

Service Manual

SR19A/K1G, /S1G, /C1G, /U1G, /U1B

AV Surround Receiver

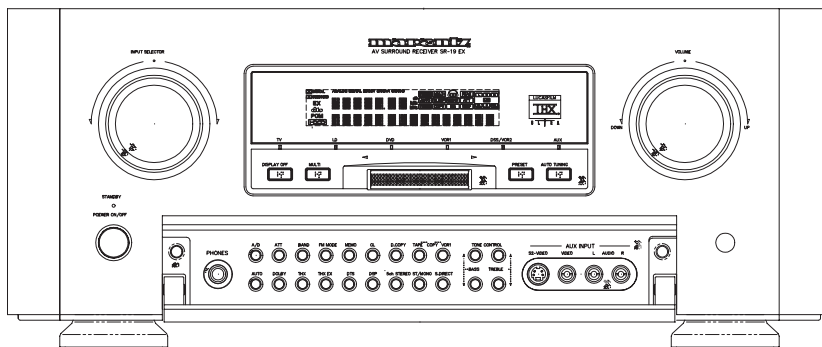


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Please use this service manual with referring to the user guide (D.F.U) without fail.

marantz®

SR-19EX

Printed in Japan

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SR-19EX

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

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FAX : +822 - 3232 - 154

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 1492.

In case of difficulties, do not hesitate to contact the Technical
Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

FM TUNER SECTION

Frequency Range 87.5 - 108.0 MHz (C, K, S, U version)
Usable Sensitivity IHF 1.8 μ V / 16.4 dBf
Signal to Noise Ratio Mono / Stereo 76 / 72 dB
Distortion Mono / Stereo 0.2 / 0.3 %
Stereo Separation 1 kHz 45 dB
Alternate Channel Selectivity $\pm$ 400 kHz 60 dB (U version)
 $\pm$ 300 kHz 60 dB (C, K, S version)
Image Rejection 98 MHz 70 dB
Tuner Output Level 1 kHz, 75 kHz Dev 800 mV (U version)
1 kHz, 40 kHz Dev 800 mV (C, K, S version)

AM TUNER SECTION

Frequency Range AM: 520 - 1710 kHz (U version)
531 - 1602 or 520 - 1710 kHz (K version)
531 - 1602 kHz (C, S version)

Signal to Noise Ratio 50 dB
Usable Sensitivity Loop 400 μ V
Distortion 400 Hz, 30 % Mod. 0.5 %
Selectivity $\pm$ 20 kHz 70 dB (U version)
 $\pm$ 18 kHz 70 dB (C, K, S version)

AUDIO SECTION

Rated Power
FRONT (20 Hz - 20 kHz) 8 ohms 130W / Ch
Center (20 Hz - 20 kHz) 8 ohms 130W / Ch
Surround (20 Hz - 20 kHz) 8 ohms 130W / Ch
THD Front (20 Hz - 20 kHz) 8 ohms 0.05%
Input Sensitivity / Impedance
Linear 350 mV / 47 kohms
Signal to Noise Rate (IHF A)
Linear 106 dB
Frequency Response
(Analog Input / Source Direct) 8 Hz - 80 kHz ($\pm$ 3 dB)
(Digital Input / 96 kHz PCM) 8 Hz - 45 kHz ($\pm$ 3 dB)

VIDEO

Television Format NTSC (U version)
PAL/NTSC (C, K, S version)
Input Level / Impedance 1 Vp-p / 75 ohms
Output Level / Impedance 1 Vp-p / 75 ohms
Video Frequency Response 5 Hz to 8 MHz (- 1 dB)
S/N 60 dB

GENERAL

Power Requirement AC 120V 60 Hz (U version)
AC 220V 50 / 60 Hz (K version)
AC 230V 50 Hz (S version)
AC 220V 60 Hz (C version)
Power Consumption 530W
Dimension (MAX)
Width 18 inches (458 mm)
Height 7 - 1/2 inches (190 mm)
Depth 19 - 1/2 inches (496 mm)
Weight 55.8 lds. (25.3 kg)

ACCESSORIES

Remote Control Unit
RC-18SR 1

Dolby Digital(AC-3) SECTION

Output Level (Master Volume is set 0dB)

Front L / R, CENTER, SURROUND L/R

1 kHz, -20 dB FS INPUT 0.24V

SUBWOOFER

40 Hz, 0 dB FS INPUT 7.5V

Frequency Response

Front L / R, CENTER, SURROUND L / R (LARGE)

20 Hz - 20 kHz -0.5 dB

Total Harmonic Distortion

Front L / R, CENTER, SURROUND L / R and

SBL / SB (1 kHz) 0.01% or less

SUBWOOFER (40 Hz) 0.07% or less

Signal to Noise Ratio (IHF-A) 80 dB

Channel Separation (1 kHz) 95 dB

Specifications subject to change without prior notice.

