

Service Manual

ORDER NO.
RRV1374

CD CDV LD PLAYER

CLD-V760

● Refer to the service manual RRV1310 for CLD-V760/KC.

↳ not with RRV1310

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
KU	O	AC120V	

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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω	→	56 × 10 ¹	→	561	RD1/8PM561J
47k Ω	→	47 × 10 ³	→	473	RD1/4PS473J
0.5 Ω	→	0R5			RN2H0R5K
1 Ω	→	010			RS1P010K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	→	562 × 10 ¹	→	5621	RN1/4PC5621F
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CLD-V760/KU and CLD-V760/KC have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		CLD-V760/KC	CLD-V760/KU	
NSP	MOTHER ASSY	VWS1201	VWS1237	No.1
	FLKB ASSY	VWG1634	VWG1718	
	KALB ASSY	VWG1636	VWG1666	
	GYCB ASSY	Not used	VWV1434	
	Rear panel (L)	VNA1593	VNA1631	No.2
	Decoration panel	VNK3404	VNK3545	
	L key B	Not used	VNK3379	
	CD door ASSY	VXA2250	VXA2235	No.3
	65 label	Not used	ORW1069	
	Operating instructions (English / French)	VRD1035	Not used	No.4
	Operating instructions (English)	Not used	VRB1160	
	Remote control unit	VXX2280	VXX2390	
	Warranty card	ARY1039	ARY1044	No.5
	Packing case	VHG1462	VHG1532	

Note : The numbers in the remarks column correspond to the numbers on the exploded diagram. Refer to "EXPLODED VIEWS".

FLKB ASSY

VWG1718 and VWG1634 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		VWG1634	VWG1718	
R120		Not used	RD1/6PM102J	*
R121		Not used	RD1/6PM361J	*

Note *: Refer to 2. SCHEMATIC AND PCB CONNECTION DIAGRAMS.

KALB ASSY

VWG1666 and VWG1636 have the same construction except for the following:

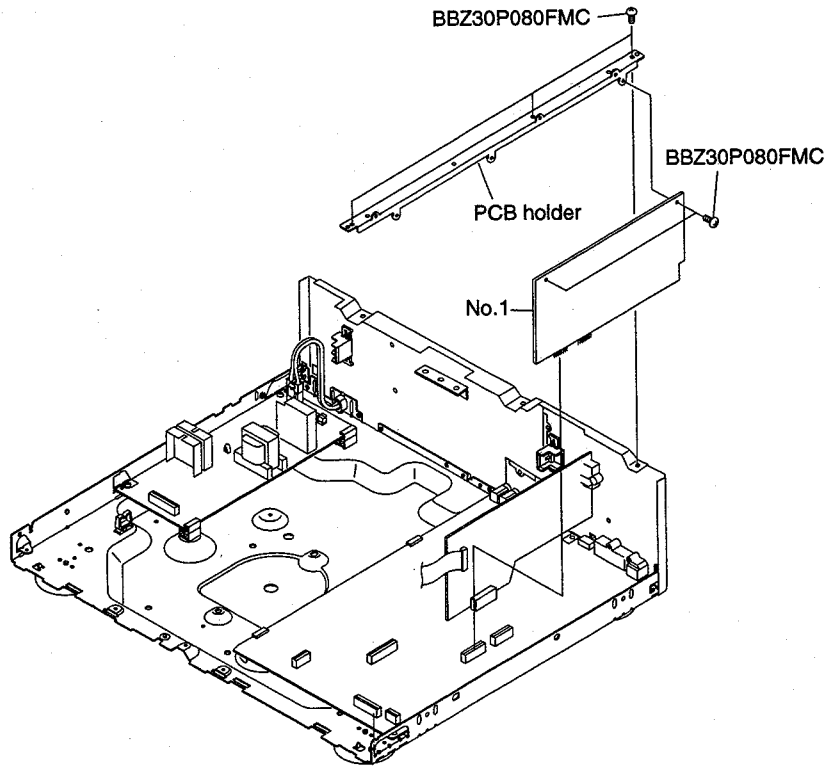
Mark	Symbol & Description	Part No.		Remarks
		VWG1636	VWG1666	
D207		Not used	SLR-342MCT31	*
R207		Not used	RD1/6PM181J	*
S207		Not used	VSG1008	*

Note *: Refer to 2. SCHEMATIC AND PCB CONNECTION DIAGRAMS.

1 | 2 |

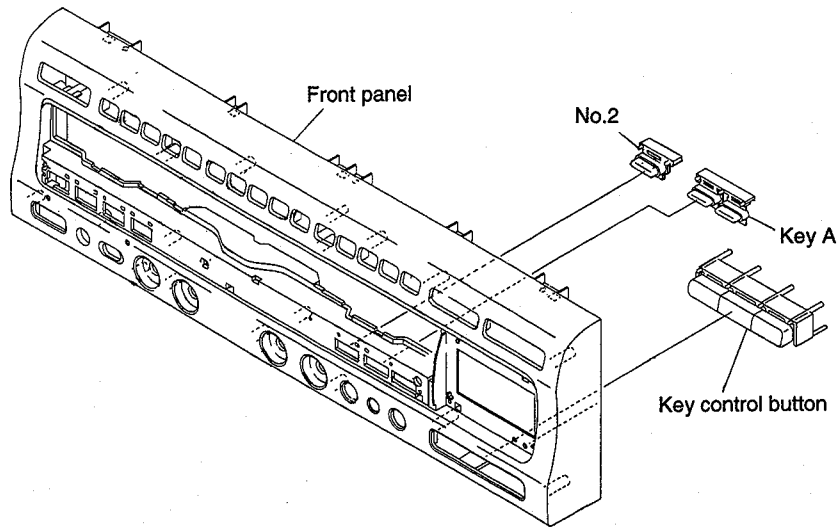
■ EXPLODED VIEWS
● TOP VIEW SECTION

A



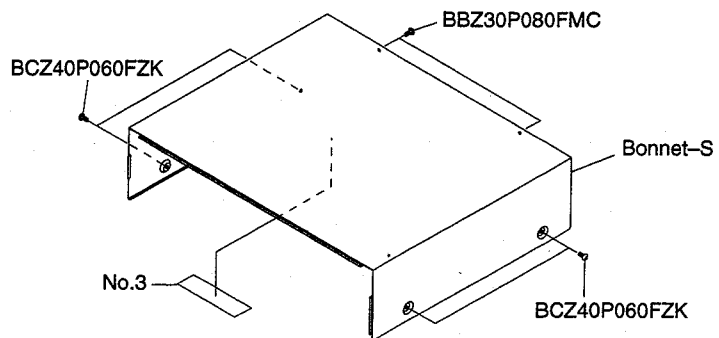
B

● FRONT PANEL SECTION



C

● EXTERIOR AND DISC TRAY SECTION



D

PCB PARTS LIST

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
● MOTHER ASSY (VWS1237)					
SEMICONDUCTORS					
IC904		BA10393F	C848, C944		CCSQCH101J50
IC202, IC205, IC903, IC905		BA4560F	C437, C474		CCSQCH120J50
IC351		CA0002AM	C416		CCSQCH121J50
IC803		LA6510	C415, C418, C434, C475		CCSQCH150J50
IC802		LC78681KE	C161, C353, C812		CCSQCH151J50
IC206		NJM78L08A	C352, C552		CCSQCH180J50
IC207		NJM79L08A	C220, C232, C579, C813, C950		CCSQCH220J50
IC801		PAC002A	C162, C417, C591, C935		CCSQCH221J50
IC901		PAC003A	C371, C419, C433, C467, C931		CCSQCH270J50
IC400		PAC005B	C106, C107, C354, C435, C452		CCSQCH330J50
IC500		PD0192A	C553, C563, C580		CCSQCH330J50
IC101		PD0196D	C351, C425, C476		CCSQCH390J50
IC201		PD2026B(L)	C260 - C263, C464, C468		CCSQCH470J50
IC902		TA8410AK	C787		CCSQCH471J50
IC501		TC7S04F	C375, C561, C806		CCSQCH680J50
Q102, Q916		2PB709A	C374, C814		CCSQCH820J50
Q201, Q202, Q451, Q475, Q805		2PD601A	C460, C462		CCSQCH910J50
Q840, Q903, Q904, Q907, Q908		2PD601A	C439		CEAL100M16
Q915, Q917		2PD601A	C836		CEAL470M16
Q834		2SA854S	C450, C838		CEALNP470M6R3
Q411, Q803		2SC2412K	C972		CEANP220M10
Q152		2SC3802K	C227, C281, C904		CEAS010M50
Q204, Q205, Q231		2SD2144S	C228, C274, C275, C367		CEAS100M50
Q208, Q209		UN2112	C364, C424, C917		CEAS101M10
Q103, Q207, Q901, Q910		UN2212	C922, C967		CEAS220M25
D202		11EQS06	C845, C902, C926		CEAS2R2M50
D102, D180, D203, D204, D801		1SS254	C101, C207, C225, C226		CEAS470M10
D901, D902, D905, D963		1SS254	C252, C253, C256, C270, C271		CEAS470M10
D201		KV1851	C279, C363, C369, C412, C484		CEAS470M10
D110		MTZJ5.1B	C491, C493, C530, C534, C538		CEAS470M10
COILS AND FILTERS					
L413		LAU100J	C550, C572, C585, C588, C801		CEAS470M10
L410		LAU101J	C803, C833, C842, C844, C893		CEAS470M10
L351, L802 - L804		LAU181J	C927, C933, C974, C975		CEAS470M10
L202, L204, L205, L352, L412		LAU220J	C255, C257		CEAS471M10
L461, L470, L800, L801		LAU220J	C850, C870		CEAS4R7M50
L411, L571		LAU270J	C368, C913, C943		CEASR47M50
L420, L421, L580		LAU430J	C968, C987		CEHAQ220M50
L462		LAU560J	C490, C891, C907, C914, C936		CKSQYB102K50
L414		LAU8R2J	C919		CKSQYB332K50
L460		LFA561J	C361, C362		CKSQYB392K50
F501		VTF1055	C355 - C358, C377, C909		CKSQYB472K50
F575		VTH1005	C104, C110, C160, C196 - C198		CKSQYF103Z50
L200, L201, L590		VTH1020	C213 - C215, C231, C234, C251		CKSQYF103Z50
SWITCH					
S12		VSH1009	C254, C286, C288, C372, C373		CKSQYF103Z50
CAPACITORS					
C562		CCSQCH050C50	C376, C413, C451, C454, C485		CKSQYF103Z50
C436, C809, C811		CCSQCH070D50	C531 - C533, C539, C570, C571		CKSQYF103Z50
C159, C420, C421, C438, C466		CCSQCH100D50	C577, C578, C581, C589, C788		CKSQYF103Z50
C583		CCSQCH100D50	C802, C804, C807, C831, C832		CKSQYF103Z50
C258, C259, C370, C810, C846		CCSQCH101J50	C834, C835, C843, C872, C876		CKSQYF103Z50
			C888, C892, C894, C918		CKSQYF103Z50
			C928, C929, C932, C937, C938		CKSQYF103Z50
			C941, C961, C962, C964, C971		CKSQYF103Z50
			C982		CKSQYF103Z50
			C102, C103, C122, C151		CKSQYF104Z25
			C284, C285, C305, C365, C366		CKSQYF104Z25

Mark No.	Description	Parts No.
C422, C423, C453, C457, C458		CKSQYF104Z25
C492, C494, C551, C574, C582		CKSQYF104Z25
C587, C592, C840, C841, C847		CKSQYF104Z25
C873, C874, C901, C910 - C912		CKSQYF104Z25
C915, C976, C981, C983		CKSQYF104Z25
C837, C921, C930		CKSQYF223Z50
C359, C360, C905, C951		CKSQYF224Z25
C280		CKSQYF333Z25
C465, C808, C815, C875, C877		CKSQYF473Z25
C924, C925		CKSQYF473Z25
C942		CQMA103J50
C920		CQMA104J50
C278, C282		CQMA152J50
C479, C908		CQMA154J50
C903		CQMA222J50
C973		CQMA224J50
C934		CQMA681J50
C483, C923		CQMA683J50
C871 (10μF, 16V)		VCH1152
VC901		VCM - 008
RESISTORS		
R521		RD1/6PM100J
R581		RD1/6PM103J
R259, R260		RD1/6PM183J
R420		RD1/6PM470J
R261, R262		RD1/6PM473J
R619, R625		RN1/10SC750D
R490, R987, R989		RN1/10SE103D
R986, R990		RN1/10SE333D
VR450 (2.2KΩ, 0.1W)		PCP1025
VR603 (4.7KΩ, 0.1W)		PCP1028
VR604, VR607, VR612 (47KΩ, 0.1W)		PCP1031
Other Resistors		RS1/10S□□□J
OTHERS		
CN101 10P FFC Connector		52045 - 1045
CN102, CN104 21P FFC Connector		52045 - 2145
CN103 23P FFC Connector		52233 - 2310
CN106 11P Top post		B11P - SHF - 1AA
CN110, CN203 B to B connector 20P		BTFN20S - 3SB7
CN113 B to B connector 6P		BTFN6S - 3SB7
JA3, JA4 Remote control jack		RKN1004
PCB Binder		VEF1040
JA15 1P Pin jack		VKB1063
JA6 4P Pin jack		VKB1065
JA13 RF Pin jack		VKB1068
Screw terminal		VNE1948
KN101, KN102 Earth metal fitting		VNF1084
X101 Ceramic resonator		VSS1040
X201 Crystal resonator(16MHZ)		VSS1057
X550 Crystal resonator		VSS1073

Mark No.	Description	Parts No.
● GYCB ASSY (VWV1434)		
SEMICONDUCTORS		
IC104		LC32464P - 80
IC106		MC14577CP
IC105		PD0198A
IC103		PDC016A
Q170, Q171		2PD601A
COILS		
L105, L106		LFA220J
L107		LFA4R7J
CAPACITORS		
C180		CCSQCH060D50
C201 - C204		CCSQCH150J50
C181, C182		CCSQCH220J50
C184		CCSQCH330J50
C183		CCSQCH680J50
C186, C188		CEAL470M6R3
C136, C138, C170, C172, C175		CEAS470M10
C177, C178, C190		CEAS470M10
C135, C137, C150, C171		CKSQYF103Z50
C173, C174, C176, C179, C185		CKSQYF103Z50
C187, C189, C191, C205, C206		CKSQYF103Z50
C192		CKSQYF104Z25
RESISTORS		
R118		RS1/10S112F
R119		RS1/10S123F
R190		RS1/10S132F
R121		RS1/10S222F
R123		RS1/10S301F
R172		RS1/10S681F
Other Resistors		RS1/10S□□□J
OTHERS		
CN101	B to B connector 20P	BTFN20P - 3RD7
CN102	B to B connector 6P	BTFN6P - 3RD7
	Screw terminal	VNE1948

2. SCHEMATIC AND PCB CONNECTION DIAGRAMS

NOTE FOR SCHEMATIC DIAGRAMS (Type 4A)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. RESISTORS:

Unit: k: k Ω , M: M Ω , or Ω unless otherwise noted.
 Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
 Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.

