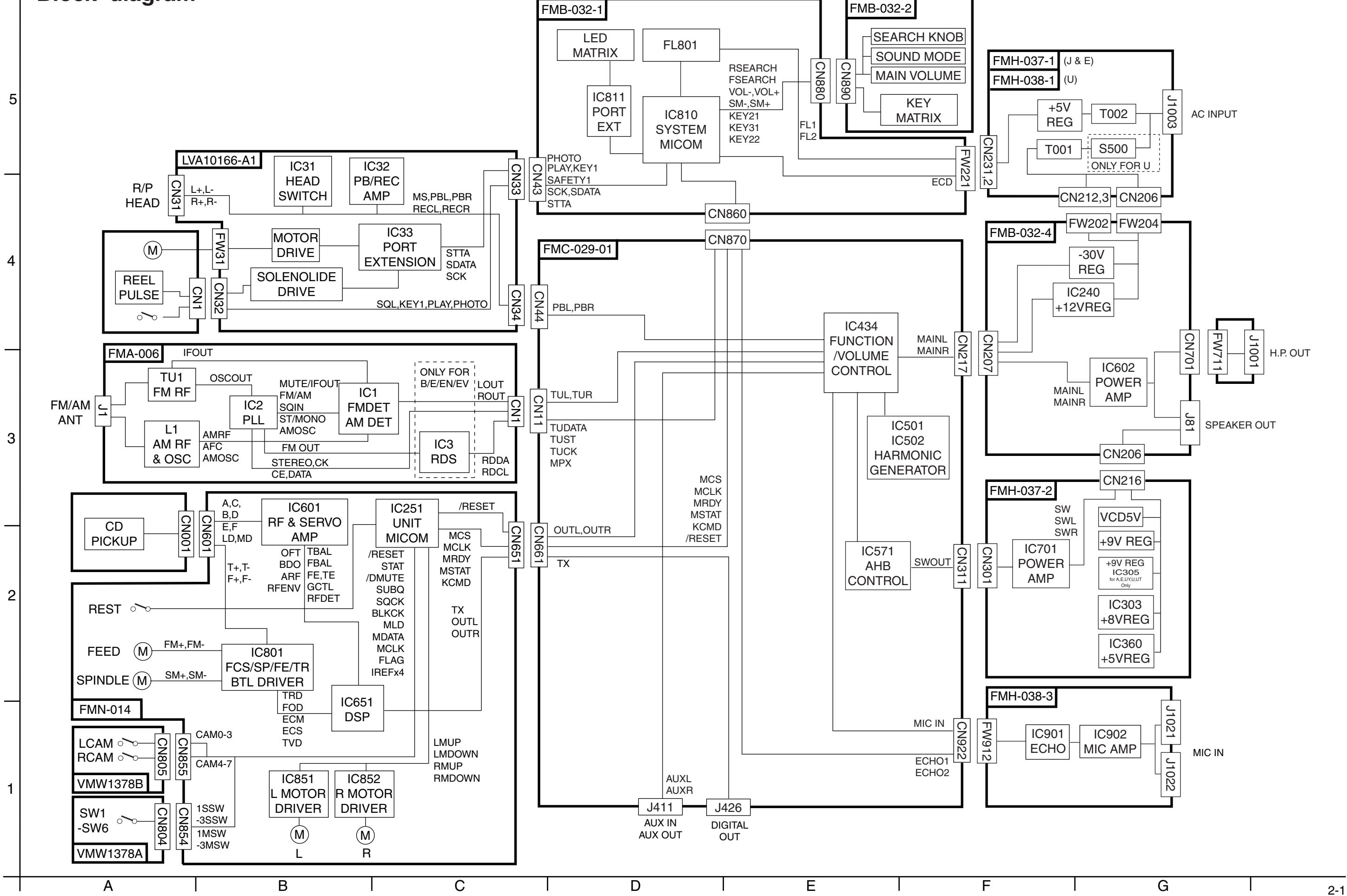


Block diagram



Standard schematic diagrams

■ Front circuit

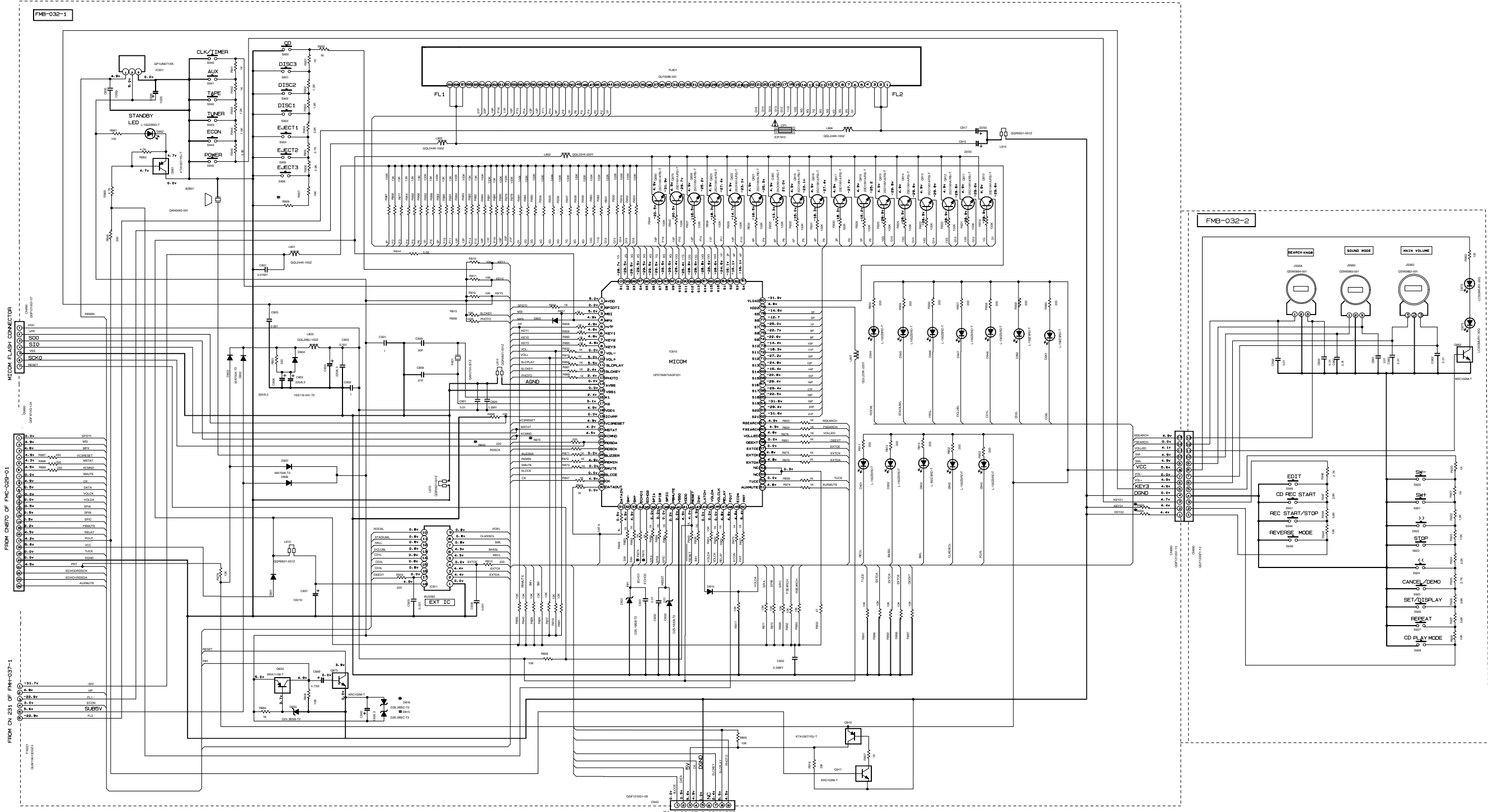
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4