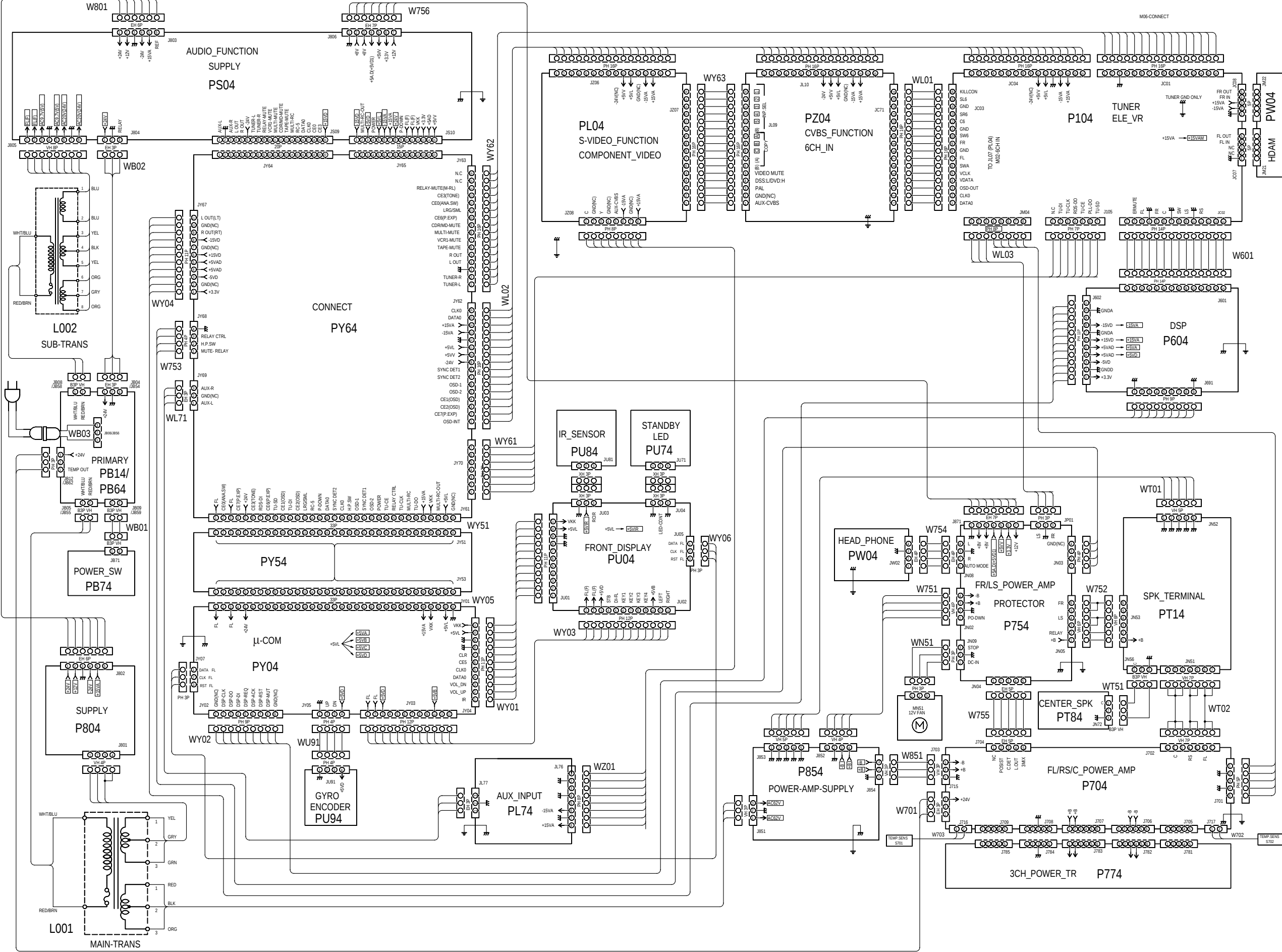
Remark : Bass signal output from Sub Woofer terminal for SR-19EX.

Sub woofer output is not active while all surround modes. Please refer to the following table.