4. CAPACITORS:

Unit: p: pF or μ F unless otherwise noted.
 Ratings: capacitor (μ F)/ voltage (V) unless otherwise noted.
 Rated voltage: 50V except for electrolytic capacitors.

5. COILS:

Unit: m: mH or μ H unless otherwise noted.

6. VOLTAGE AND CURRENT:

or \leftarrow V :
 DC voltage (V) in PLAY mode unless otherwise noted.
 \leftarrow mA or \leftarrow mA :
 DC current in PLAY mode unless otherwise noted.
 Value in () is DC current in STOP mode.

7. OTHERS:

- or : Adjusting point.
- : Measurement point.
- The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SCH-□ ON THE SCHEMATIC DIAGRAM:

- SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position):

LMSB ASSY	DIKB ASSY
S101 : SW1	S301 :
S102 : SW2	S302 :
S103 : SW3	S303 : 1
	S304 : 2

PKSB ASSY	S305 : 3
S104 : OUTER	S306 : 4
S105 : INNER	S307 : 5
	S308 : 6

FLKB ASSY	S309 : 7
S101 : STOP	S310 : 8
S102 : PLAY	S311 : 9
S103 : CD	S312 : 10
S104 : LD	S313 : 11
S105 : FLAT	S314 : 12
S106 : NATURAL	S315 : 13
S107 : SHARP	S316 : 14
	S317 : 15

KALB ASSY	VRSB ASSY
S201 : POWER ON	S601 : MODE SELECTION
S202 : SINGLE PLAY	
S203 : VOCAL PARTNER	

MOTHER ASSY	
S204 : ONE TOUCH KARAOKE	S12 : ATTENUATOR
S205 : GUIDE VOCAL	
S207 : GRAPHICS	
S208 : COMPETITION	
S209 : SCORING	

NOTE FOR PCB DIAGRAMS:

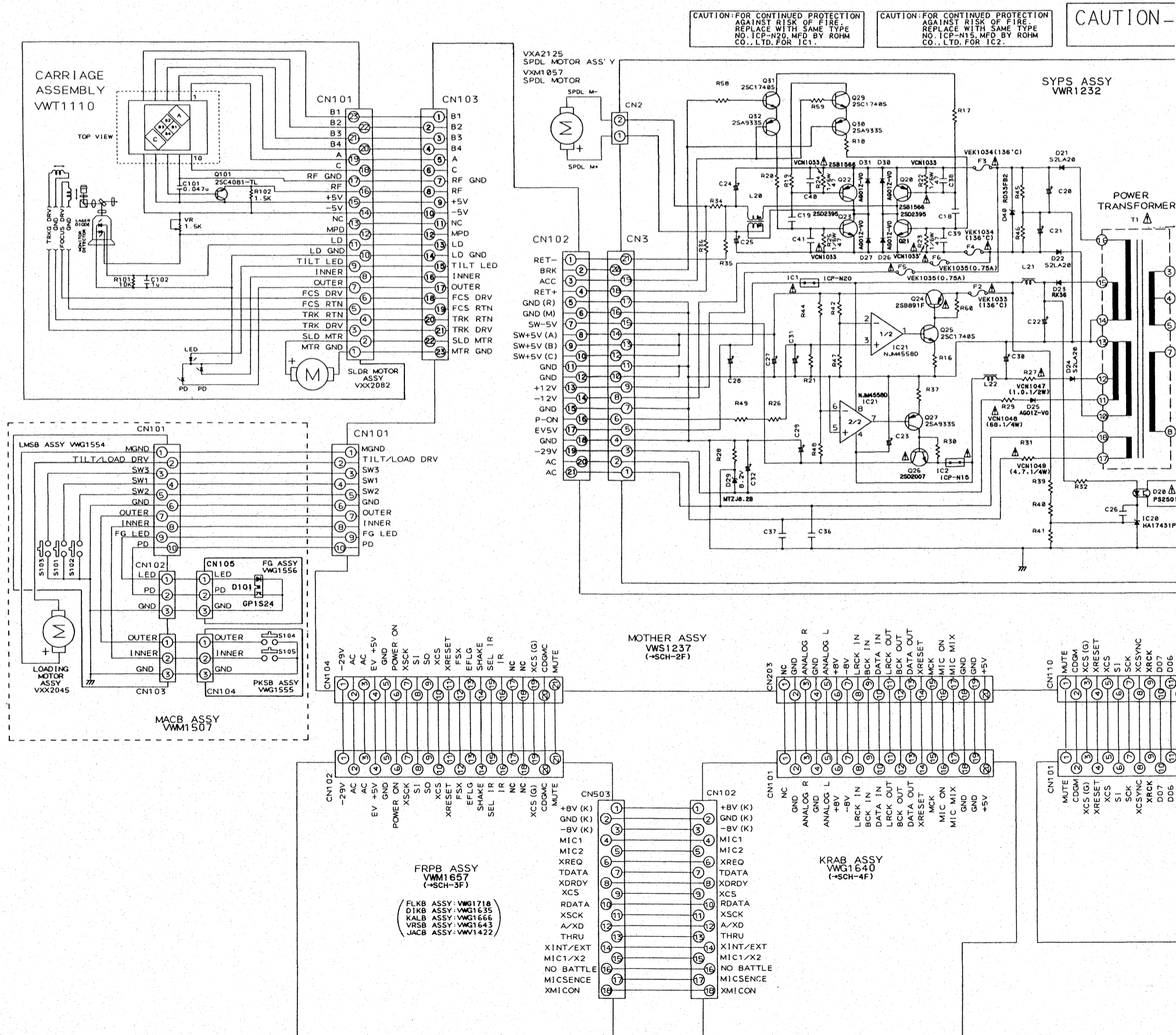
- Part numbers in PCB diagrams match those in the schematic diagrams.
- A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

- The parts mounted on this PCB include all necessary parts for several destinations.
 For further information for respective destinations, be sure to check with the schematic diagram.

2.1 OVERALL CONNECTIONS, SYPS, LMSB, FG, PKSB AND CARRIAGE ASSEMBLIES

NOTE FC



SCH-1F

OVERALL CONNECTIONS,
SYPS ASSY, LMSB ASSY,
FG ASSY,
PKSB ASSY, CARRIAGE ASSY

● NOTE FOR FUSE REPLACEMENT

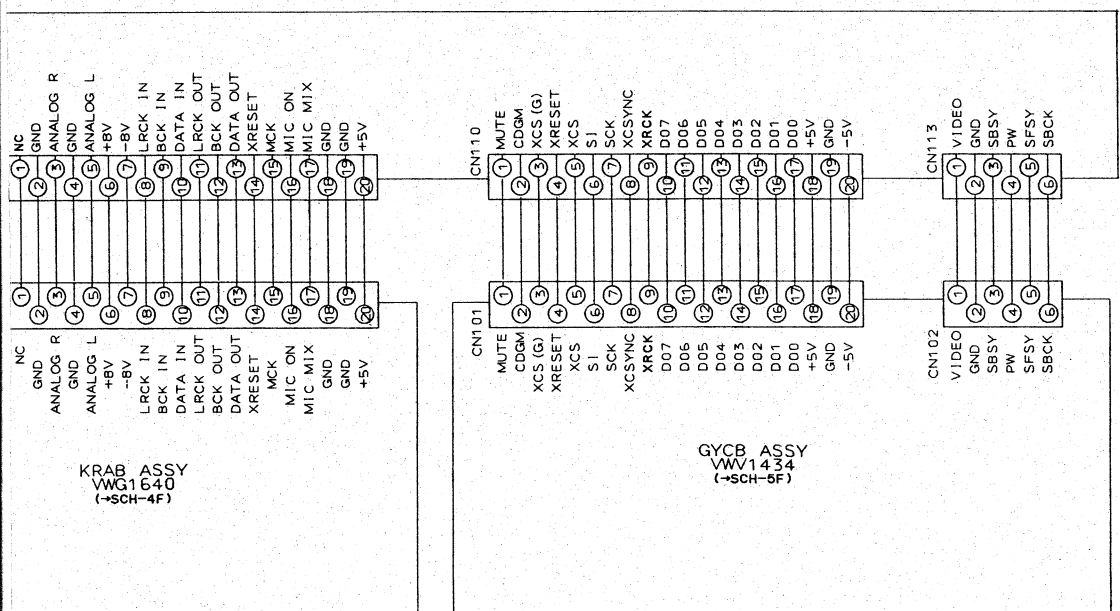
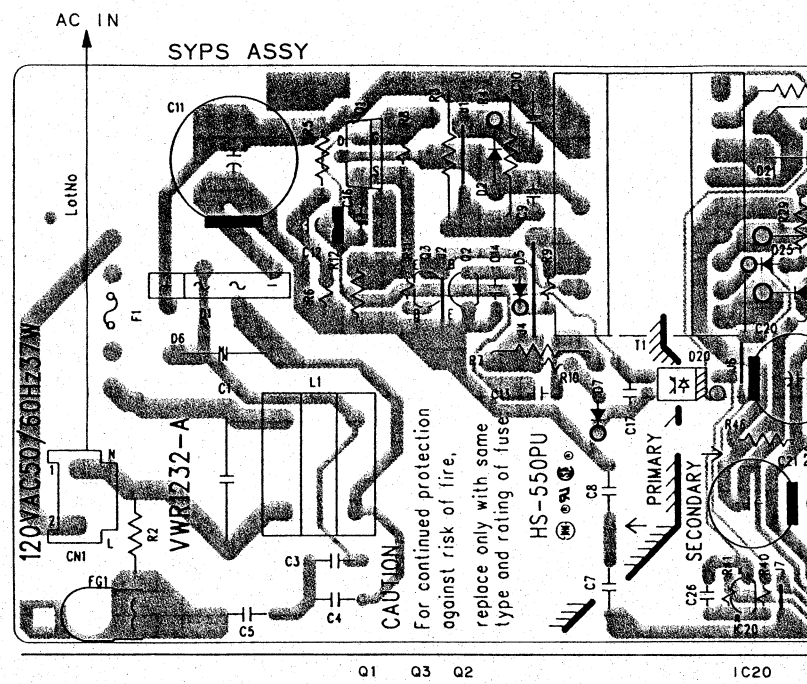
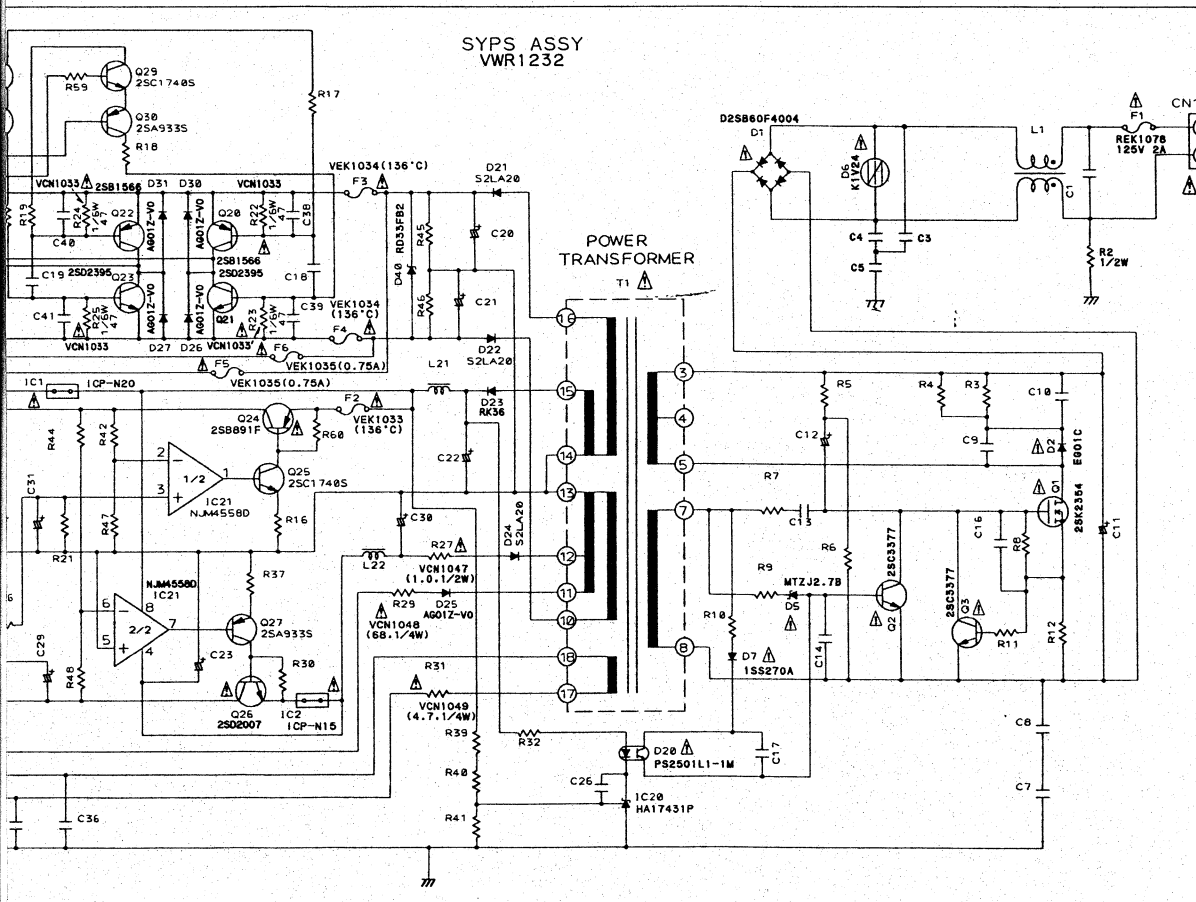
INUED PROTECTION RISK OF FIRE WITH SAME TYPE NO. ICP-N15, MFD BY ROHM FOR IC1.