3

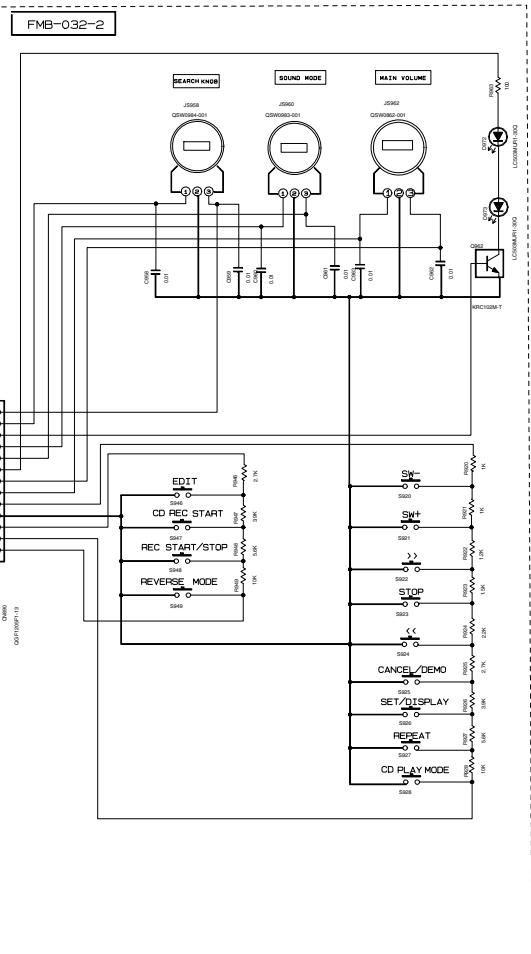
2

1



FROM CN801 OF FMB-032-01

FROM CN 231 OF FMB-037-1



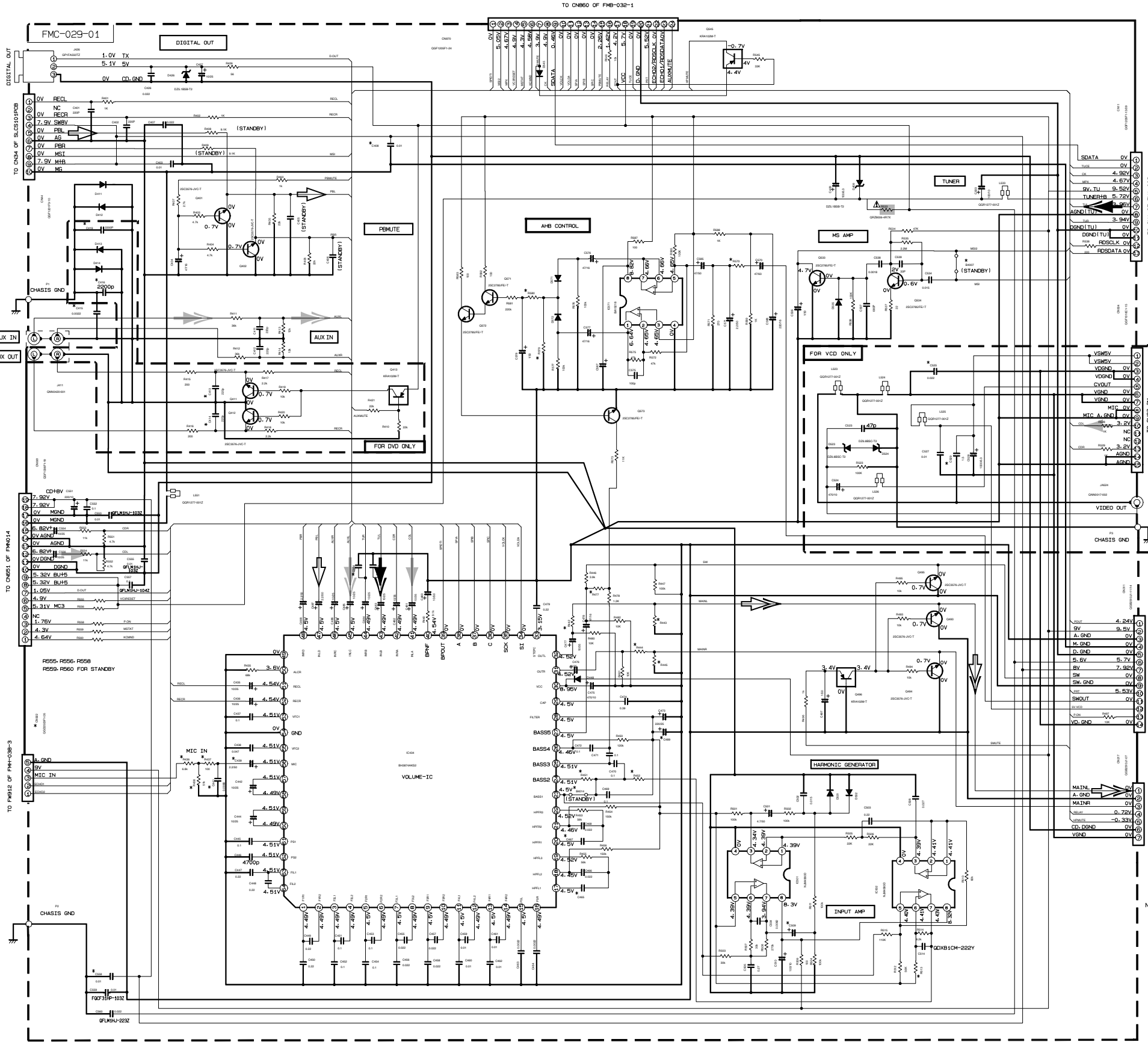
MARK	HXZ-1					HXZ-3				
	B-E-EN-EV	A	J-C	U-U-U-UT-UN	UY	B-E-EN-EV	A	J-C	U-U-U-UT-UN	UY
R809	330K	330K	330K	330K	330K	75K	75K	75K	75K	75K
R829	75K	330K	330K	330K	75K	75K	330K	330K	330K	75K
R850	330K	18K	330K	75K	330K	330K	18K	330K	75K	330K
R874-R875	USE	NONE	NONE	NONE	USE	USE	NONE	NONE	NONE	NONE
D815-D816	DZ6.2BSC-T2	DZ6.2BSC-T2	NONE	NONE	USE	NONE	NONE	NONE	USE	USE

NOTE: FOR VCD MODEL C840 CHANGE TO 100/10 AND REPLACE B8150 BY 68 OHM RESISTOR

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

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 nF (nF).  
ALL INDUCTANCE VALUES ARE IN mH (mH).  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).  
ALL DIODES ARE 1SS119-041-T2.  
ALL TACT SWITCH ARE G806074-0012.

■ Main circuit



MODEL	HX-Z1 & HX-Z3				
VERSION	J/C	B/E EN/VE	A	UT/UW U/UJ	UY
C408	NONE	FGCF31H-103Z			NONE
C568	NONE	FGCF31H-103Z			NONE
C563	NONE	QDYB1CM-103Y			NONE
C564	NONE	QDYB1CM-103Y			NONE
R477	GRE141J-123Y	GRE141J-123Y			GRE141J-682Y
R538	NONE	GRE141J-221Y	NONE		NONE
CN922	NONE	NONE		GRD2503F1-05	NONE
CN870	QGF1205F1-21	QGF1205F1-23	QGF1205F1-21	QGF1205F1-21	QGF1205F1-21
CN11	QGF1205F1-09	QGF1205F1-13	QGF1205F1-09	QGF1205F1-09	QGF1205F1-09
R436	NONE	NONE		GRE141J-682Y	NONE
R437	NONE	NONE		GRE141J-101Y	NONE
R438	NONE	NONE		GRE141J-513Y	NONE
C439	NONE	NONE		QETN1HM-282Z	NONE
C441	NONE	NONE		QFLM1HJ-682Z	NONE