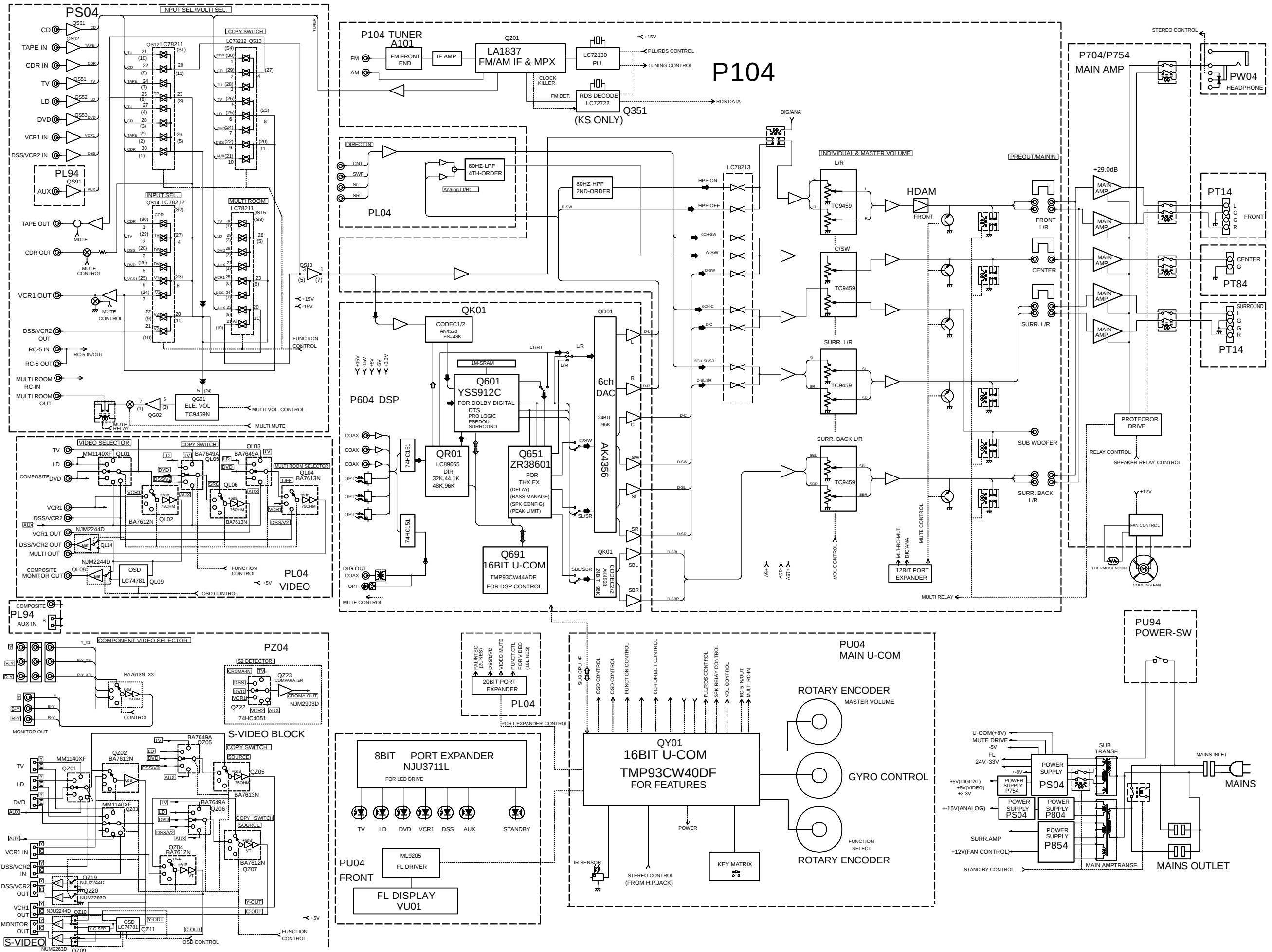
SPK SETUP for SR-19EX

SPK setup					ZR38601	SubWoofer Output by Surround mode								
Sub Woofer	Surr. Front	Center	L/R	Surr.B (L/R)	Bass CFG	THX Surr EX	THX5.1, Dolby-D, DTS	THX4.0, Logic	Pro	Stereo	AUTO (PCM,Ana)		NOTES	No.
ON	Large	Large	Large	Large	#						AUTO(AC-3,DTS)	(AC-3:2ch,karaoke)		
				Small	1	LFE	LFE	none		L+R	LFE	L+R		1
				Small	14	LFE+Sb	LFE							
			Small	Large	3	LFE+SL+SR	LFE+SL+SR	none		L+R	LFE+SL+SR	L+R		2
				Small	16	LFE+SL+SR+Sb	LFE+SL+SR							
			None	(prohibit)	1	LFE	LFE	none		L+R	LFE	L+R		3
			Large	Large	5	LFE+C	LFE+C	C		L+R	LFE+C	L+R		4
				Small	18	LFE+C+Sb	LFE+C							
			Small	Large	8	LFE+C+SL+SR	LFE+C+SL+SR	C		L+R	LFE+C+SL+SR	L+R		5
				Small	21	LFE+C+SL+SR+Sb	LFE+C+SL+SR							
			None	(prohibit)	5	LFE+C	LFE+C	C		L+R	LFE+C	L+R		6
			Large	Large	1	LFE	LFE	none		L+R	LFE	L+R		7
				Small	14	LFE+Sb	LFE							
			Small	Large	3	LFE+SL+SR	LFE+SL+SR	none		L+R	LFE+SL+SR	L+R		8