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE WITH SAME TYPE NO. ICP-N15, MFD BY ROHM CO., LTD. FOR IC2.

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

● This diagram is viewed from the m

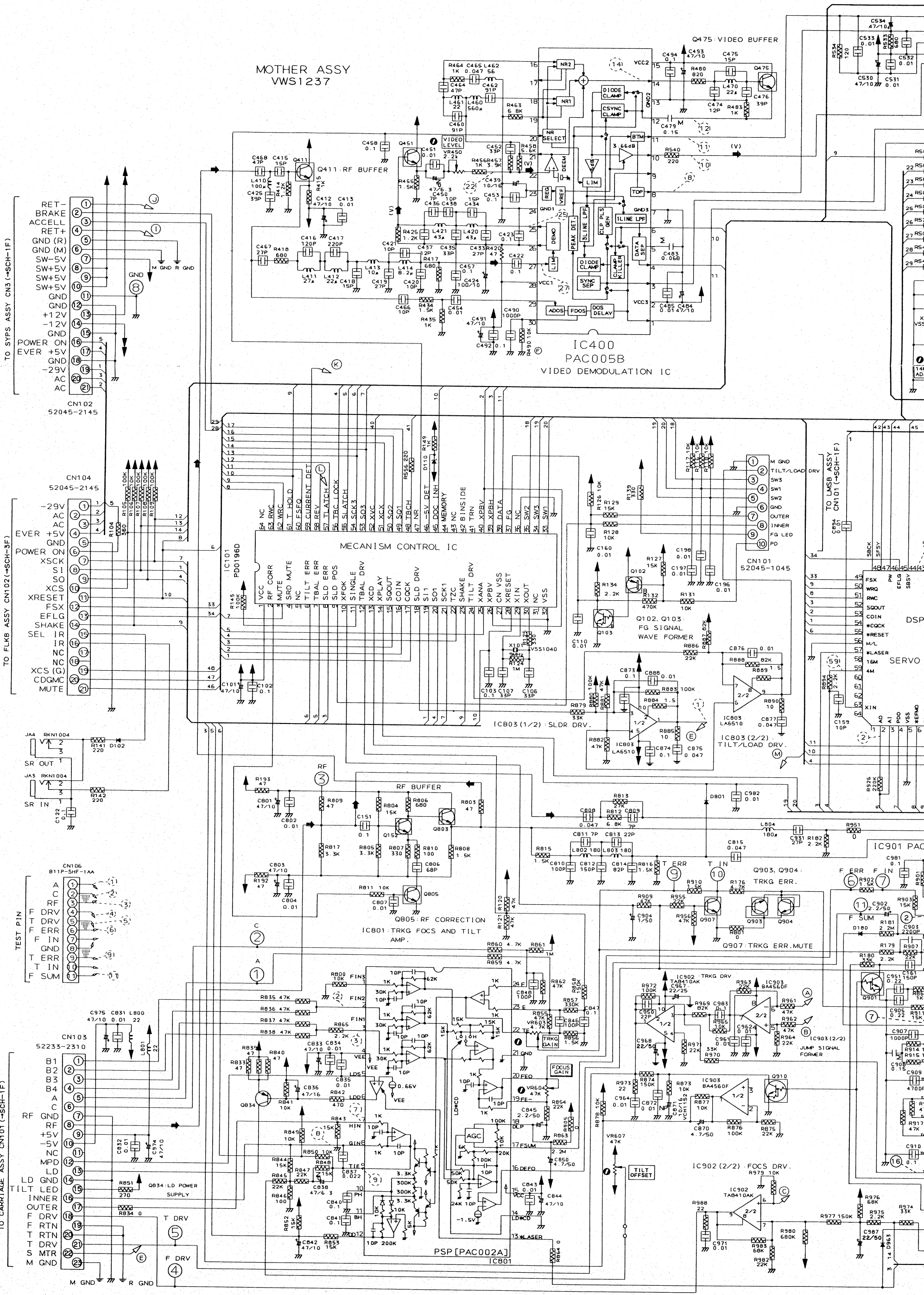
SCH-1F



OVERALL CONNECTIONS, SYPS ASSY, LMSB ASSY, FG ASSY, PKSB ASSY, CARRIAGE ASSY

SCH-1F

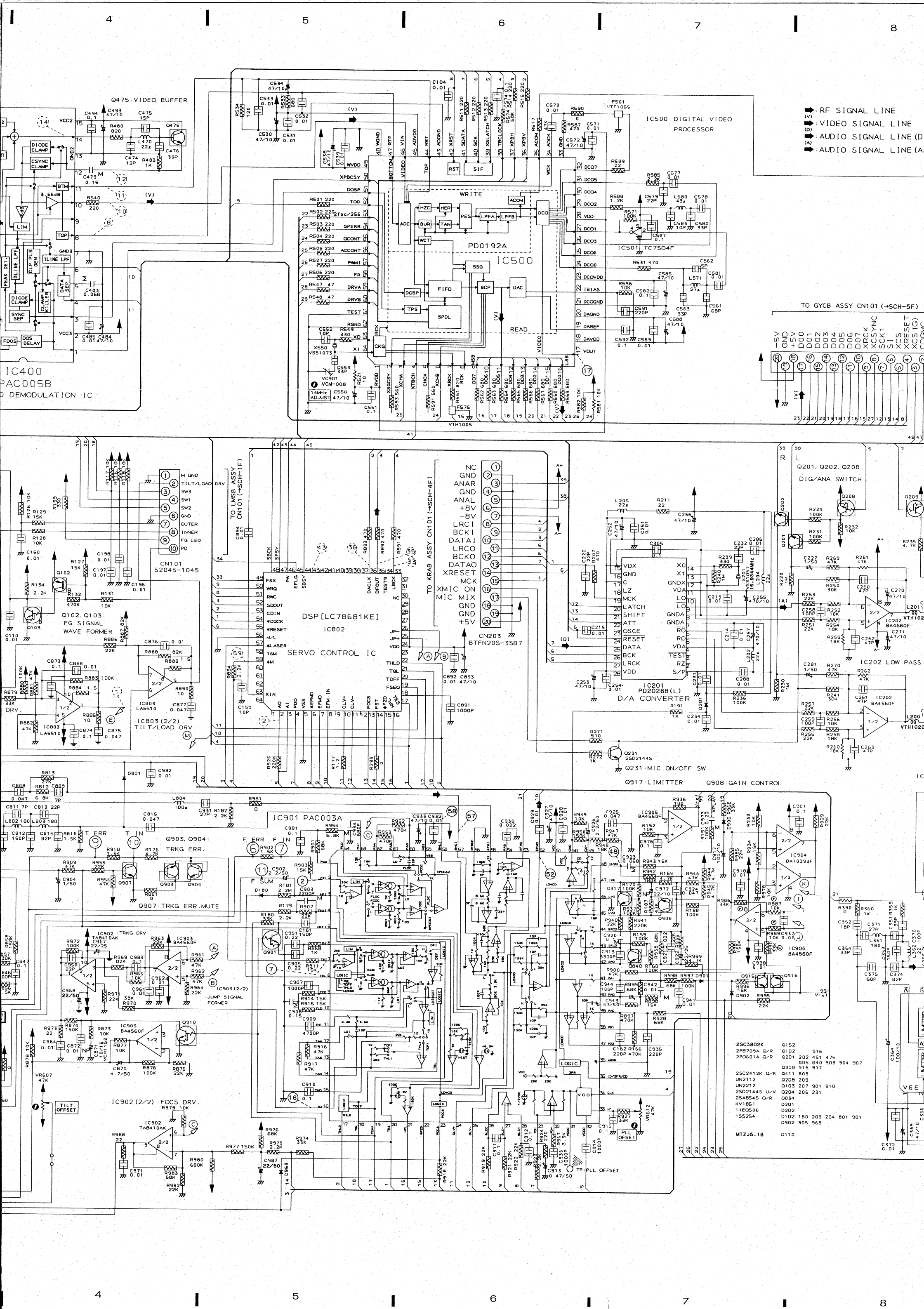
2.2 MOTHER ASSEMBLY



SCH-2F

MOTHER ASSY

A
B
C
D
E
F



RF SIGNAL LINE
VIDEO SIGNAL LINE
AUDIO SIGNAL LINE (D)
AUDIO SIGNAL LINE (A)

TO GYCB ASSY CN101 (-SCH-5F)