MODEL	HX-Z1		HX-Z3	
VERSION	J/C/A/B/E/EN UT/UW/UJ/UJ		J/C/A/B/E/EN UT/UW/UJ/UJ	
R442	GRE141J-682Y		GRE141J-472Y	
R443	GRE141J-243Y		GRE141J-103Y	
R444	GRE141J-682Y		GRE141J-472Y	
R445	GRE141J-243Y		GRE141J-103Y	
R451	GRE141J-183Y		GRE141J-103Y	
R452	GRE141J-682Y		GRE141J-622Y	
R513	GRE141J-103Y		GRE141J-622Y	
R570	GRE141J-562Y		GRE141J-622Y	
R579	GRE141J-154Y		GRE141J-224Y	
R580	GRE141J-682Y		GRE141J-223Y	
C465	QGF32AJ-223Z		QF20160-223Z	
C467	QGF32AJ-223Z		QF20160-223Z	
C469			QTE1C06-476Z	
C509	QETN1HM-475Z		QETN1CM-106Z	

	REFERENCE NUMBER POSITION
TAPE	401 - 409
AUX IN	410 - 421
DIGITAL OUT	426 - 427
VOLUME IC	434 - 499
SUPPLY	493 - 497
HARMONIC GENERATOR	501 - 515
VCD	523 - 529
TUNER	533 - 539
TO FMB	545 - 548
VIDEO	551 - 560
AHB CONTROL	570 - 588

- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
CONDITION - AUX MODE - VOL. MIN - SUBWOOFER VOL. 1.
  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 PICO (pF).  
ALL INDUCTANCE VALUES ARE IN MILLI (mH).  
ALL C. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (pF)/RATED VOLTAGE (V).  
ALL DIODES ARE 1SS119-041-12.

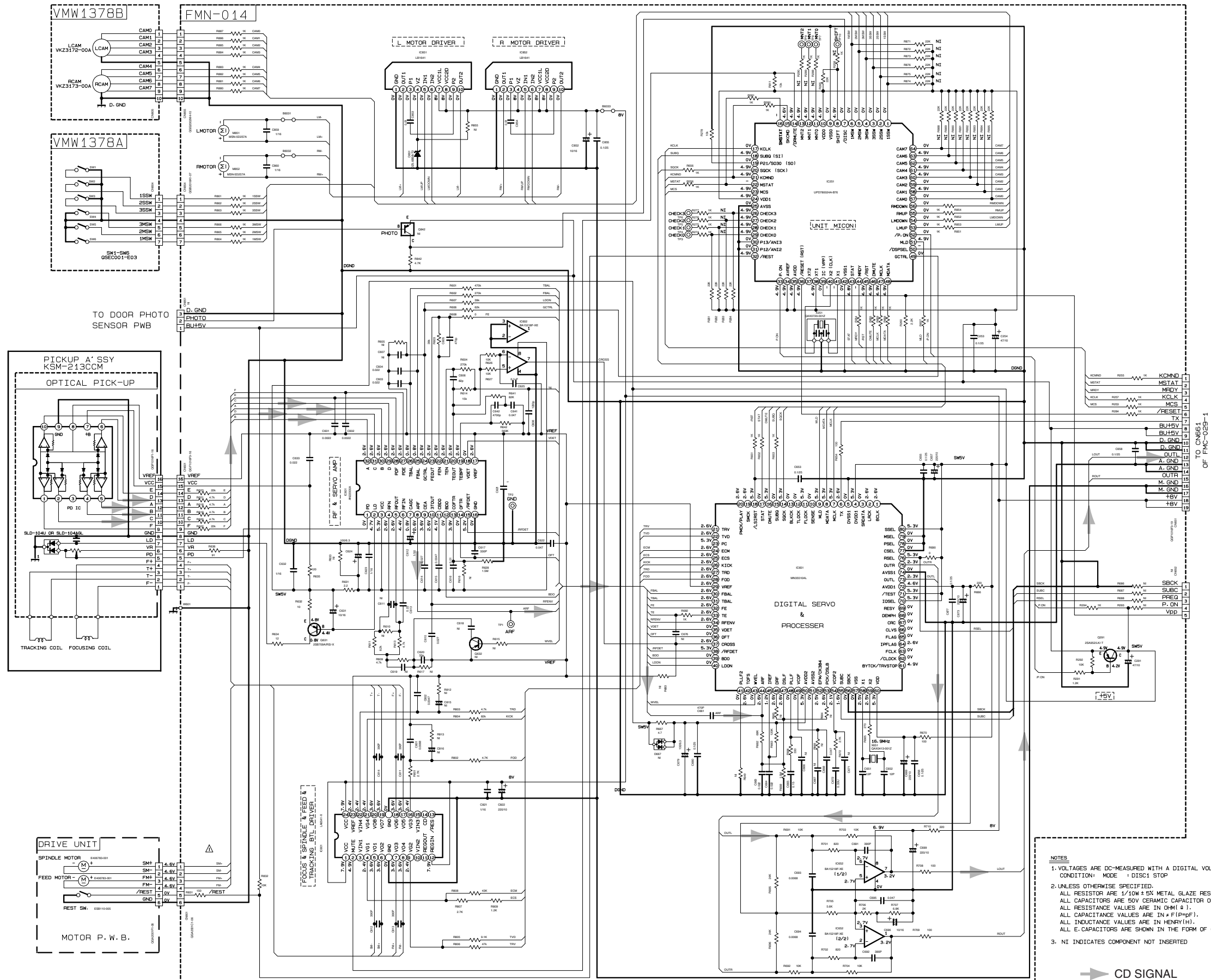
- ➡ CD SIGNAL
- ➡ AUX SIGNAL
- ➡ MAIN SIGNAL
- ➡ TAPE P. B. SIGNAL
- ➡ FM/TUNER SIGNAL