				Small	16	LFE+SL+SR+Sb	LFE+SL+SR							
			None	(prohibit)	1	LFE	LFE	none		L+R	LFE	L+R		9
			Large	Large	12	LFE+L+R	LFE+L+R	L+R		L+R	LFE+L+R	L+R		10
				Small	25	LFE+L+R+Sb	LFE+L+R							
			Small	Large	11	LFE+L+R+SL+SR	LFE+L+R+SL+SR	L+R		L+R	LFE+L+R+SL+SR	L+R		11
				Small	24	LFE+L+R+SL+SR+Sb	LFE+L+R+SL+SR							
			None	(prohibit)	12	LFE+L+R	LFE+L+R	L+R		L+R	LFE+L+R	L+R		12
			Large	Large	10	LFE+L+R+C	LFE+L+R+C	L+R+C		L+R	LFE+L+R+C	L+R		13
				Small	23	LFE+L+R+C+Sb								
			Small	Large	0	LFE+L+R+C+SL+SR	LFE+L+R+C+SL+SR	L+R+C		L+R	LFE+L+R+C+SL+SR	L+R		14
				Small	13	LFE+L+R+C+SL+SR+Sb								
			None	(prohibit)	10	LFE+L+R+C	LFE+L+R+C	L+R+C		L+R	LFE+L+R+C	L+R		15
			Large	Large	12	LFE+L+R	LFE+L+R	L+R		L+R	LFE+L+R	L+R		16
				Small	25	LFE+L+R+Sb								
			Small	Large	11	LFE+SL+SR	LFE+SL+SR	L+R		L+R	LFE+SL+SR	L+R		17
				Small	24	LFE+SL+SR+Sb								
			None	(prohibit)	12	LFE+L+R	LFE+L+R	L+R		L+R	LFE+L+R	L+R		18
OFF						No output to subW								