Q201, Q202, Q208
DIG/ANA SWITCH

IC202 LOW PASS

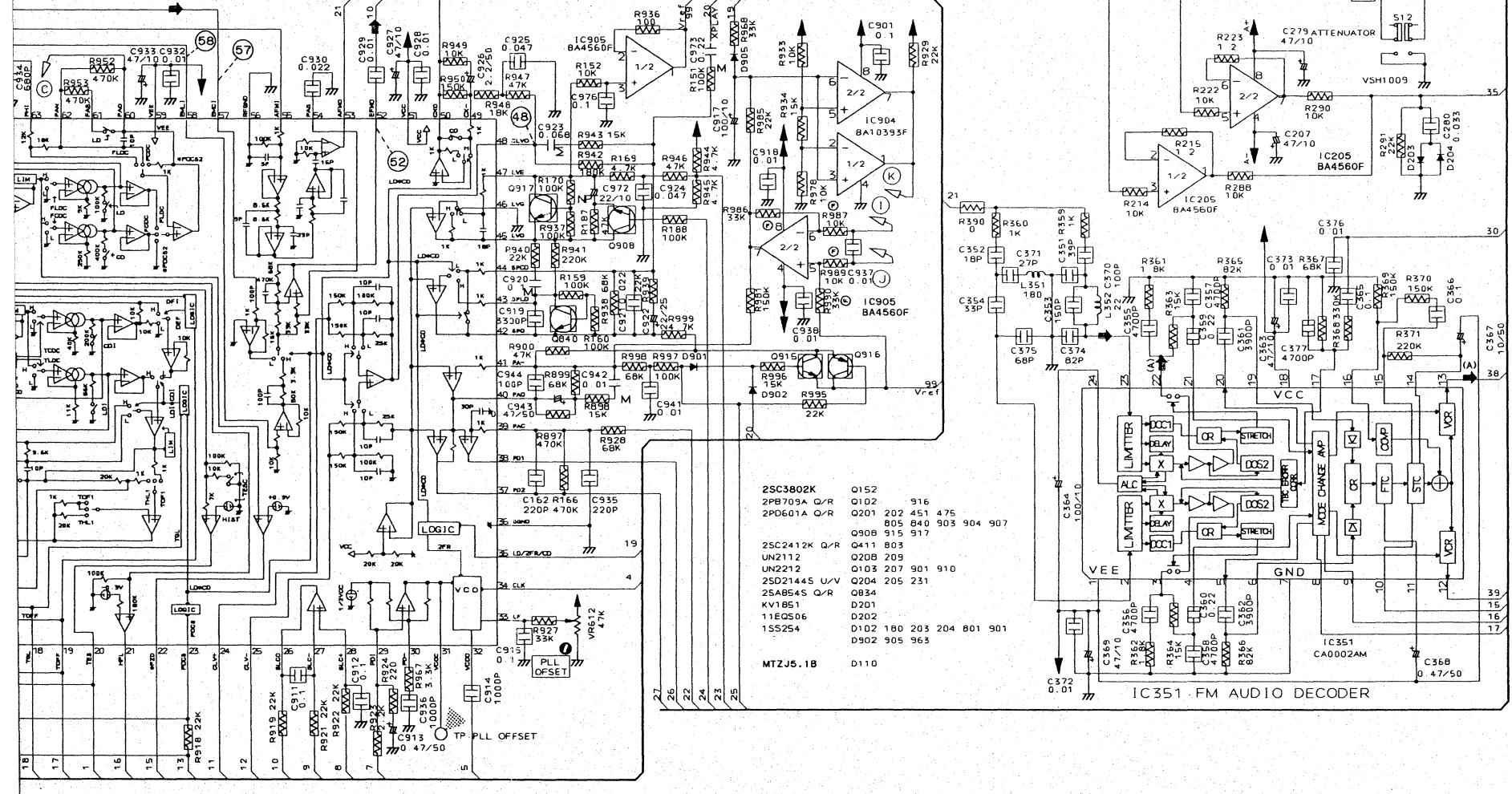
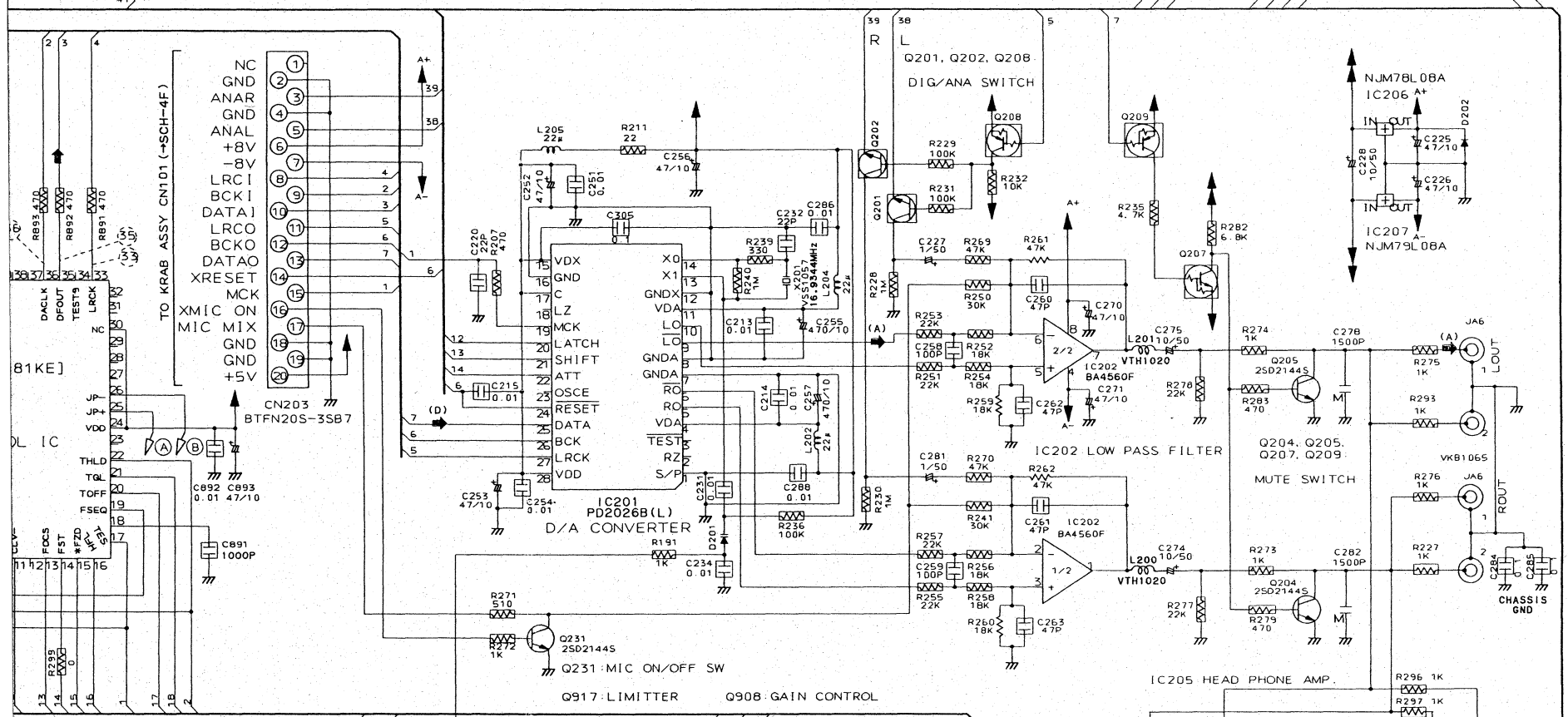
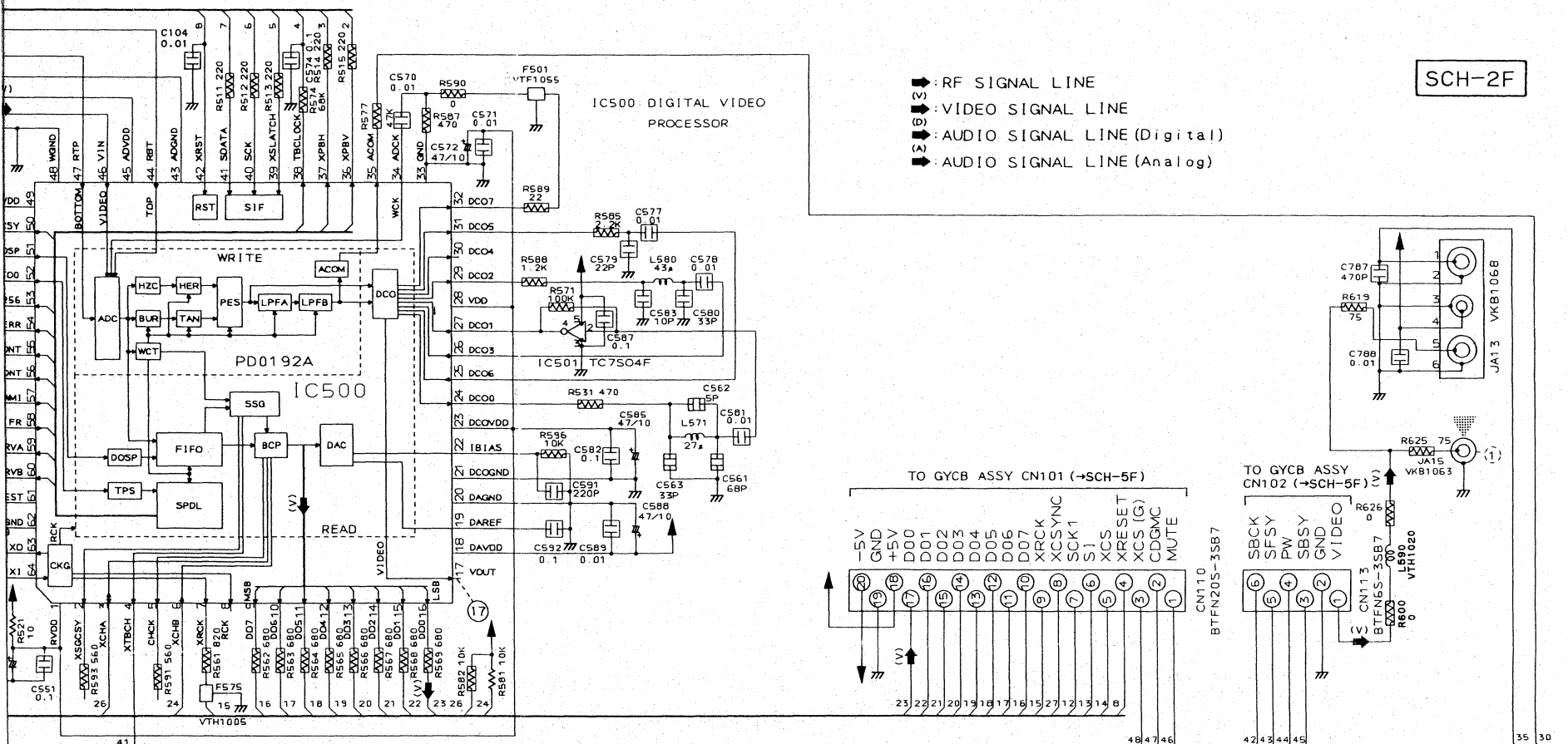
Q231 MIC ON/OFF SW

Q917 LIMITER Q908 GAIN CONTROL

- 25C3802K O152
- 2P8709A Q/R O102 916
- 2PD601A Q/R Q201 202 451 475
- 805 840 903 904 907
- Q908 915 917
- 25C2412K Q/R Q411 803
- UN2112 Q208 209
- UN2112 O103 207 901 910
- 25D21445 U/V Q204 205 231
- 25AB545 Q/R Q84
- KV1851 D201
- 11EC056 D202
- 15S254 O102 180 203 204 801 901
- O902 905 963
- MTZJ5.18 D110

SCH-2F

- RF SIGNAL LINE
- VIDEO SIGNAL LINE
- AUDIO SIGNAL LINE (Digital)
- AUDIO SIGNAL LINE (Analog)



25C3802K	0152	
2P8705A Q/R	0102	916
2P0601A Q/R	Q201	202 451 475
		805 840 903 904 907
25C2412K Q/R	Q908	915 917
UN2112	Q41	803
UN2212	Q208	209
25D2144S U/V	Q204	205 231
25A854S Q/R	Q834	
KV1851	D201	
11G0506	D202	
15S254	D102	180 203 204 801 901
	D902	905 963
MTZJ5.18	D110	

MOTHER ASSY

SCH-2F

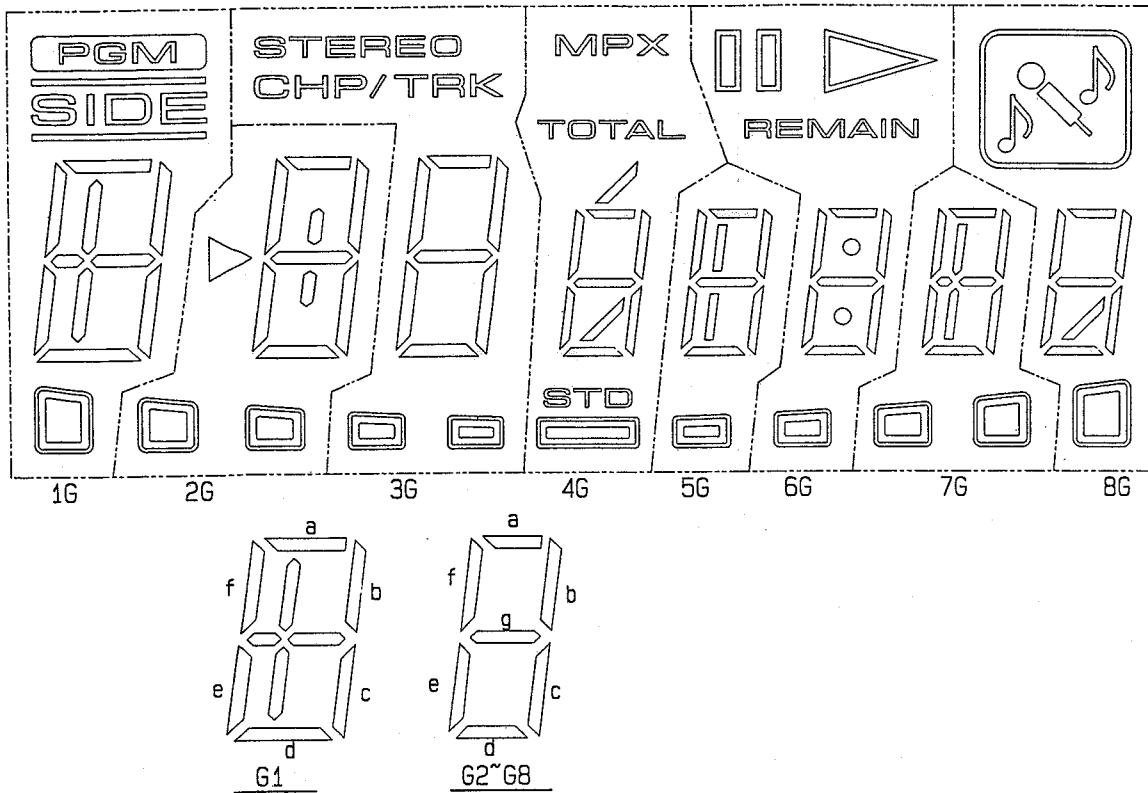
**WAVEFORMS AND VOLTAGE
MOTHER ASSEMBLY**

Note: (No.) in the table correspond to the pin number.