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

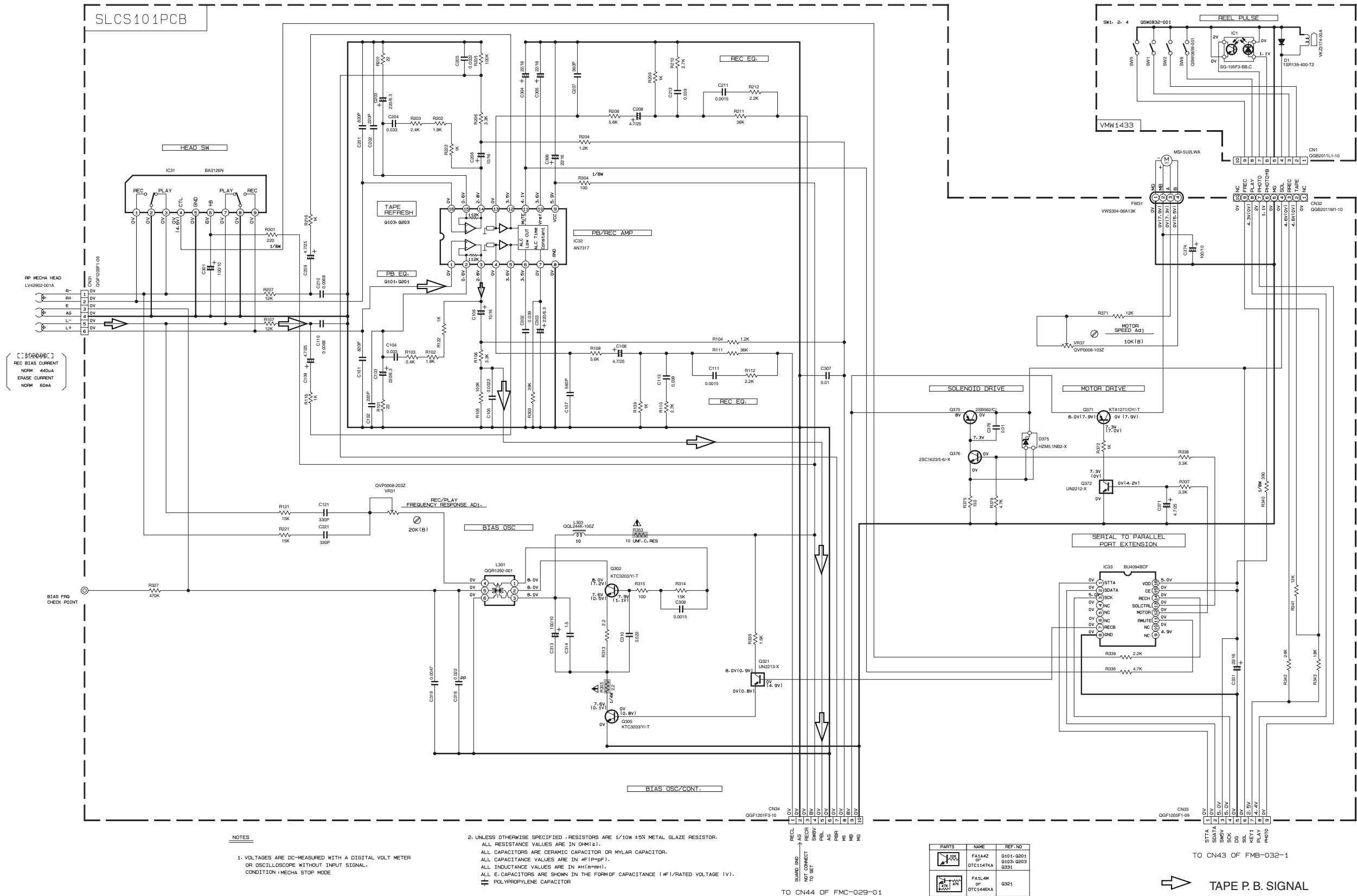




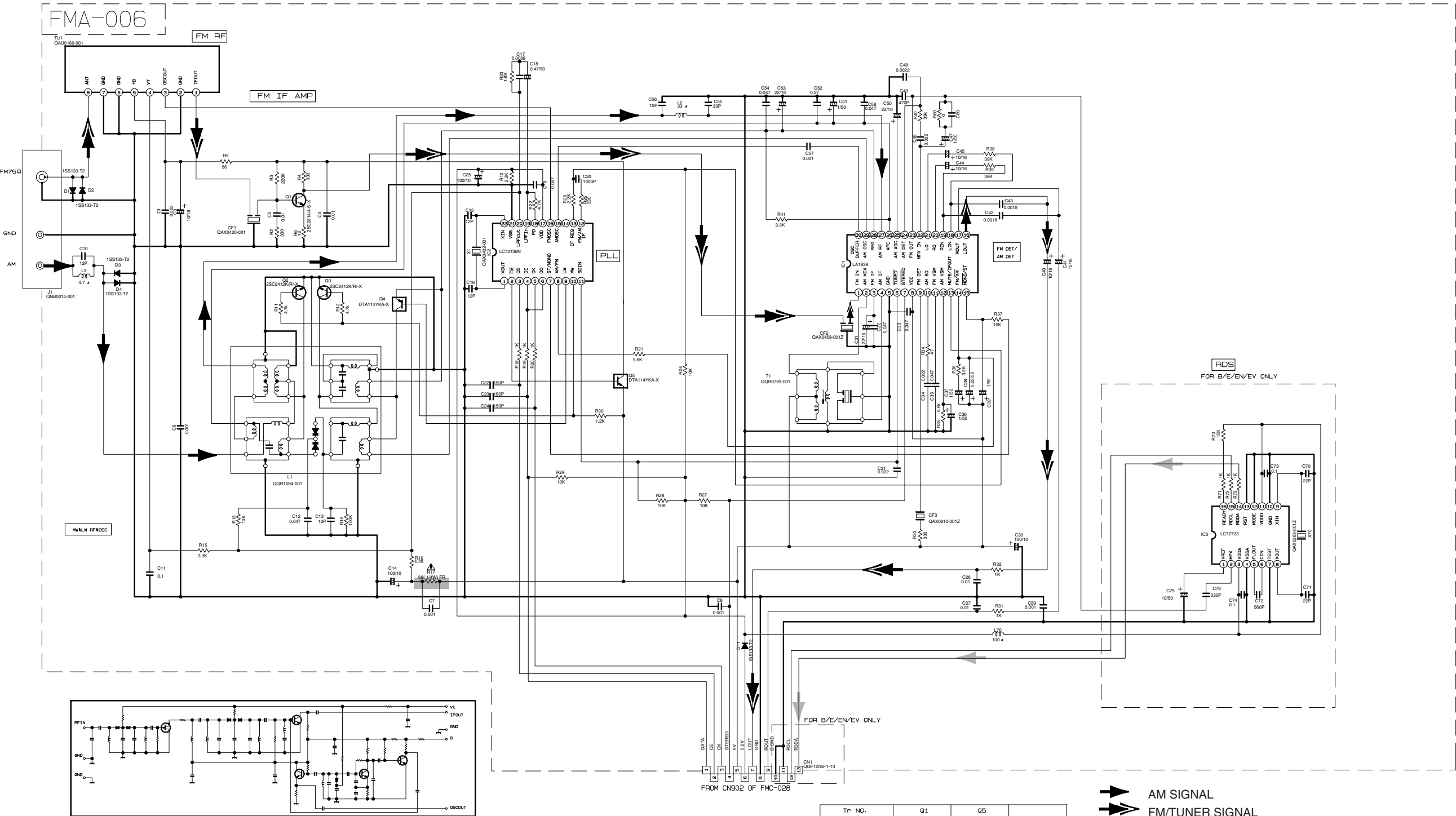
# ■ CD control circuit



Cassette amplifier circuit



Tuner circuit



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
FM NO SIGNAL	IC1	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	IC1	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	IC2	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
FM NO SIGNAL	IC2	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 52KHz 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 52KHz 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

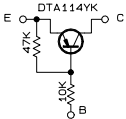
➔ AM SIGNAL  
➔ FM/TUNER SIGNAL  
➔ RDS SIGNAL

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

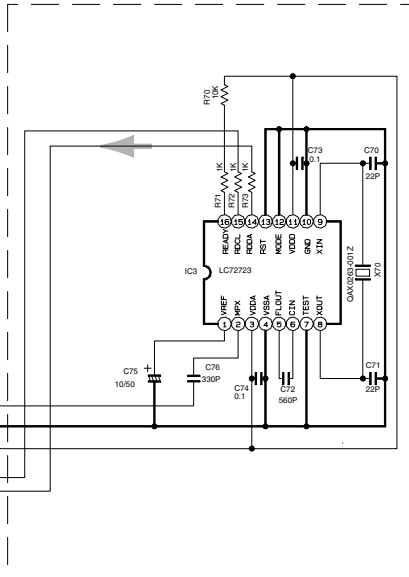
NOTES

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 CAPACITANCE VALUES ARE IN nF(pF).
5. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (nF)/RATED VOLTAGE (V).
6. SI DIODES (D) 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.



RDS  
FOR B/E/EN/EV ONLY



※ MARK	L1001, L1002	C1001, C1002	L1003
B, E, EN, EV	QQL231K-470Y	3900P	QQR1277-001Z
A	QQL231K-470Y	3900P	QQR1277-001Z
J, C	SHORT	NONE	QQL231K-2R2Y
U, UJ, UT, UW	SHORT	NONE	QQL231K-2R2Y
UY	SHORT	NONE	QQL231K-2R2Y

※ MARK	L1001・L1002	C1001・C1002	L1003
B・E・EN・EV	QQL231K-470Y	3900P	QQR1277-001Z
A	QQL231K-470Y	3900P	QQL231K-2R2Y
J・C	SHORT	NONE	QQL231K-2R2Y
U・UJ・UT・UW	SHORT	NONE	QQL231K-2R2Y
UY	SHORT	3900P	QQL231K-2R2Y