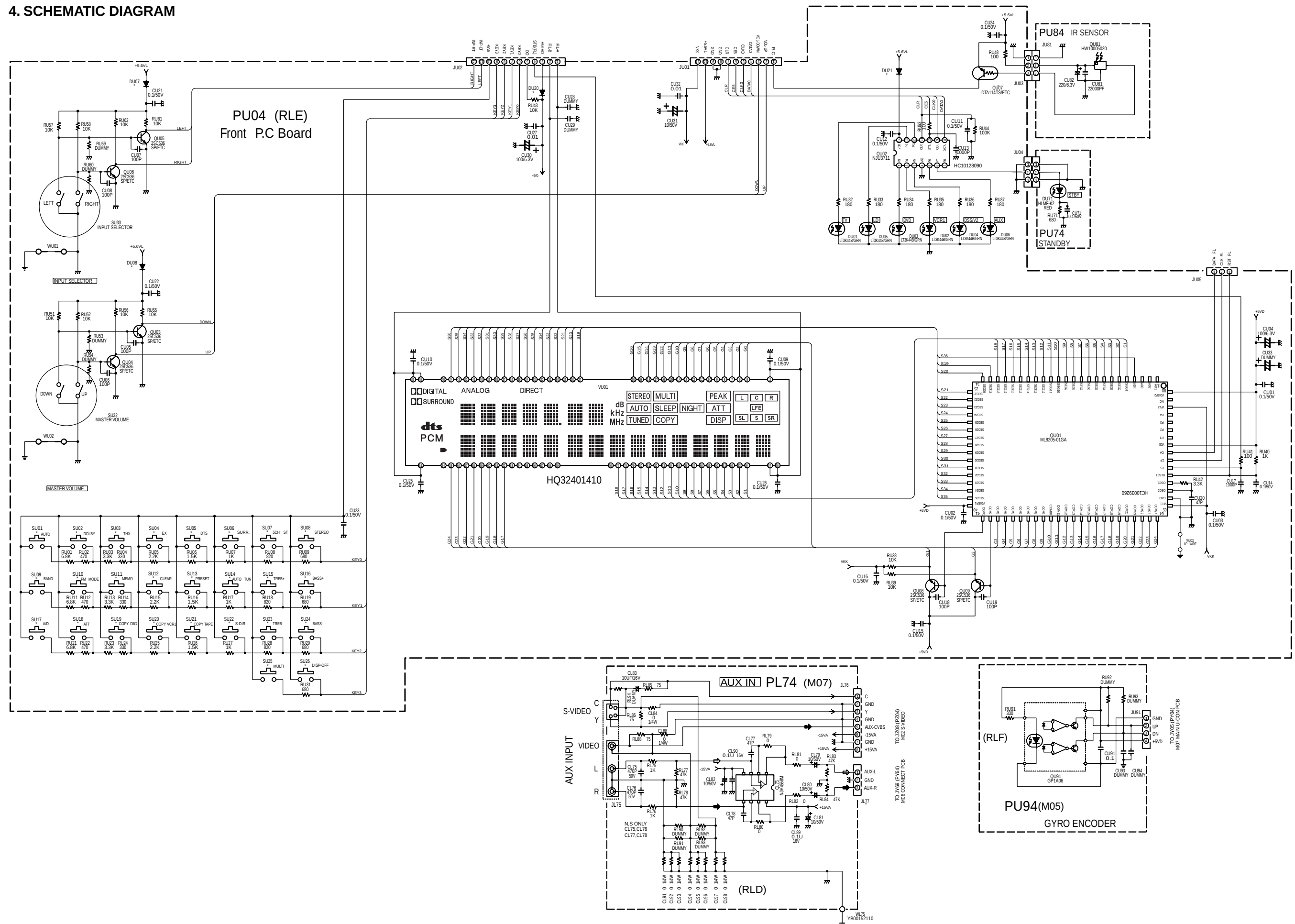
2. WIRING DIAGRAM