Measurement condition: In case when (D.audio) is written, at time when disc that has digital audio recording is played.

IC801(PAC002A)	IC802(LC78681KE)	IC803(LA6510)	IC901(PAC003A)	CN106	IC400 (PAC005B)
<p>②, ③ 1mS/Div. 16mVp-p</p> <p>AC mode</p>	<p>② 0.1μS/Div. 4.3Vp-p</p> <p>AC mode(D.audio)</p>	<p>① 2mS/Div. 1.8Vp-p</p> <p>DC mode</p>	<p>② 0.2mS/Div. 74mVp-p</p> <p>DC mode</p>	<p>①, ② 5mS/Div. 65mVp-p</p> <p>DC mode</p>	<p>⑩ 1.52Vp-p</p> <p>V : 20mV/Div H : 10mS/Div</p>
<p>⑦, ⑧ 1mS/Div. 67mVp-p</p> <p>DC mode</p>	<p>③③ 10μS/Div. 4.2Vp-p</p> <p>AC mode(D.audio)</p>		<p>⑦ 0.2mS/Div. 74mVp-p</p> <p>DC mode</p>	<p>③ 0.5mS/Div. 300mVp-p</p> <p>AC mode</p>	<p>⑧ (TOP) 2.4V</p> <p>⑪ (BOTTOM) 0.55V</p> <p>V : 20mV/Div H : 10mS/Div</p>
<p>⑨ 5mS/Div. 0.1Vp-p</p> <p>DC mode</p>	<p>③⑤ 0.2μS/Div. 4.4Vp-p</p> <p>AC mode(D.audio)</p>		<p>⑩ 0.2mS/Div. 0.61Vp-p</p> <p>DC mode</p>	<p>④ 5mS/Div. 15Vp-p</p> <p>DC mode</p>	<p>⑫ 1Vp-p</p> <p>V : 20mV/Div H : 10mS/Div</p>
	<p>③⑥ 0.2μS/Div. 4.5Vp-p</p> <p>AC mode(D.audio)</p>		<p>⑭ 50μS/Div. 6.2Vp-p</p> <p>DC mode</p>	<p>⑤ 5mS/Div. 5.8Vp-p</p> <p>DC mode</p>	<p>⑭ 1Vp-p</p> <p>V : 20mV/Div H : 10mS/Div</p>
	<p>④③ 0.1μS/Div. 4.5Vp-p</p> <p>AC mode(D.audio)</p>		<p>⑮ 0.2μS/Div. 2.1Vp-p</p> <p>AC mode</p>	<p>⑥ 5mS/Div. 3.5Vp-p</p> <p>DC mode</p>	<p>⑲ (No noise) about 1Vp-p</p> <p>⑳ (With limiter noise) about 330mVp-p</p> <p>V : 20mV/Div H : 10mS/Div</p>
	<p>⑤⑨ 0.1μS/Div. 2Vp-p</p> <p>AC mode(D.audio)</p>		<p>⑰ 1mS/Div. 0.53Vp-p</p> <p>DC mode</p>	<p>⑨ 5mS/Div. 1.25Vp-p</p> <p>DC mode</p>	<p>⑳ about 1Vp-p</p> <p>0.5mS/Div</p>
			<p>⑱ 0.2mS/Div. 0.32Vp-p</p> <p>DC mode</p>	<p>⑪ 10mS/Div. 1.7Vp-p</p> <p>DC mode</p>	<p>⑳ (75Ω termination) about 1Vp-p</p> <p>V : 20mV/Div H : 10mS/Div</p>
					<p>Video output pin</p> <p>① about 1Vp-p</p> <p>V : 20mV/Div H : 10mS/Div</p>

● FL INFORMATION (V101, VAW1039)



ANODE GRID ASSIGNMENT & PIN ASSIGNMENT

	G1	G2	G3	G4	G5	G6	G7	G8
S1	a	a	a	a	a	a	a	a
S2	b	b	b	b	b	b	b	b
S3	c	c	c	c	c	c	c	c
S4	d	d	d	d	d	d	d	d
S5	e	e	e	e	e	e	e	e
S6	f	f	f	f	f	f	f	f
S7	-	g	g	g	g	g	-	g
S8	-	⋮	STEREO (Upper)	⋮	⋮	⋮	-	⋮
S9	⋮	▷	CHP/TRK (Lower)	⋮	⋮	⋮	⋮	⋮
S10	PGM	(R) □	(R) □	MPX	⋮	▷	(R) □	⋮
S11	SIDE	(L) □	(L) □	TOTAL	⋮	REMAIN	(L) □	⋮
S12	□	(R) □	(R) □	STD	□	□	(R) □	□
S13	□	(L) □	(L) □	□	□	□	(L) □	□

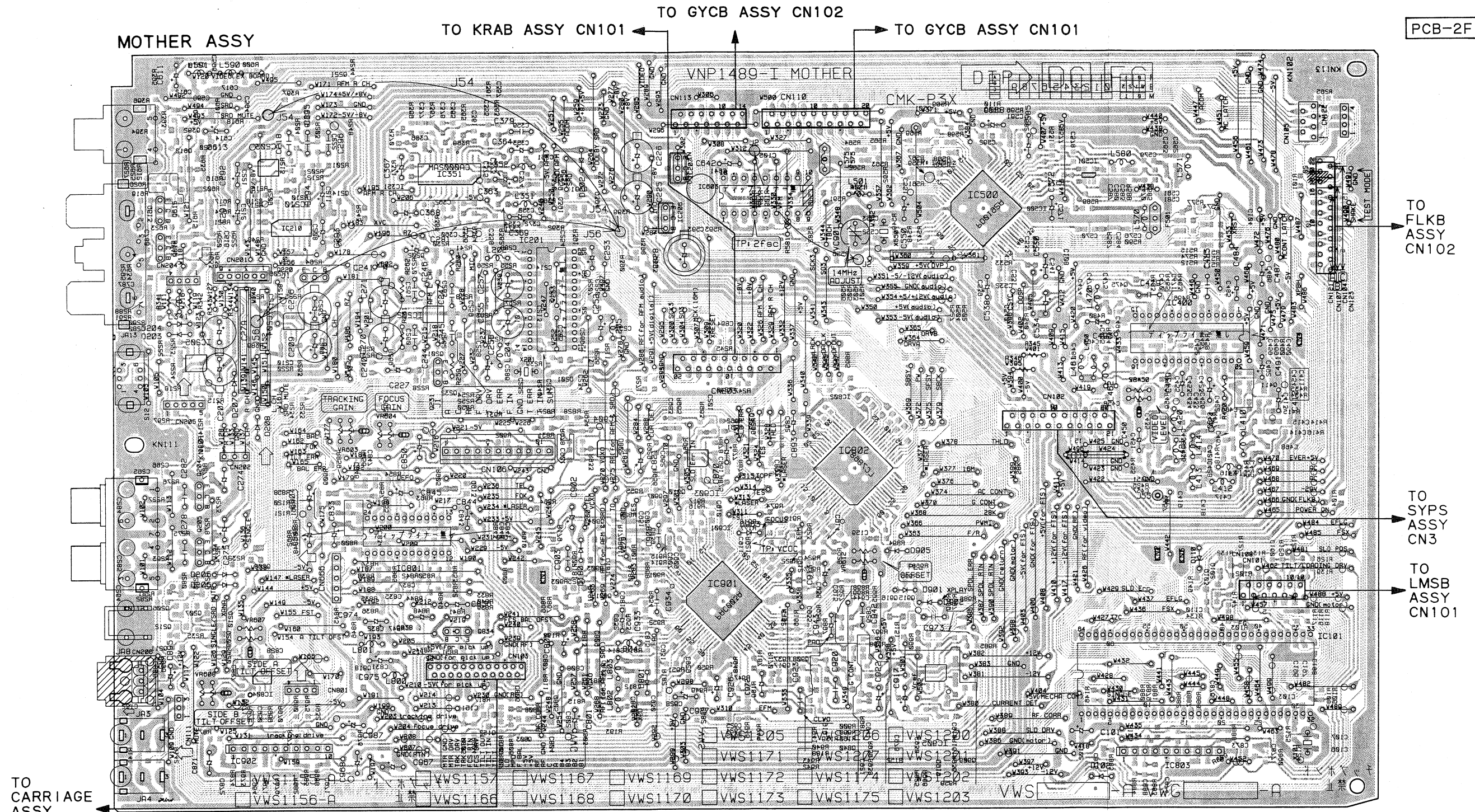
PIN ASSIGNMENT

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Assignment	F	F	NP	S13	S12	S11	S10	S9	S8	S7	S6	S5	S4	S3	S2	S1	G1	G2	G3	G4

Pin No.	21	22	23	24	25	26	27
Assignment	G5	G6	G7	G8	NP	F	F

F:Filament G1~G8:Grid S1~S13:Anode NP:No pin

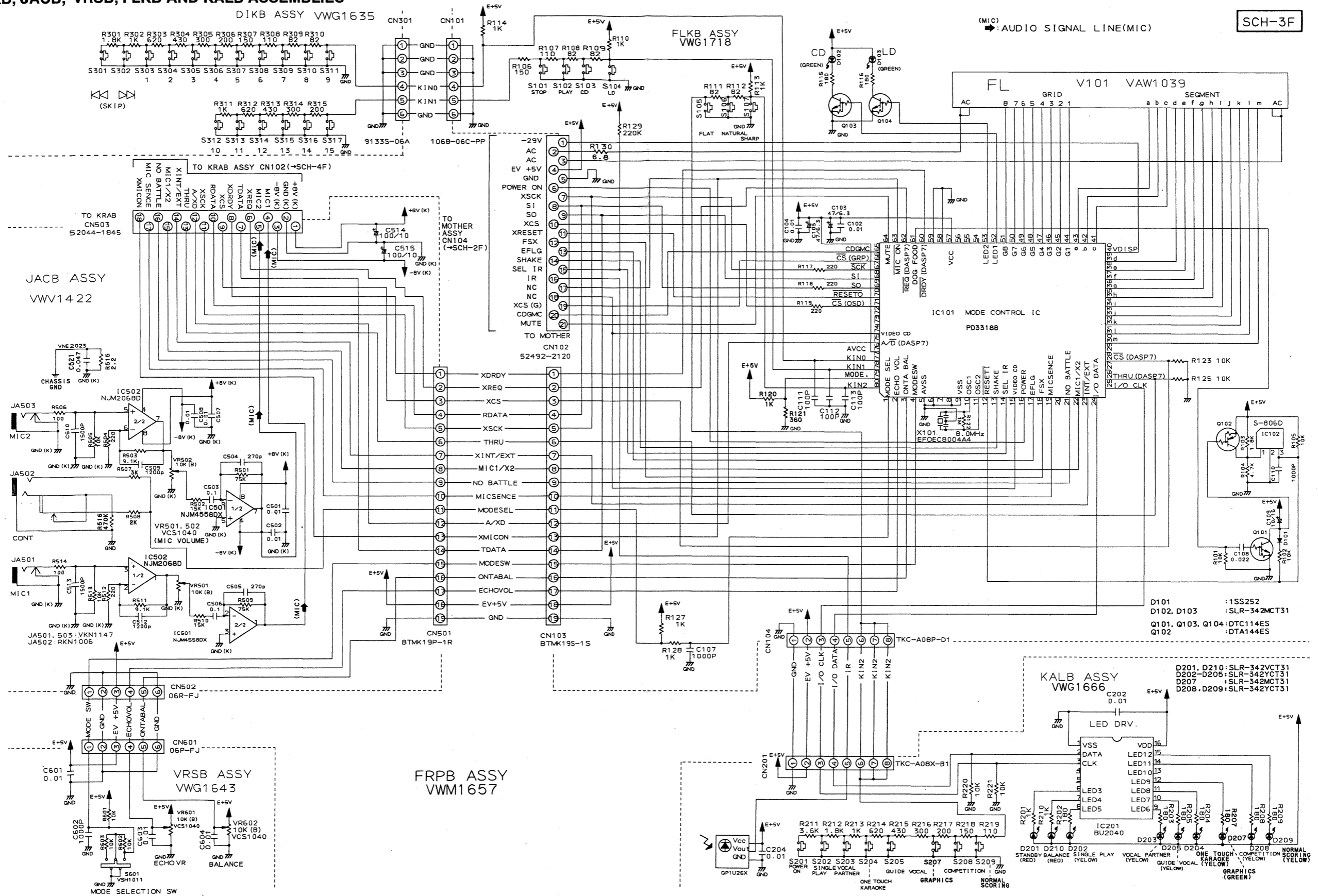
• This diagram is viewed from the mounted parts side.