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

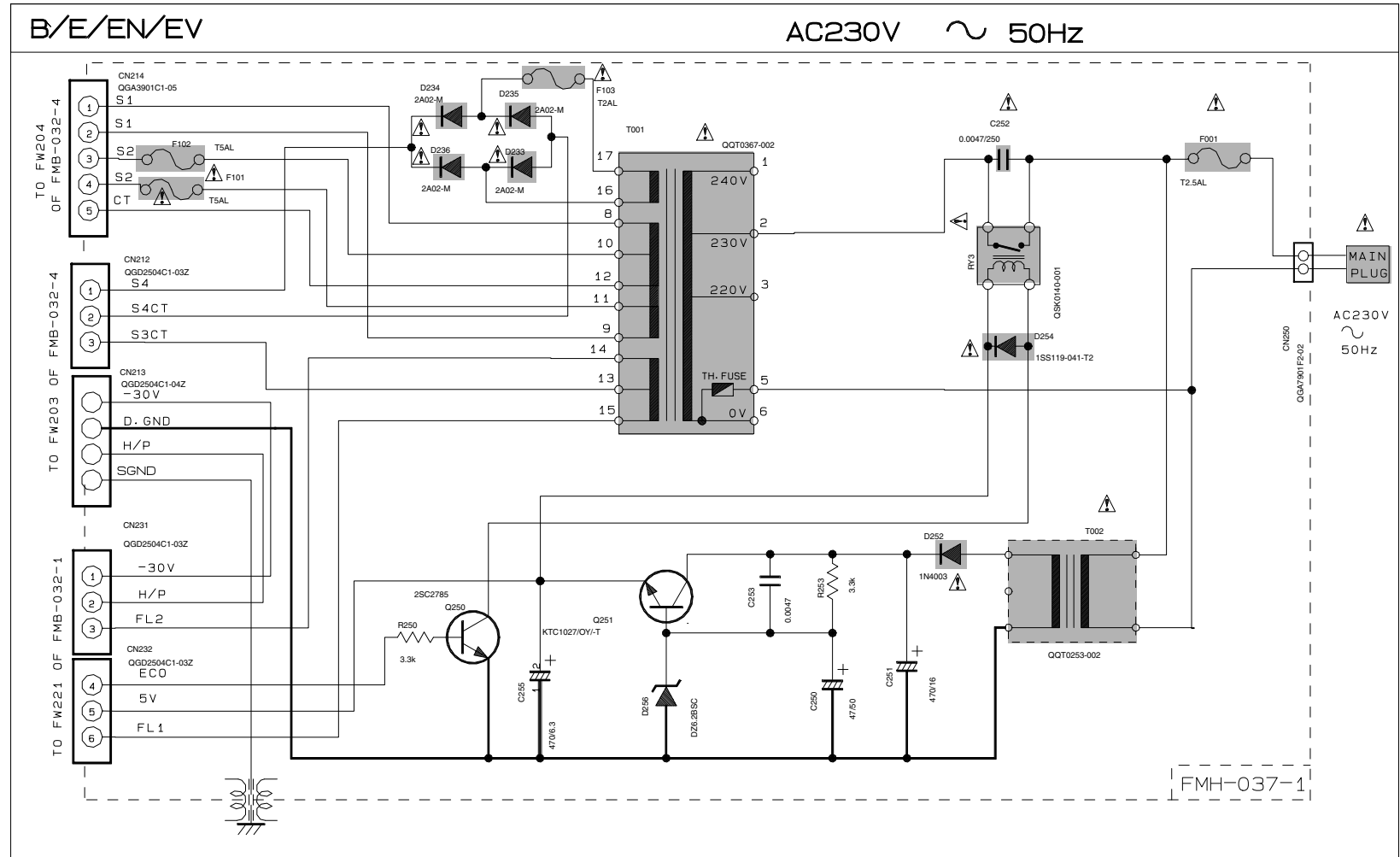
2. UNLESS OTHERWISE SPECIFIED

RESISTORS ARE 1/4W + 5% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN OHM( $\Omega$ ).  
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN PF(P=pF).  
ALL INDUCTANCE VALUES ARE IN MH(m=mH).  
ALL E. CAPACITORS ARE SHOWN IN THE FORM  
OF CAPACITANCE ( F )/RATED VOLTAGE (V).

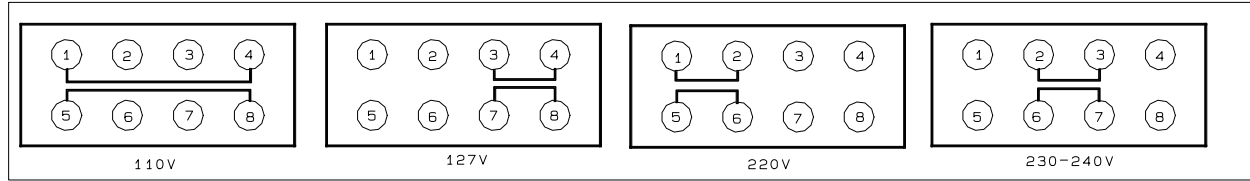


■ Power supply circuit

POWER SUPPLY BLOCK



VOLTAGE SELECTOR LOCATION



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

EXPLANATION OF OVERALL OF SCHEMA.