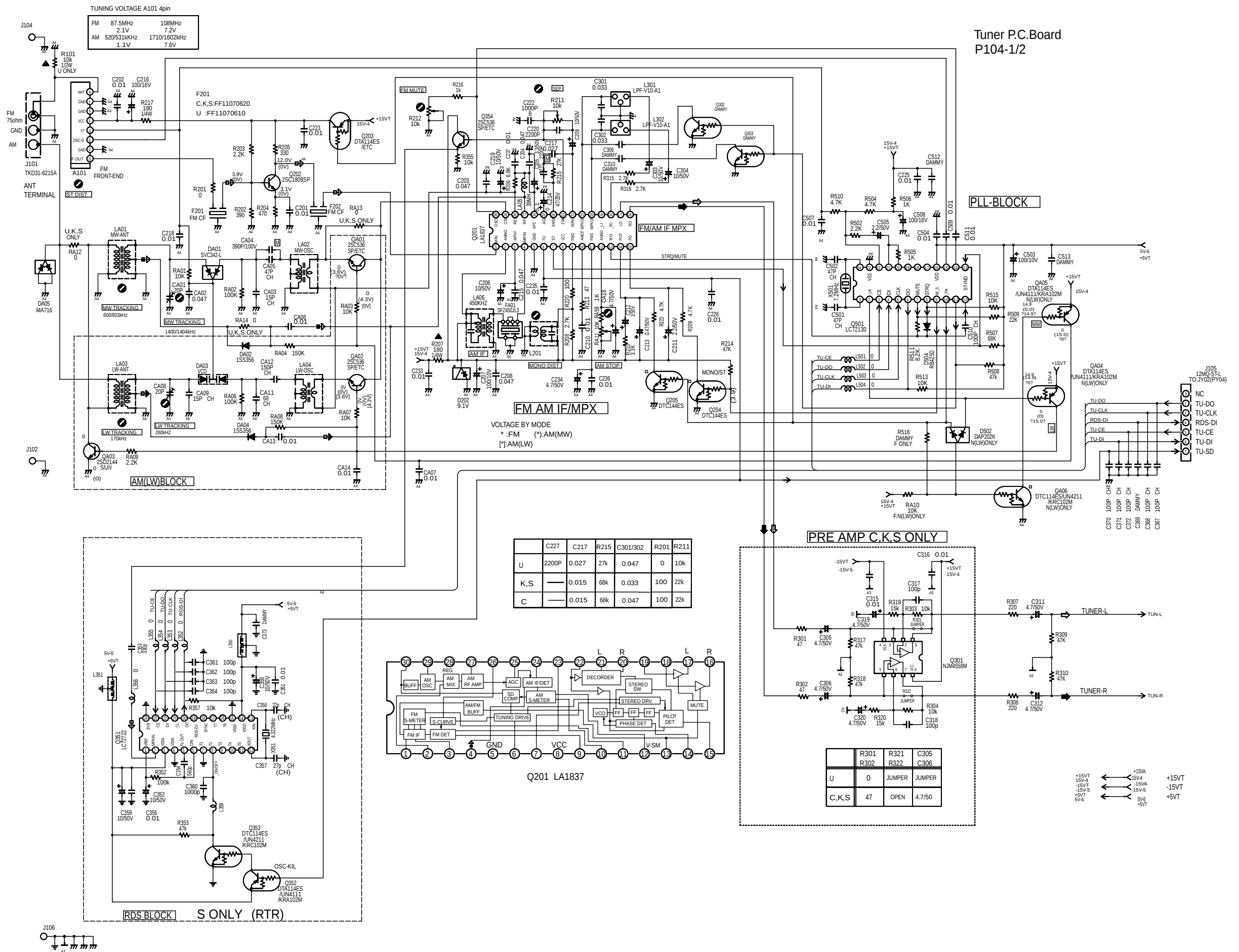


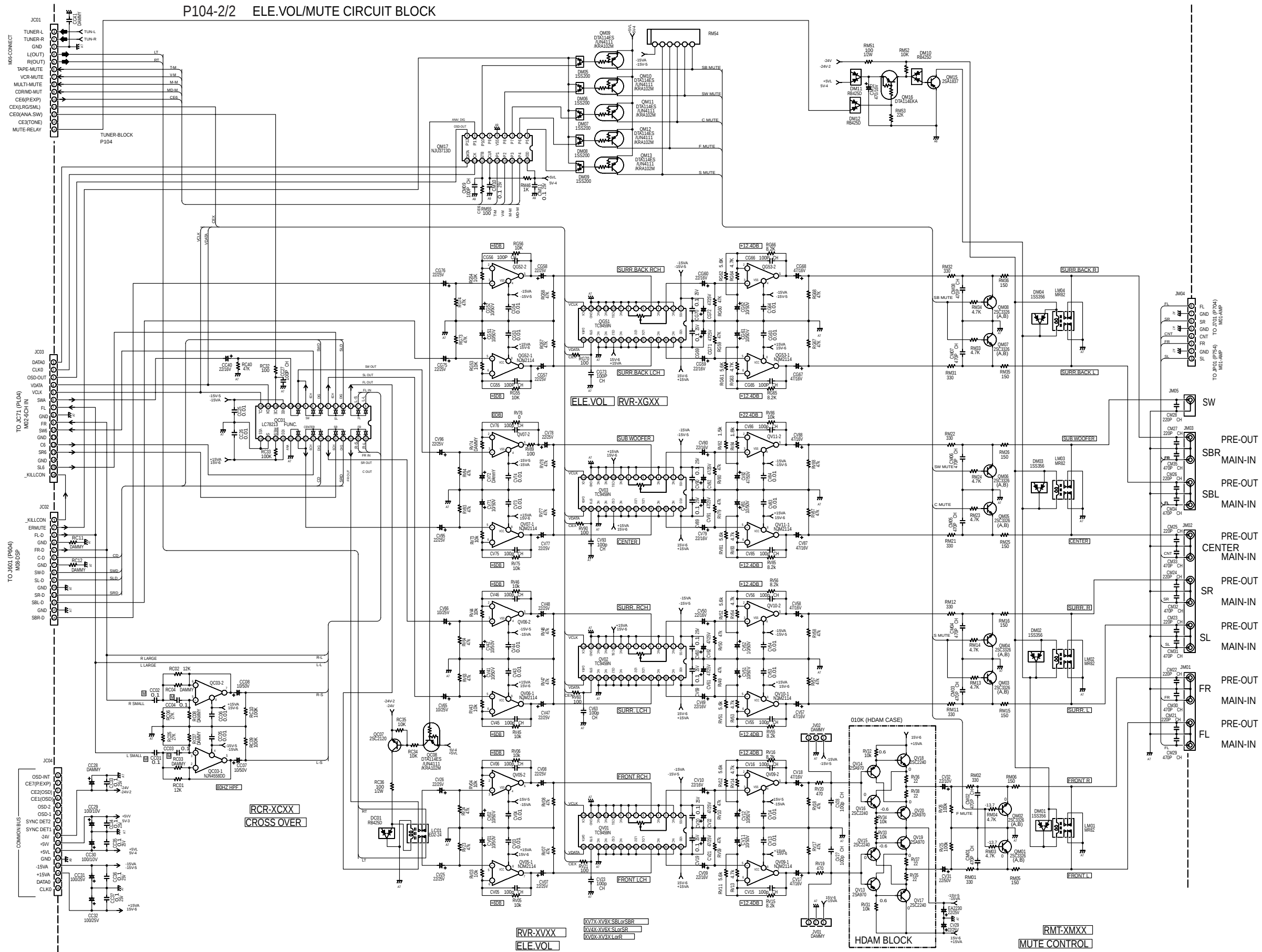