VR608	VR607	VR603	VR604	VC901	VR612	VR450
Q615	Q204	IC902	Q220	ISS1	IC801	Q231
Q616	Q205	IC903	Q221	ISS2	IC802	Q232
Q617	Q206	IC904	Q222	ISS3	IC803	Q233
Q618	Q207	IC905	Q223	ISS4	IC804	Q234
Q619	Q208	IC906	Q224	ISS5	IC805	Q235
Q620	Q209	IC907	Q225	ISS6	IC806	Q236
Q621	Q210	IC908	Q226	ISS7	IC807	Q237
Q622	Q211	IC909	Q227	ISS8	IC808	Q238
Q623	Q212	IC910	Q228	ISS9	IC809	Q239
Q624	Q213	IC911	Q229	ISS10	IC810	Q240
Q625	Q214	IC912	Q230	ISS11	IC811	Q241
Q626	Q215	IC913	Q231	ISS12	IC812	Q242
Q627	Q216	IC914	Q232	ISS13	IC813	Q243
Q628	Q217	IC915	Q233	ISS14	IC814	Q244
Q629	Q218	IC916	Q234	ISS15	IC815	Q245
Q630	Q219	IC917	Q235	ISS16	IC816	Q246
Q631	Q220	IC918	Q236	ISS17	IC817	Q247
Q632	Q221	IC919	Q237	ISS18	IC818	Q248
Q633	Q222	IC920	Q238	ISS19	IC819	Q249
Q634	Q223	IC921	Q239	ISS20	IC820	Q250
Q635	Q224	IC922	Q240	ISS21	IC821	Q251
Q636	Q225	IC923	Q241	ISS22	IC822	Q252
Q637	Q226	IC924	Q242	ISS23	IC823	Q253
Q638	Q227	IC925	Q243	ISS24	IC824	Q254
Q639	Q228	IC926	Q244	ISS25	IC825	Q255
Q640	Q229	IC927	Q245	ISS26	IC826	Q256
Q641	Q230	IC928	Q246	ISS27	IC827	Q257
Q642	Q231	IC929	Q247	ISS28	IC828	Q258
Q643	Q232	IC930	Q248	ISS29	IC829	Q259
Q644	Q233	IC931	Q249	ISS30	IC830	Q260
Q645	Q234	IC932	Q250	ISS31	IC831	Q261
Q646	Q235	IC933	Q251	ISS32	IC832	Q262
Q647	Q236	IC934	Q252	ISS33	IC833	Q263
Q648	Q237	IC935	Q253	ISS34	IC834	Q264
Q649	Q238	IC936	Q254	ISS35	IC835	Q265
Q650	Q239	IC937	Q255	ISS36	IC836	Q266
Q651	Q240	IC938	Q256	ISS37	IC837	Q267
Q652	Q241	IC939	Q257	ISS38	IC838	Q268
Q653	Q242	IC940	Q258	ISS39	IC839	Q269
Q654	Q243	IC941	Q259	ISS40	IC840	Q270
Q655	Q244	IC942	Q260	ISS41	IC841	Q271
Q656	Q245	IC943	Q261	ISS42	IC842	Q272
Q657	Q246	IC944	Q262	ISS43	IC843	Q273
Q658	Q247	IC945	Q263	ISS44	IC844	Q274
Q659	Q248	IC946	Q264	ISS45	IC845	Q275
Q660	Q249	IC947	Q265	ISS46	IC846	Q276
Q661	Q250	IC948	Q266	ISS47	IC847	Q277
Q662	Q251	IC949	Q267	ISS48	IC848	Q278
Q663	Q252	IC950	Q268	ISS49	IC849	Q279
Q664	Q253	IC951	Q269	ISS50	IC850	Q280
Q665	Q254	IC952	Q270	ISS51	IC851	Q281
Q666	Q255	IC953	Q271	ISS52	IC852	Q282
Q667	Q256	IC954	Q272	ISS53	IC853	Q283
Q668	Q257	IC955	Q273	ISS54	IC854	Q284
Q669	Q258	IC956	Q274	ISS55	IC855	Q285
Q670	Q259	IC957	Q275	ISS56	IC856	Q286
Q671	Q260	IC958	Q276	ISS57	IC857	Q287
Q672	Q261	IC959	Q277	ISS58	IC858	Q288
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Q683	Q272	IC970	Q288	ISS69	IC869	Q299
Q684	Q273	IC971	Q289	ISS70	IC870	Q300
Q685	Q274	IC972	Q290	ISS71	IC871	Q301
Q686	Q275	IC973	Q291	ISS72	IC872	Q302
Q687	Q276	IC974	Q292	ISS73	IC873	Q303
Q688	Q277	IC975	Q293	ISS74	IC874	Q304
Q689	Q278	IC976	Q294	ISS75	IC875	Q305
Q690	Q279	IC977	Q295	ISS76	IC876	Q306
Q691	Q280	IC978	Q296	ISS77	IC877	Q307
Q692	Q281	IC979	Q297	ISS78	IC878	Q308
Q693	Q282	IC980	Q298	ISS79	IC879	Q309
Q694	Q283	IC981	Q299	ISS80	IC880	Q310
Q695	Q284	IC982	Q300	ISS81	IC881	Q311
Q696	Q285	IC983	Q301	ISS82	IC882	Q312
Q697	Q286	IC984	Q302	ISS83	IC883	Q313
Q698	Q287	IC985	Q303	ISS84	IC884	Q314
Q699	Q288	IC986	Q304	ISS85	IC885	Q315
Q700	Q289	IC987	Q305	ISS86	IC886	Q316
Q701	Q290	IC988	Q306	ISS87	IC887	Q317
Q702	Q291	IC989	Q307	ISS88	IC888	Q318
Q703	Q292	IC990	Q308	ISS89	IC889	Q319
Q704	Q293	IC991	Q309	ISS90	IC890	Q320
Q705	Q294	IC992	Q310	ISS91	IC891	Q321
Q706	Q295	IC993	Q311	ISS92	IC892	Q322
Q707	Q296	IC994	Q312	ISS93	IC893	Q323
Q708	Q297	IC995	Q313	ISS94	IC894	Q324
Q709	Q298	IC996	Q314	ISS95	IC895	Q325
Q710	Q299	IC997	Q315	ISS96	IC896	Q326
Q711	Q300	IC998	Q316	ISS97	IC897	Q327
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Q718	Q307	IC1005	Q323	ISS104	IC904	Q334
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Q726	Q315	IC1013	Q331	ISS112	IC912	Q342
Q727	Q316	IC1014	Q332	ISS113	IC913	Q343
Q728	Q317	IC1015	Q333	ISS114	IC914	Q344
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Q732	Q321	IC1019	Q337	ISS118	IC918	Q348
Q733	Q322	IC1020	Q338	ISS119	IC919	Q349
Q734	Q323	IC1021	Q339	ISS120	IC920	Q350
Q735	Q324	IC1022	Q340	ISS121	IC921	Q351
Q736	Q325	IC1023	Q341	ISS122	IC922	Q352
Q737	Q326	IC1024	Q342	ISS123	IC923	Q353
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Q739	Q328	IC1026	Q344	ISS125	IC925	Q355
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Q742	Q331	IC1029	Q347	ISS128	IC928	Q358
Q743	Q332	IC1030	Q348	ISS129	IC929	Q359
Q744	Q333	IC1031	Q349	ISS130	IC930	Q360
Q745	Q334	IC1032	Q350	ISS131	IC931	Q361
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Q747	Q336	IC1034	Q352	ISS133	IC933	Q363
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Q751	Q340	IC1038	Q356	ISS137	IC937	Q367
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Q754	Q343	IC1041	Q359	ISS140	IC940	Q370
Q755	Q344	IC1042	Q360	ISS141	IC941	Q371
Q756	Q345	IC1043	Q361	ISS142	IC942	Q372
Q757	Q346	IC1044	Q362	ISS143	IC943	Q373
Q758	Q347	IC1045	Q363	ISS144	IC944	Q374
Q759	Q348	IC1046	Q364	ISS145	IC945	Q375
Q760	Q349	IC1047	Q365	ISS146	IC946	Q376
Q761	Q350	IC1048	Q366	ISS147	IC947	Q377
Q762	Q351	IC1049	Q367	ISS148	IC948	Q378
Q763	Q352	IC1050	Q368	ISS149	IC949	Q379
Q764	Q353	IC1051	Q369			

2.3 DIKB, JACB, VRSB, FLKB AND KALB ASSEMBLIES

SCH-3F



SCH-3F

DIKB ASSY, JACB ASSY, VRSB ASSY, FLKB ASSY, KALB ASSY

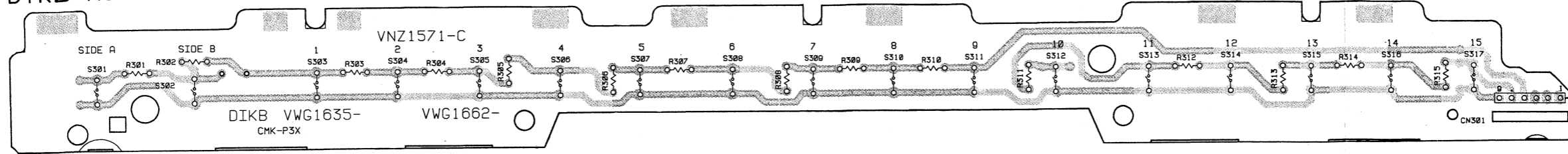
SCH-3F

DIKB ASSY, JACB ASSY, VRSB ASSY, FLKB ASSY, KALB ASSY

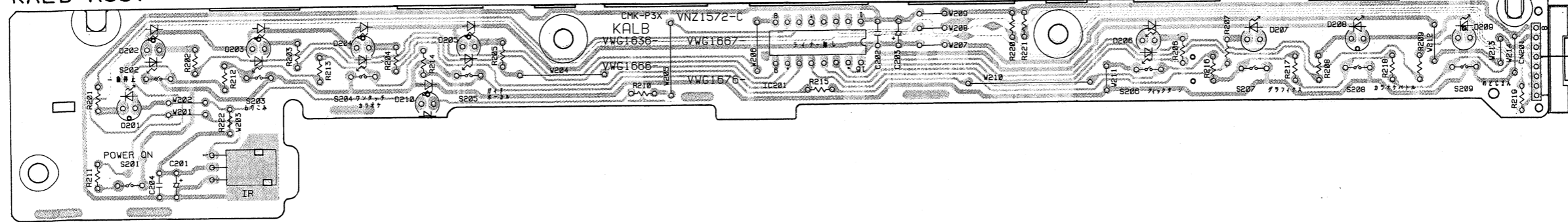
● This diagram is viewed from the mounted parts side.