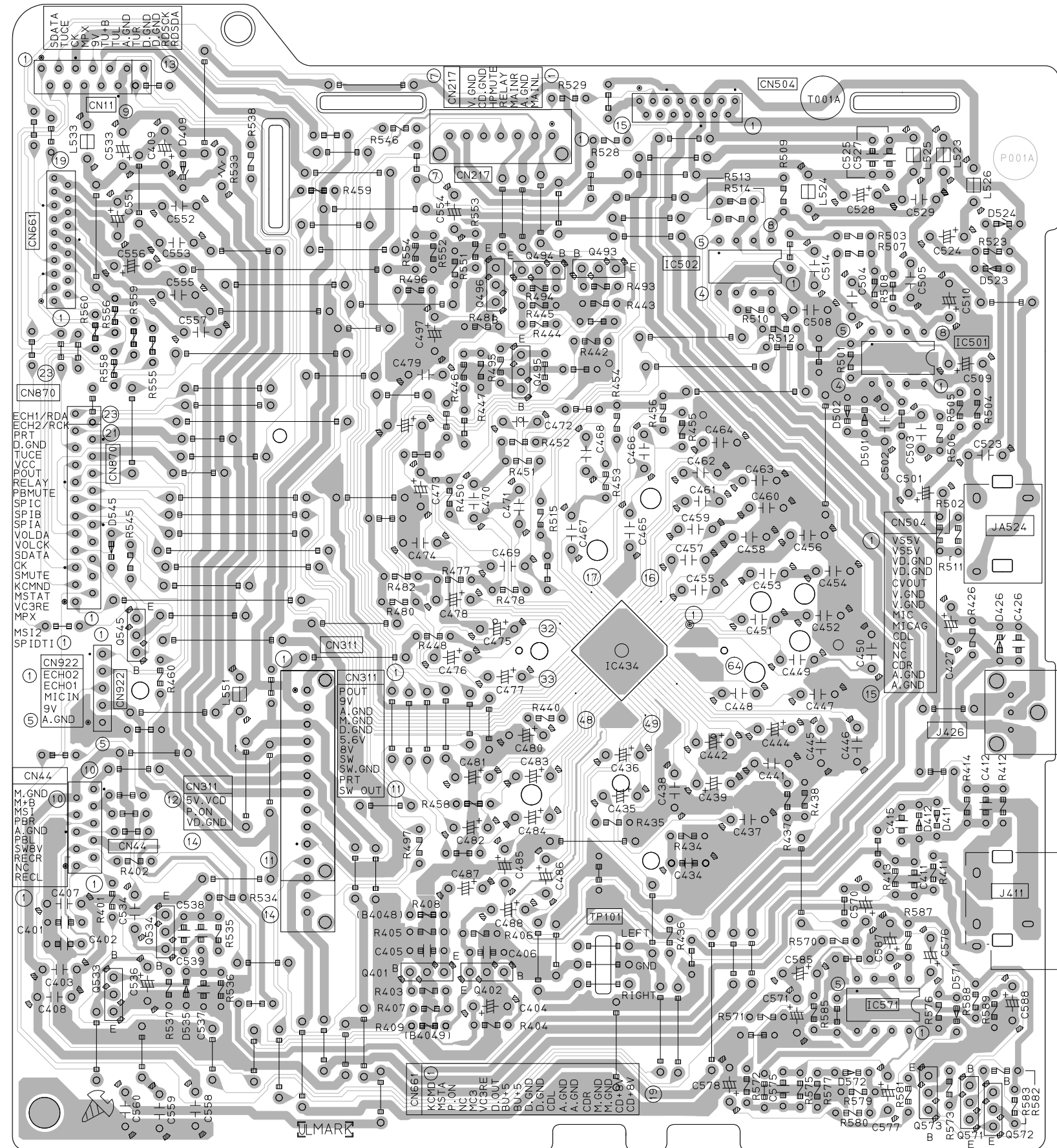
MODEL CA-HXZ1/CA-HXZ1R/HX-Z1/HX-Z1R

SHEET NUMBER	CIRCUITS DESCRIPTION
1/9	.PRIMARY WITH MAINS TRANSFORMER
2/9	.DC REGULATORS/AUDIO OUTPUT
3/9	.EXTERNAL INPUT, SOURCE SELECTOR SWITCH
4/9	.FL DISPLAY, SYSTEM CONTROL LSI, USER CONTROL KEYS
5/9	.MIC AMP, ECHO CIRCUIT ( ONLY FOR U,UJ,UT,UW )
6/9	.CD SERVO AND CD SYSTEM CONTROL .CD CHANGER MECHANISM CONTROL
7/9	.TAPE DECK MECHANISM CONTROL .TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
8/9	.TUNER RF/IF/FM MULTIPLEX ( ONLY FOR A,B,E,EN,EV )
9/9	.TUNER RF/IF/FM MULTIPLEX ( ONLY FOR C,J,U, UP, US, UT, UX, UY )

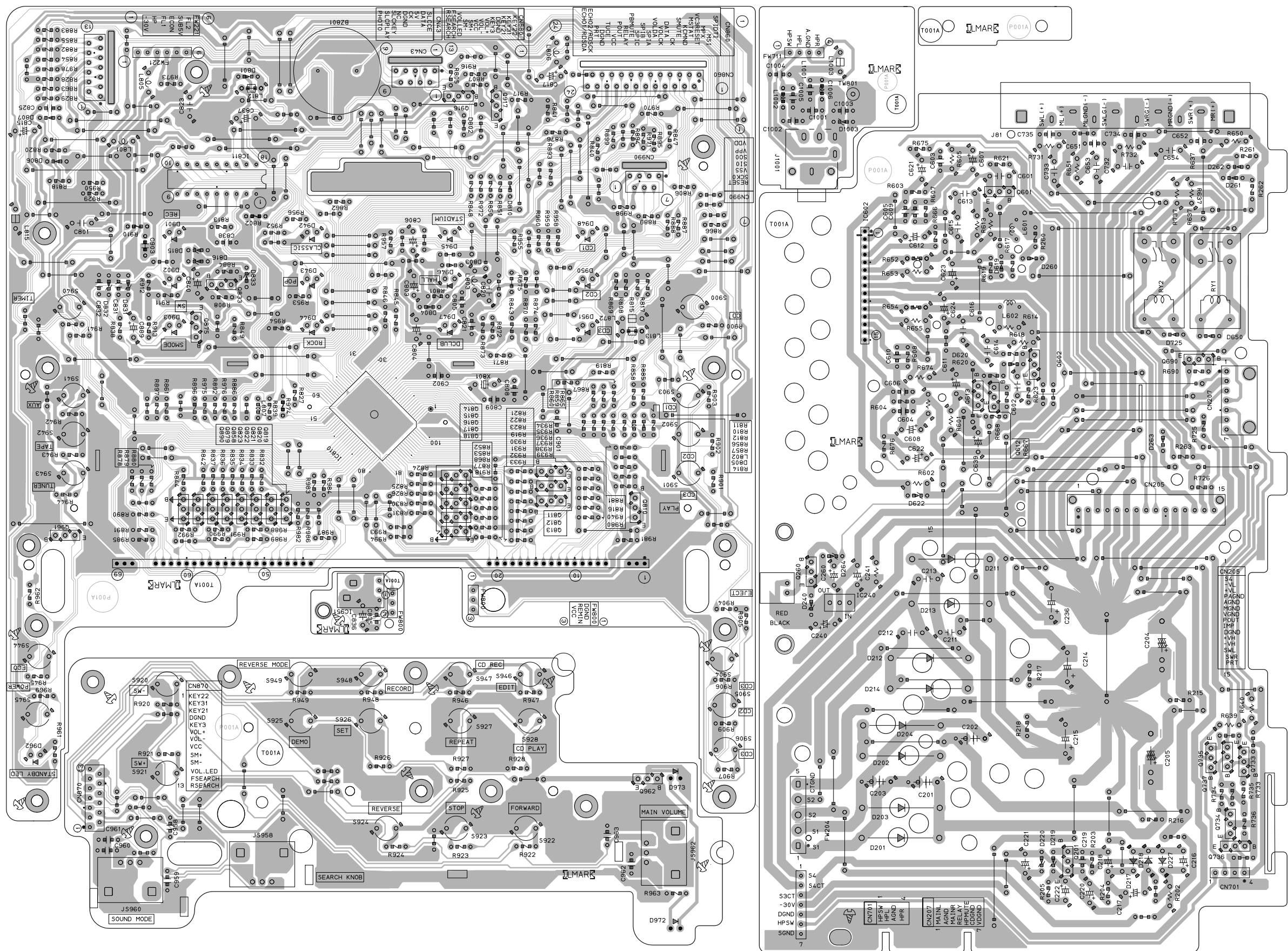
VERSION CODES

J :U. S. A.  
C :CANADA  
B :U. K.  
E :CONTINENTAL EUROPE  
EN :NORDIC COUNTRIES  
EV :EASTERN EUROPE & RUSSIA  
A :AUSTRALIA  
UJ :MILITARY  
UT :TAIWAN  
UY :ARGENTINA  
UW :SOUTH AMERICA EXCEPT ARGENTINA  
U : UNIVERSAL EXCEPT ALL OF ABOVE