3. BLOCK DIAGRAM

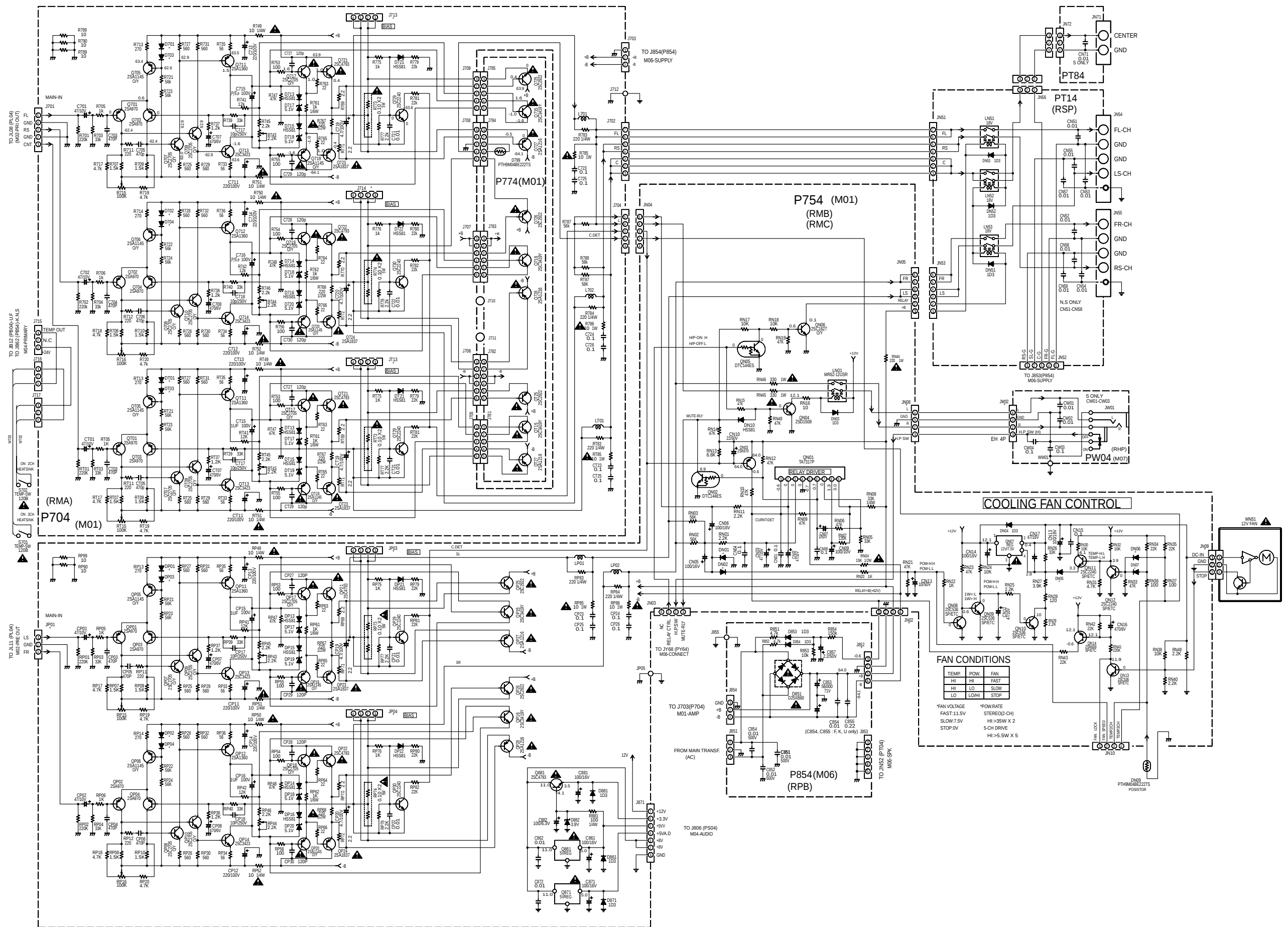