PCB-3F

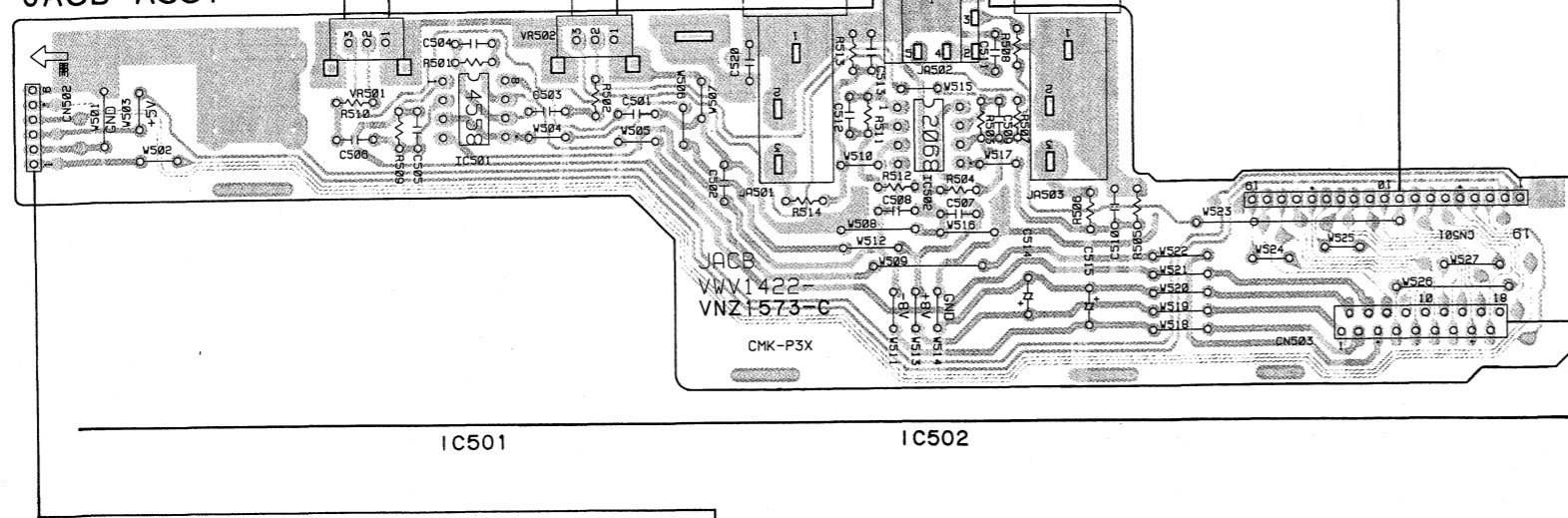
DIKB ASSY



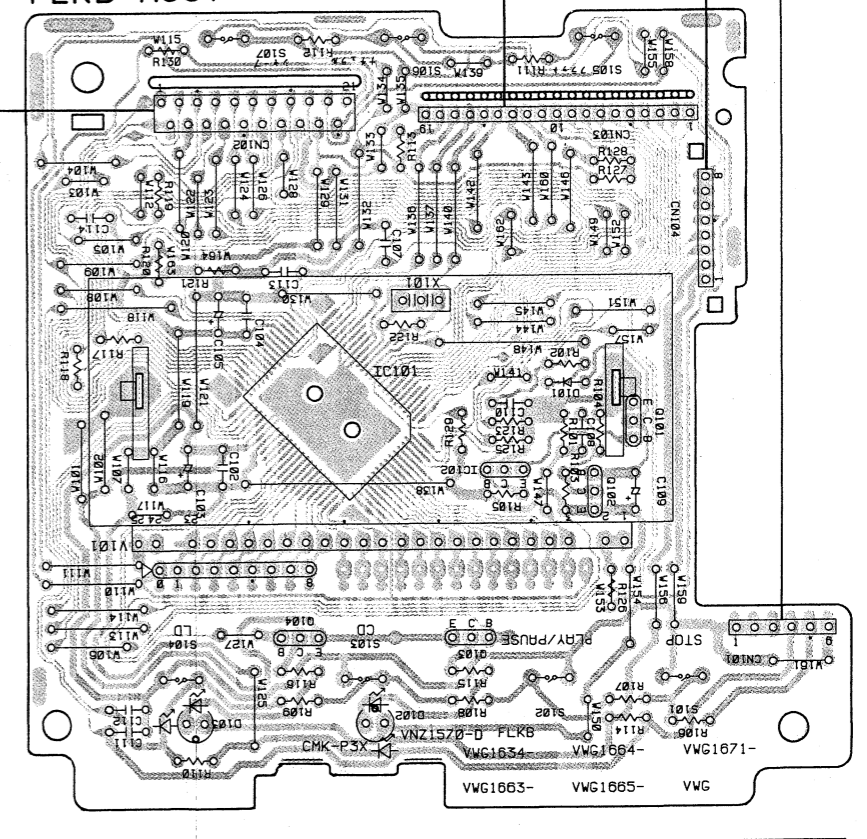
KALB ASSY



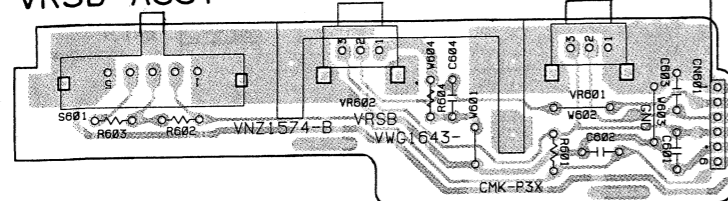
JACB ASSY



FLKB ASSY



VRSB ASSY



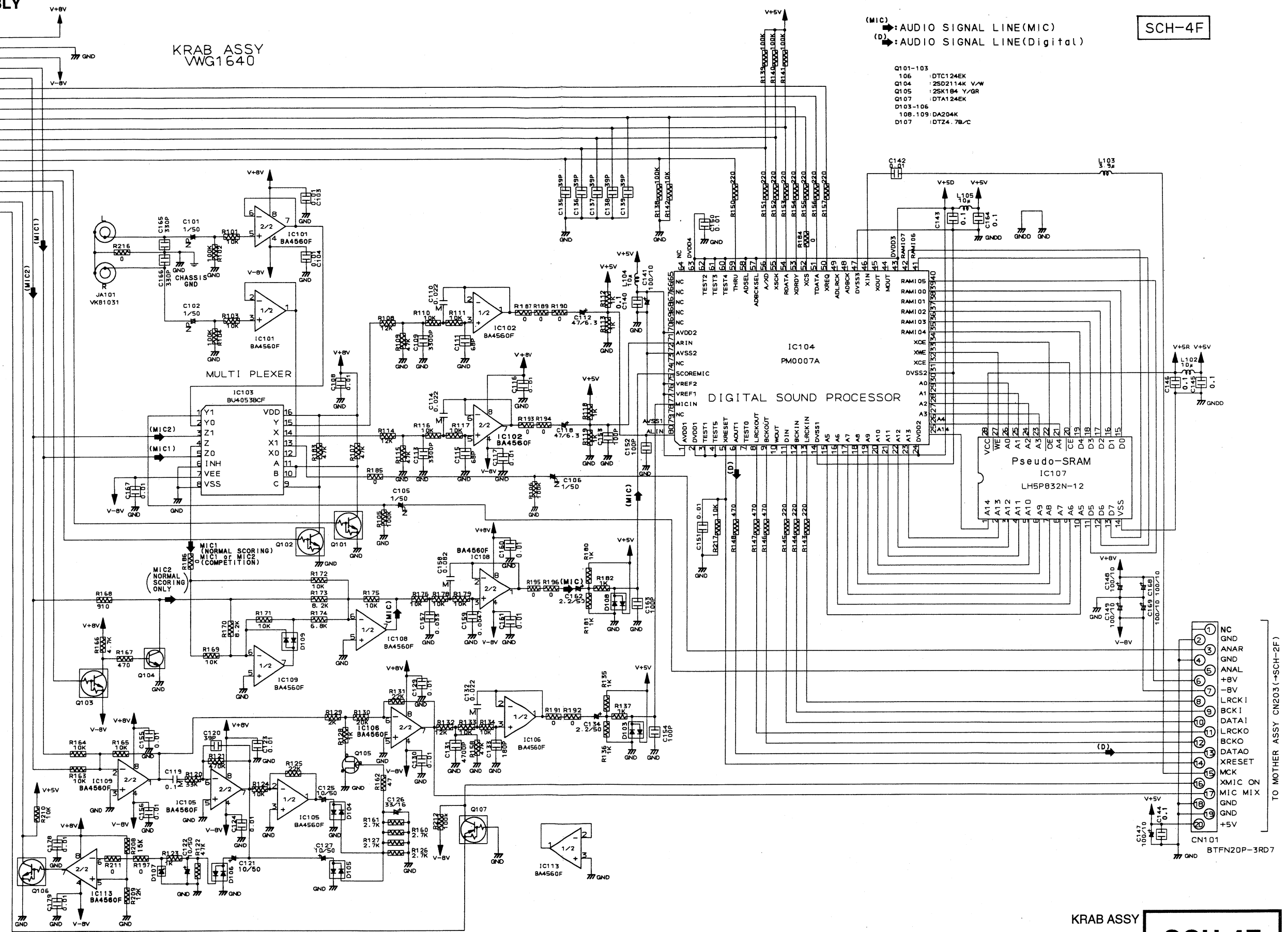
IC101 Q104 IC102 Q102 Q101 Q103

VNP1512-D

2.4 KRAB ASSEMBLY

SCH-4F

- Q101-103 : DTC124EK
- Q104 : 2SC2114K V/V
- Q105 : 2SK184 V/QR
- Q107 : DTA124EK
- D103-106 : 10B-109 DA204K
- D107 : DTZ4.7B/C



KRAB ASSY
SCH-4F

KRAB ASSY
SCH-4F

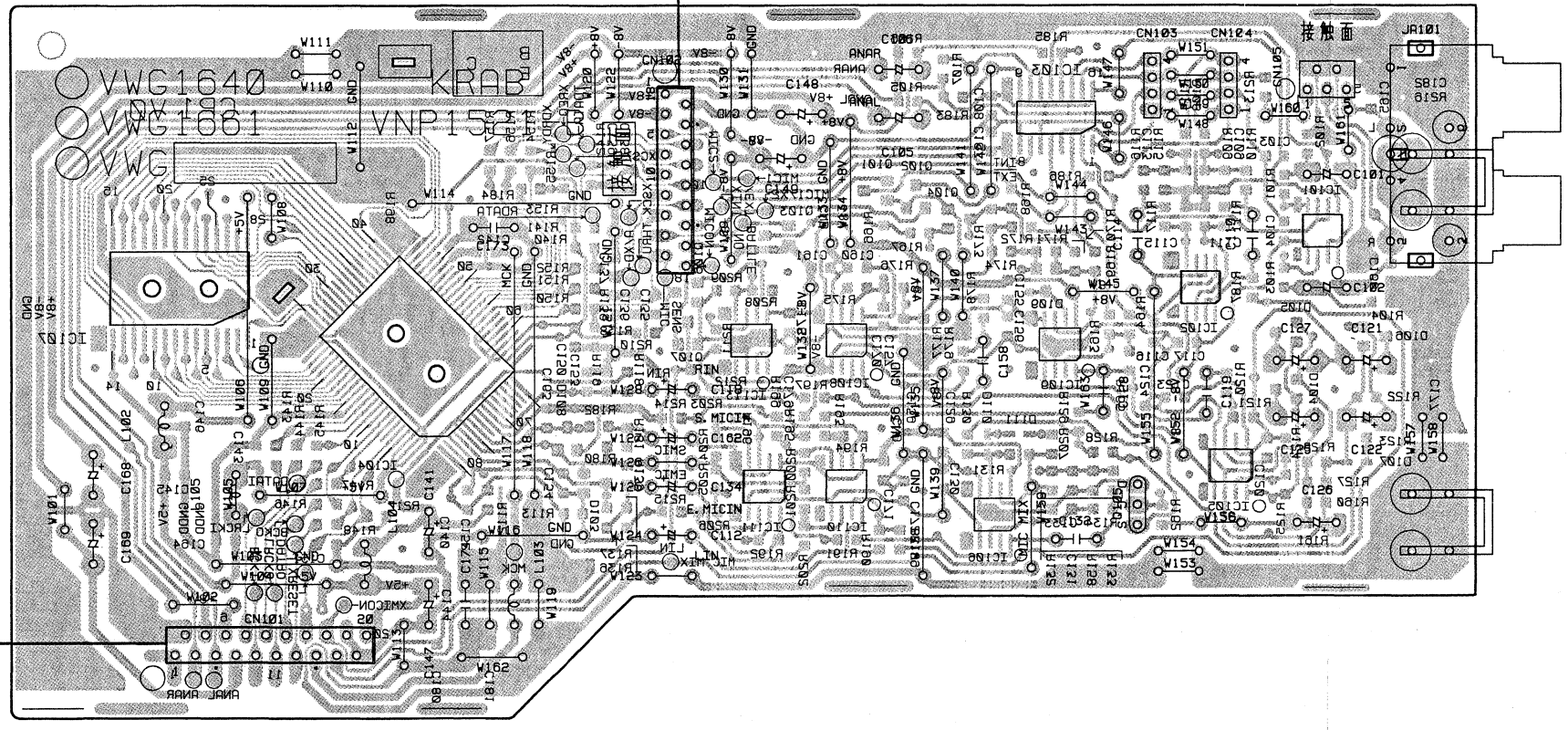
1 2 3 4 5 6

A

A

● This diagram is viewed from the mounted parts side.

KRAB ASSY TO JACB ASSY CN503 PCB-4F



B

B

C

C

TO MOTHER ASSY CN203

D

D

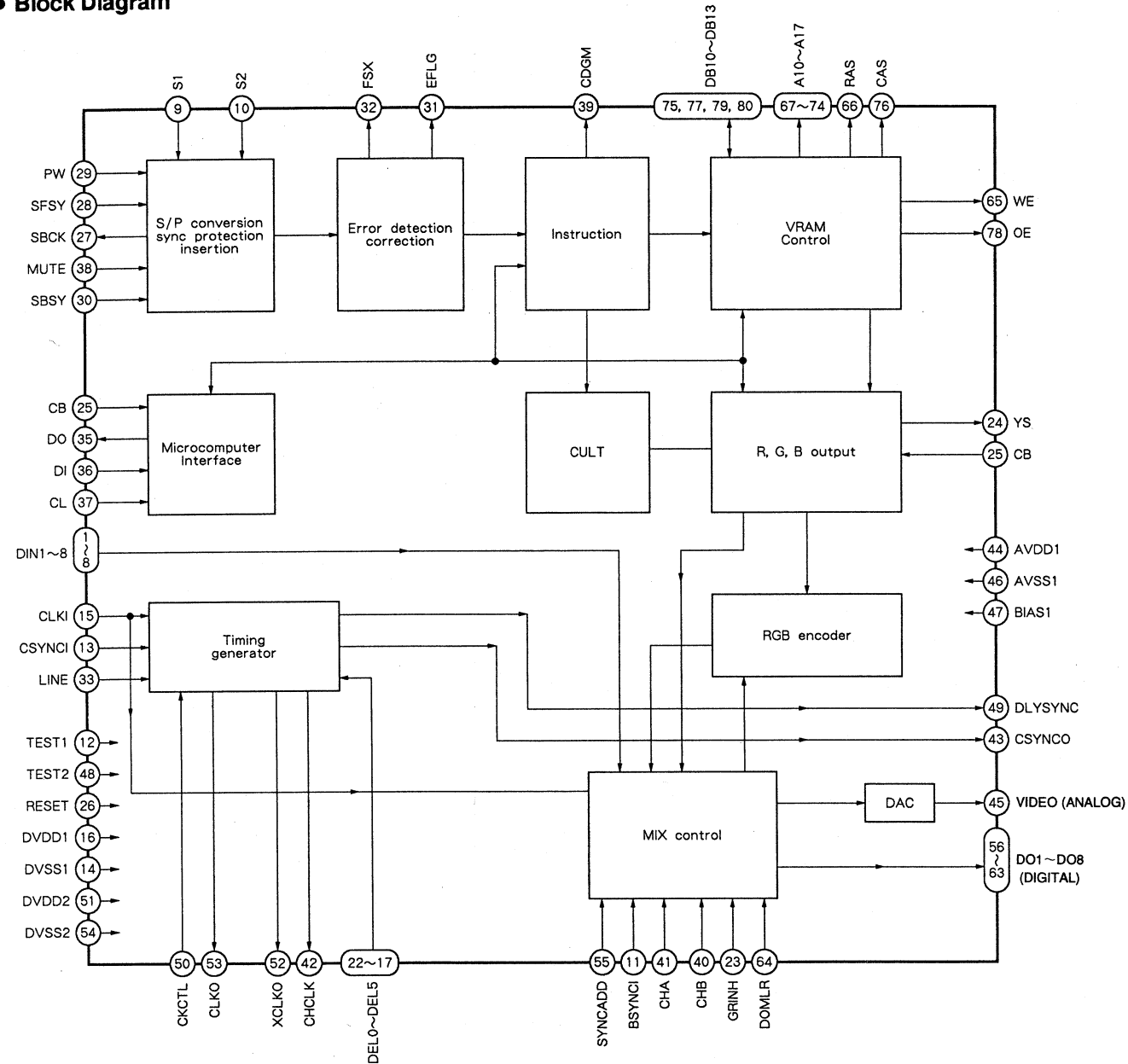
1 2 3 4 5 6

3. IC INFORMATION

● The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ **PDC016A (GYCB ASSY IC103)**
 ● **DIGITAL GRAPHICS DECODER for LD**