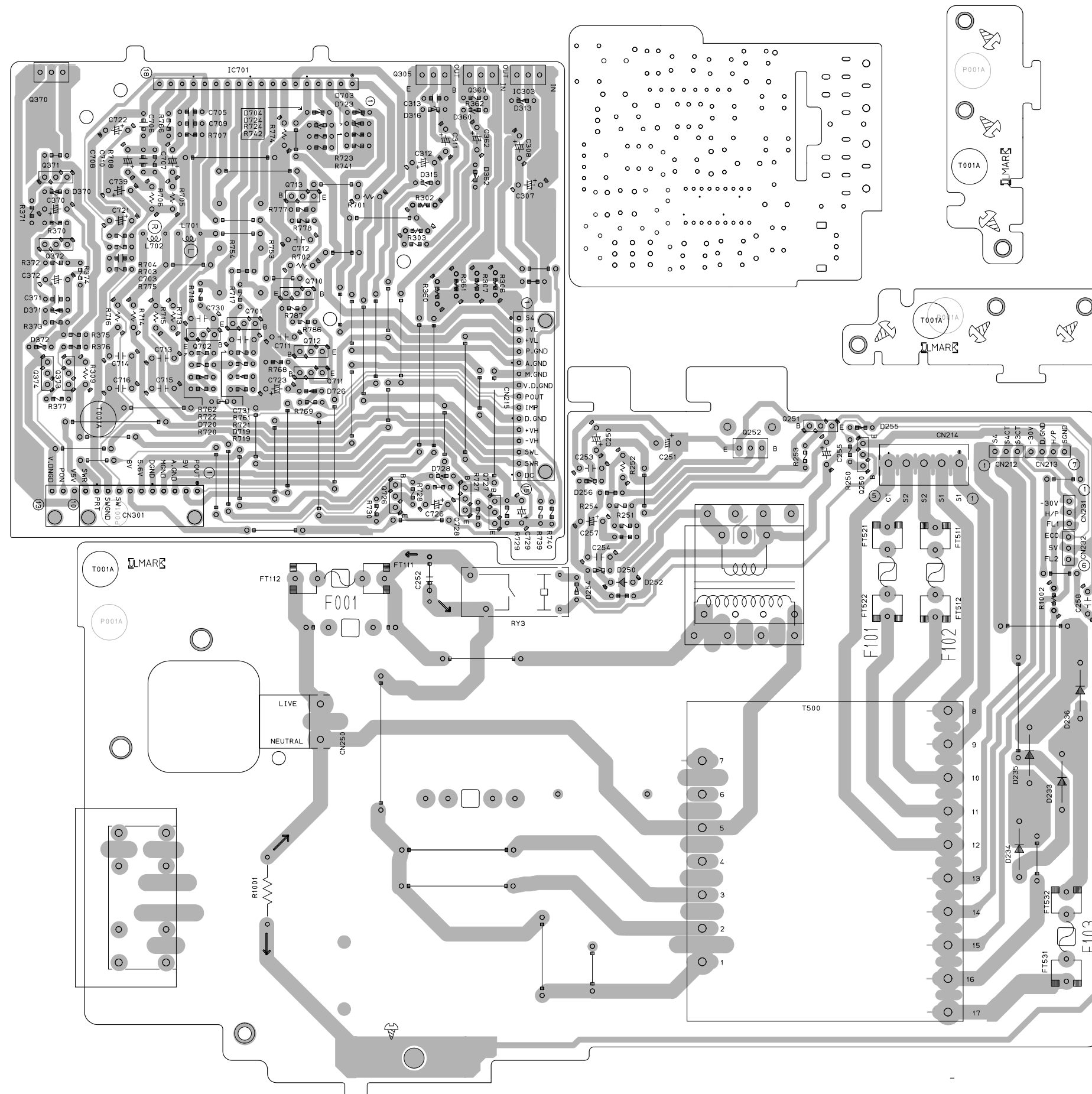
## ■ Main board



■ Front board

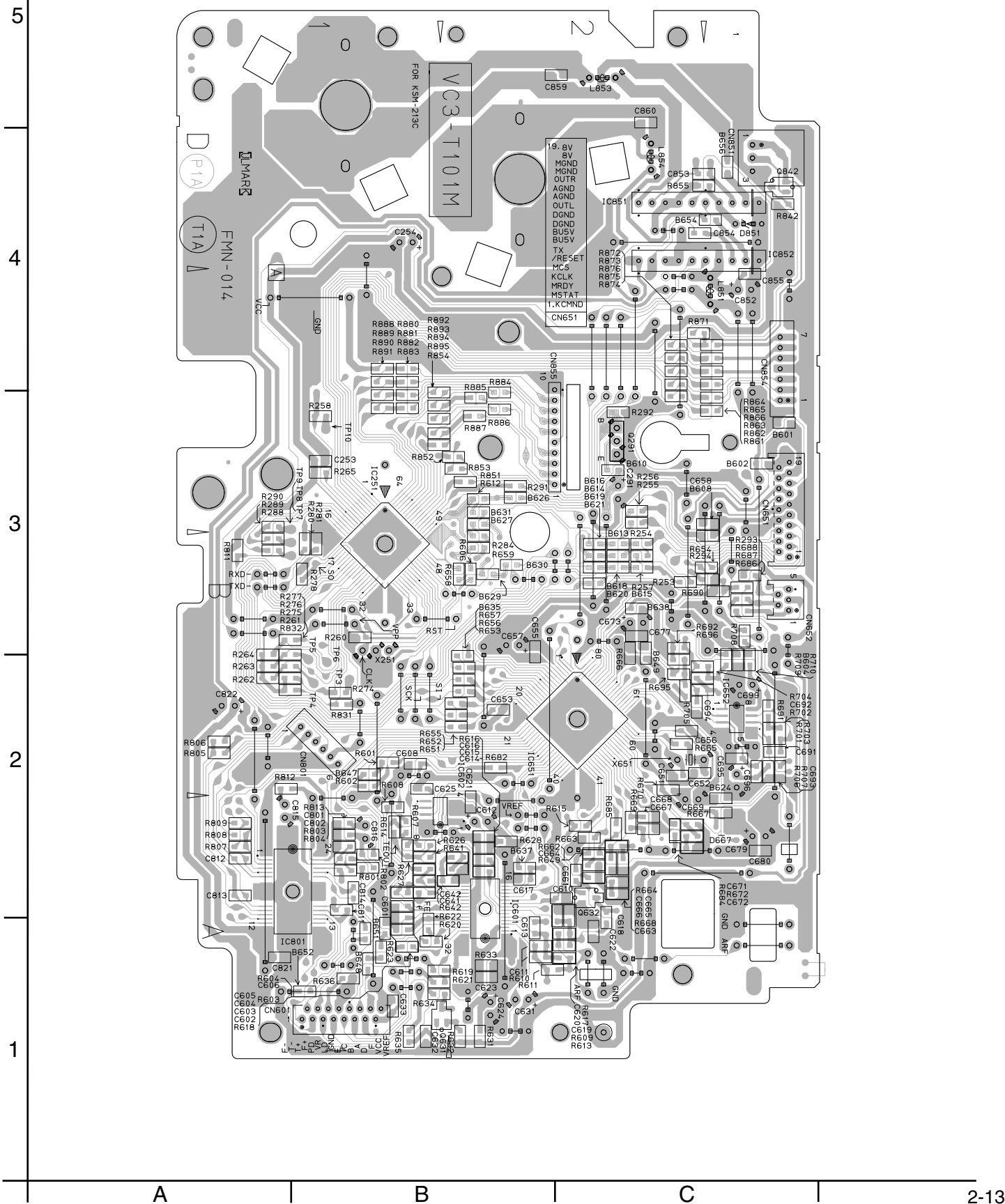


### ■ Power amplifier board



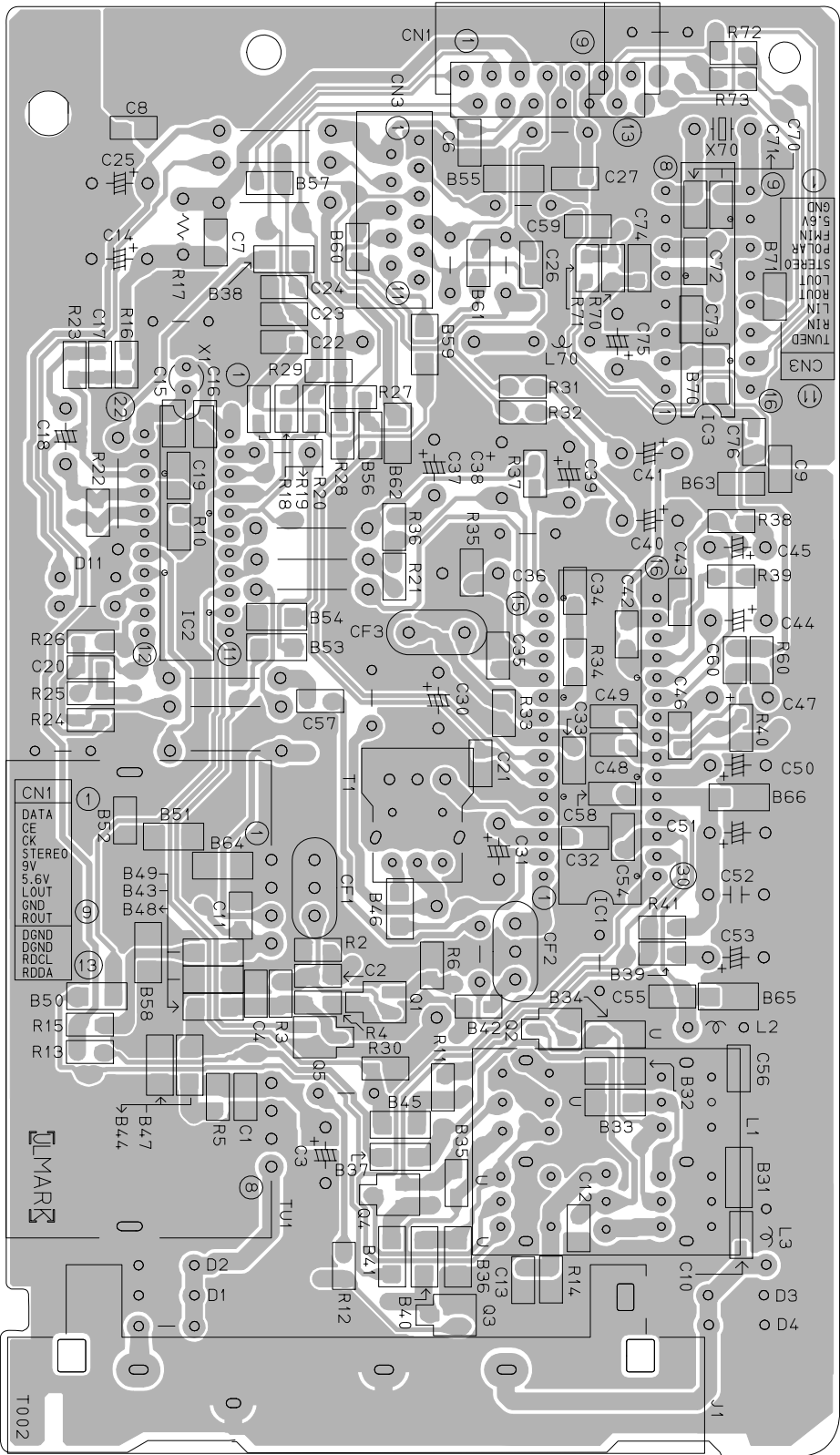