● **Block Diagram**



● **Pin Function**

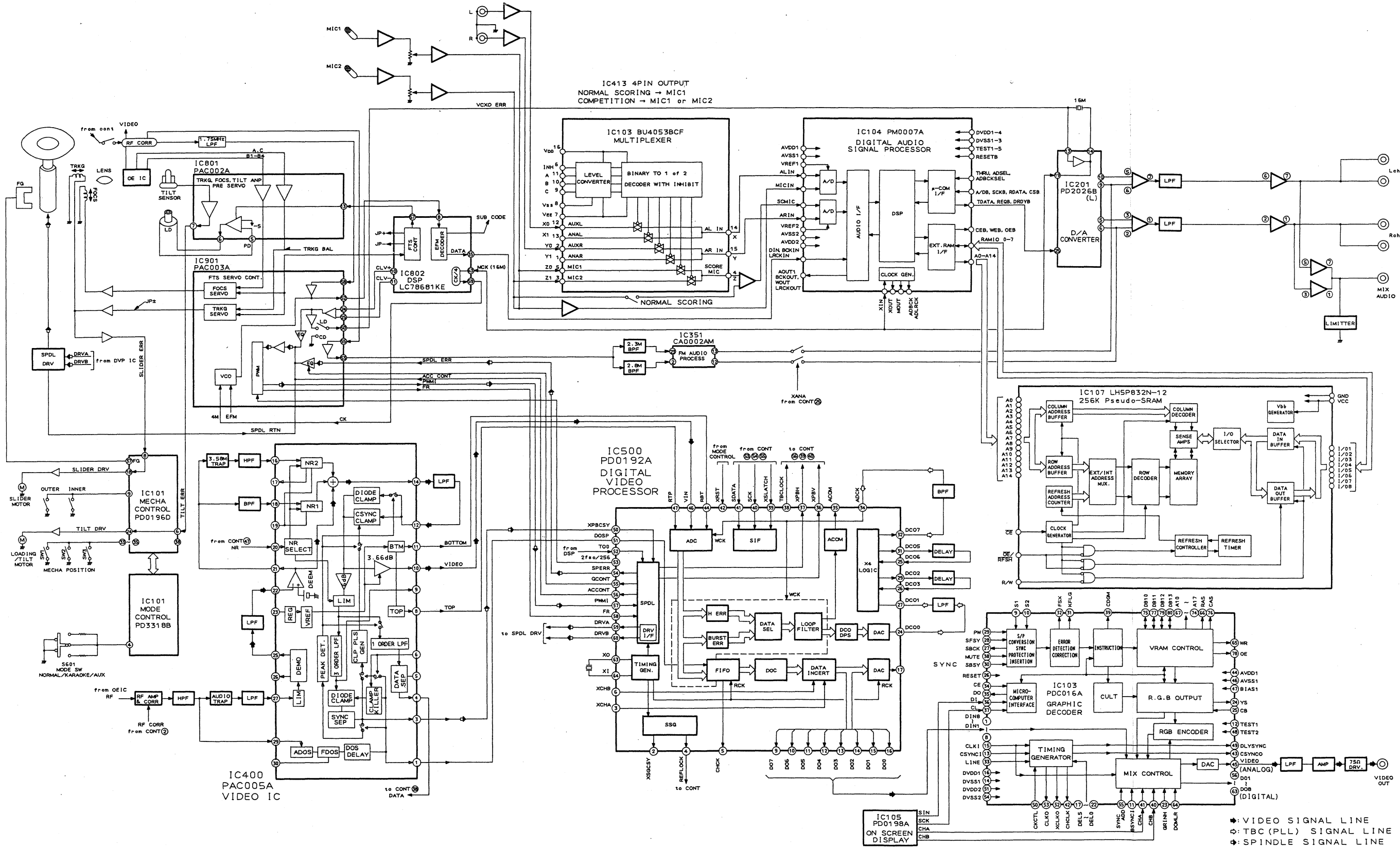
No.	Name	Pin Name	I/O	Function															
1	DIN8	Video data input pin	I	Digital video data input. (MSB)															
2	DIN7			Digital video data input.															
7	DIN2			Digital video data input.															
8	DIN1			Digital video data input.(LSB)															
9	S1	DSP selection pin	I	<table border="1"> <thead> <tr> <th>S1</th> <th>S2</th> <th>Select DSP</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>LC7861N/67</td> </tr> <tr> <td>0</td> <td>1</td> <td></td> </tr> <tr> <td>1</td> <td>0</td> <td>LC7860K/63</td> </tr> <tr> <td>1</td> <td>1</td> <td>LC7868/69/681/681KE</td> </tr> </tbody> </table>	S1	S2	Select DSP	0	0	LC7861N/67	0	1		1	0	LC7860K/63	1	1	LC7868/69/681/681KE
S1	S2				Select DSP														
0	0	LC7861N/67																	
0	1																		
1	0	LC7860K/63																	
1	1	LC7868/69/681/681KE																	
10	S2																		
11	BSYNCO	Ref. SYNC input pin	I	Reference SYNC signal input for burst phase judgment.															
12	TEST1	Test input pin	I	Test input. Normally, fix to "L".															
13	CSYNCO	Composite sync signal input pin	I	Composite sync signal input.															
14	DVSS1	Ground pin	-	Digital system GND.															
15	CLKI	Clock input pin	I	4fsc clock input. (self bias input)															
16	DVDD1	Power supply pin (+5V)	-	Digital system power supply.															
17	DEL5	Amount of delay setting input pin	I	Set the amount of the delay of composite sync signal. (MSB)															
18	DEL4			Set the amount of the delay of composite sync signal.															
21	DEL1			Set the amount of the delay of composite sync signal.															
22	DEL0			Set the amount of the delay of composite sync signal. (LSB)															
23	GRINH	Graphic INH pin	I	Graphic display INHIBIT control input.															
24	YS	Super impose output pin	O	Super impose control output.															
25	CB	Color bar selection pin	I	"L": Normal mode, "H": Color bar output															
26	RESET	Reset input pin	I	Reset signal input.															
27	SBCK	Clock output pin	O	Subcode R-W reading clock output.															
28	SFSY	Sync signal input pin	I	Subcode frame sync signal input.															
29	PW	Data input pin	I	Subcode R-W data input.															
30	SBSY	Sync signal input pin	I	Subcode block sync signal input.															
31	EFLG	Error state monitor output pin	O	Error state monitor signal output.															
32	FSX	Error state monitor trigger pin	O	Error state monitor trigger signal output.															
33	LINE	LINE number selection pin	I	Line number selection input. "H"=263H, "L"=262H(at noninterlace)															
34	CE	Enable input pin	I	Control input of serial input/output data.															
35	DO	Data output pin	O	Serial data output.															
36	DI	Data input pin	I	Serial data input.															
37	CL	Clock input pin	I	Clock input for serial data input/output.															
38	MUTE	Mute pin	I	Control signal input for invaliding the subcode data.															
39	CDGM	Graphic data discrimination output pin	O	This pin becomes "H" when graphic instruction is input. (Reset "L" for command control.)															
40	CHB	OSD data input pin	I	OSD edge data input.															
41	CHA		I	OSD character data input.															
42	CHCLK	Clock output pin	O	2fsc clock output. (Lock by burst signal)															
43	CSYNCO	Composite sync output pin	O	Composite sync signal output.															
44	AVDD1	Power supply pin (+5V)	-	Analog system power supply.															
45	VIDEO	Composite video signal output	O	Composite video signal output. (8 bit DAC output)															
46	AVSS1	Ground	-	Analog system GND.															
47	BIAS1	Capacitor connection pin	O	Connect a capacitor for eliminating the ripple.															

● Pin Function

No.	Name	Pin Name	I/O	Function															
1	DIN8	Video data input pin	I	Digital video data input. (MSB)															
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S1	S2				Select DSP														
0	0	LC7861N/67																	
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26	RESET	Reset input pin	I	Reset signal input.															
27	SBCK	Clock output pin	O	Subcode R-W reading clock output.															
28	SFSY	Sync signal input pin	I	Subcode frame sync signal input.															
29	PW	Data input pin	I	Subcode R-W data input.															
30	SBSY	Sync signal input pin	I	Subcode block sync signal input.															
31	EFLG	Error state monitor output pin	O	Error state monitor signal output.															
32	FSX	Error state monitor trigger pin	O	Error state monitor trigger signal output.															
33	LINE	LINE number selection pin	I	Line number selection input. "H"=263H, "L"=262H(at noninterlace)															
34	CE	Enable input pin	I	Control input of serial input/output data.															
35	DO	Data output pin	O	Serial data output.															
36	DI	Data input pin	I	Serial data input.															
37	CL	Clock input pin	I	Clock input for serial data input/output.															
38	MUTE	Mute pin	I	Control signal input for invalidating the subcode data.															
39	CDGM	Graphic data discrimination output pin	O	This pin becomes "H" when graphic instruction is input. (Reset "L" for command control.)															
40	CHB	OSD data input pin	I	OSD edge data input.															
41	CHA			OSD character data input.															
42	CHCLK	Clock output pin	O	2fsc clock output. (Lock by burst signal)															
43	CSYNC \bar{O}	Composite sync output pin	O	Composite sync signal output.															
44	AVdd1	Power supply pin (+5V)	-	Analog system power supply.															
45	VIDEO	Composite video signal output	O	Composite video signal output. (8 bit DAC output)															
46	AVss1	Ground	-	Analog system GND.															
47	BIAS1	Capacitor connection pin	O	Connect a capacitor for eliminating the ripple.															

No.	Name	Pin Name	I/O	Function
48	TEST2	Input pin for test	I	Test input. in the normal operation, Error correction logical selection pin. ("H"=PQPQ, "L"=QPQ)
49	DLYSYNC	Delayed composite sync output pin	O	Delayed composite sync signal output.
50	CKCTL	Clock polarity selection pin	I	BSYNC \bar{I} latch selection pin. "H"=FSC4, "L"=FSC4 (This pin will be input pin for test at test.)
51	DVdd2	Power supply pin (+5V)	-	Digital system power supply.
52	XCLKO	Inversion clock output pin	O	4fsc inversion clock output.
53	CLKO	Clock output pin	O	4fsc clock output.
54	DVss2	Ground pin	-	Digital system GND.
55	SYNCADD	CSYNC selection input pin	I	Additional selection input of the composite sync signal to 8 bit input data. "H"=Add, "L"=Not add
56	DO1	Video data output pins	O	Digital composite video signal output. (LSB)
57	DO2			Digital composite video signal output.
62	DO7			Digital composite video signal output. (MSB)
63	DO8			
64	DOMLR	Data inversion selection input pin	I	Inverting selection input of the video digital signal output pin. "H"=Invert (LSB \rightarrow MSB), "L"=Not invert
65	WE	Output pins for DRAM	O	Writing enable signal output of DRAM.
66	RAS		O	Line address strobe signal output of DRAM.
67	A10		O	DRAM address (A0) output.
68	A11		O	DRAM address (A1) output.
69	A12		O	DRAM address (A2) output.
70	A13		O	DRAM address (A3) output.
71	A14		O	DRAM address (A4) output.
72	A15		O	DRAM address (A5) output.
73	A16		O	DRAM address (A6) output.
74	A17		O	DRAM address (A7) output.
75	DB10		I/O	DRAM address (D0) input/output.
76	CAS		O	Row address strobe signal output of DRAM.
77	DB11		I/O	DRAM address (D1) input/output.
78	OE	O	DRAM reading enable signal output.	
79	DB12	I/O	DRAM address (D2) input/output.	
80	DB13	I/O	DRAM address (D3) input/output.	

4. BLOCK DIAGRAM



● VIDEO SIGNAL LINE
 ○ TBC (PLL) SIGNAL LINE
 ◆ SPINDLE SIGNAL LINE