# CD servo control board

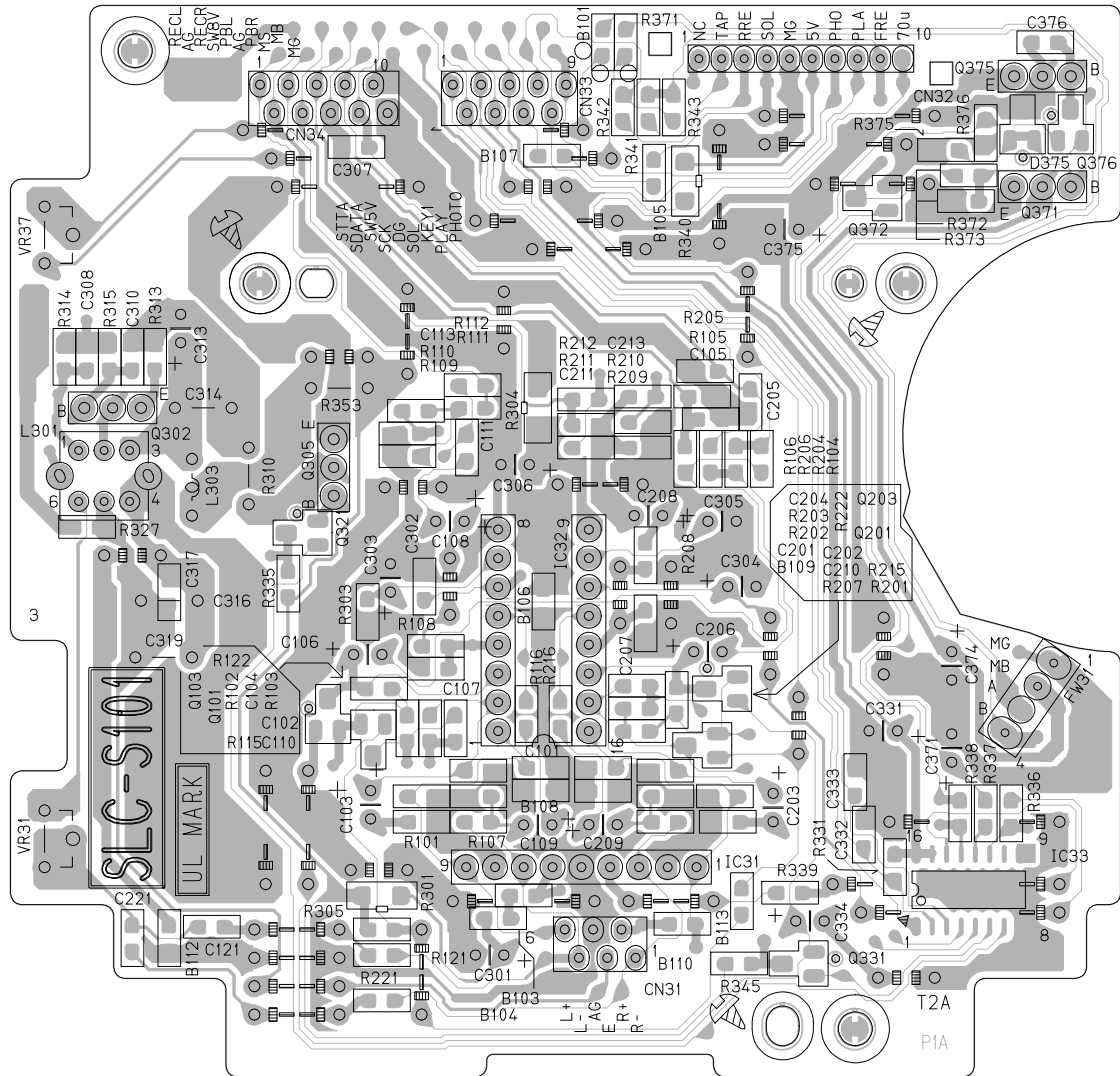




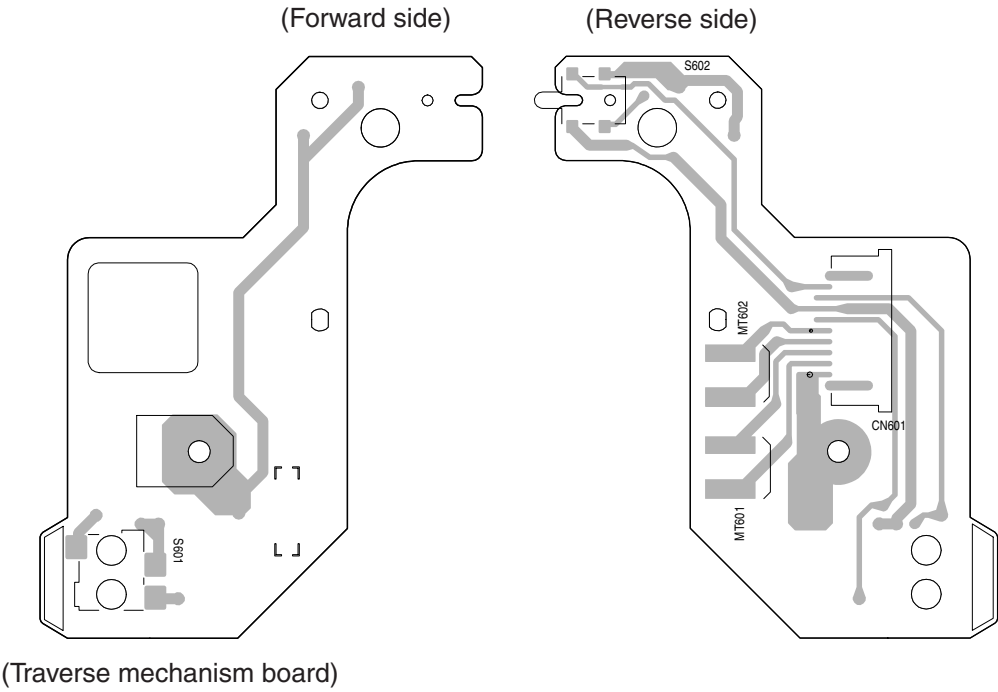
■ Tuner board



## ■ Head amplifier board



■ Traverse mechanism board



■ Cassette switch board