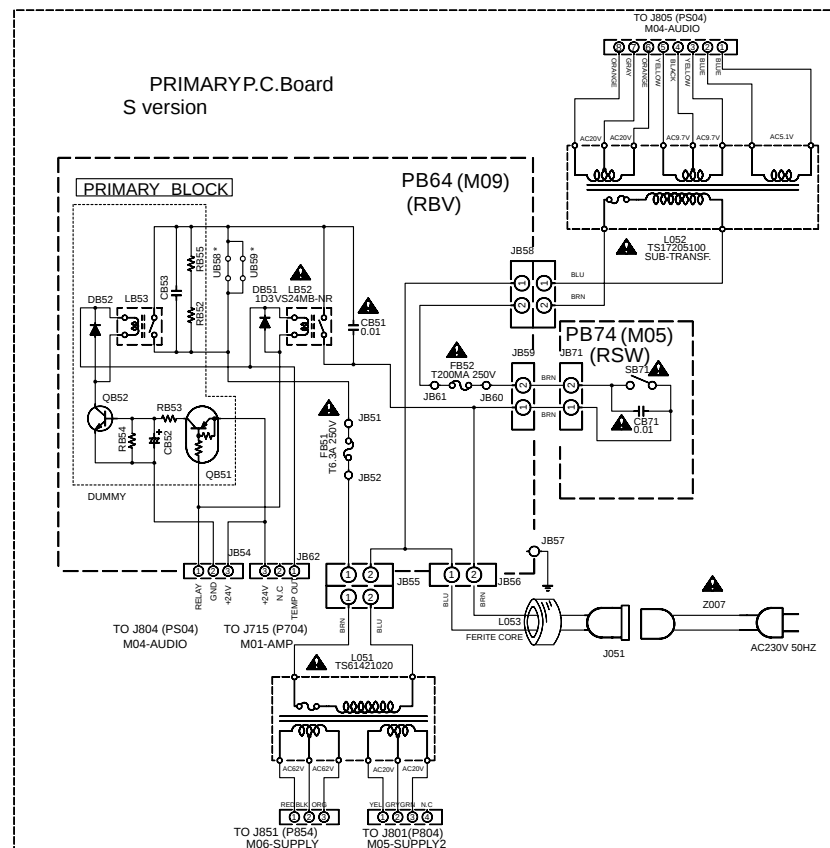
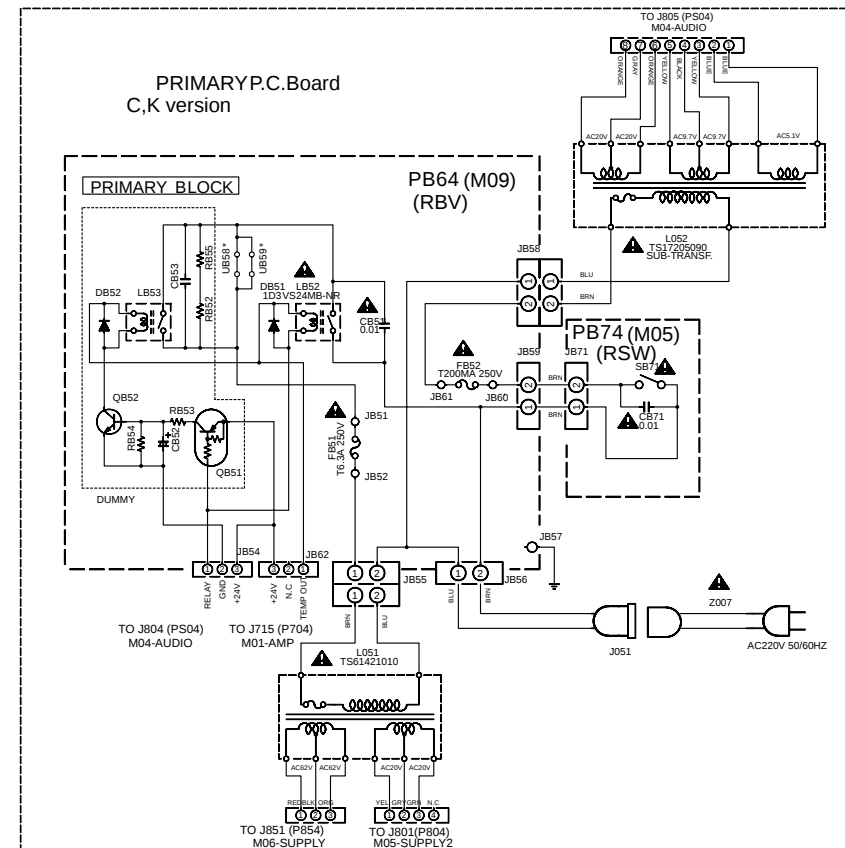
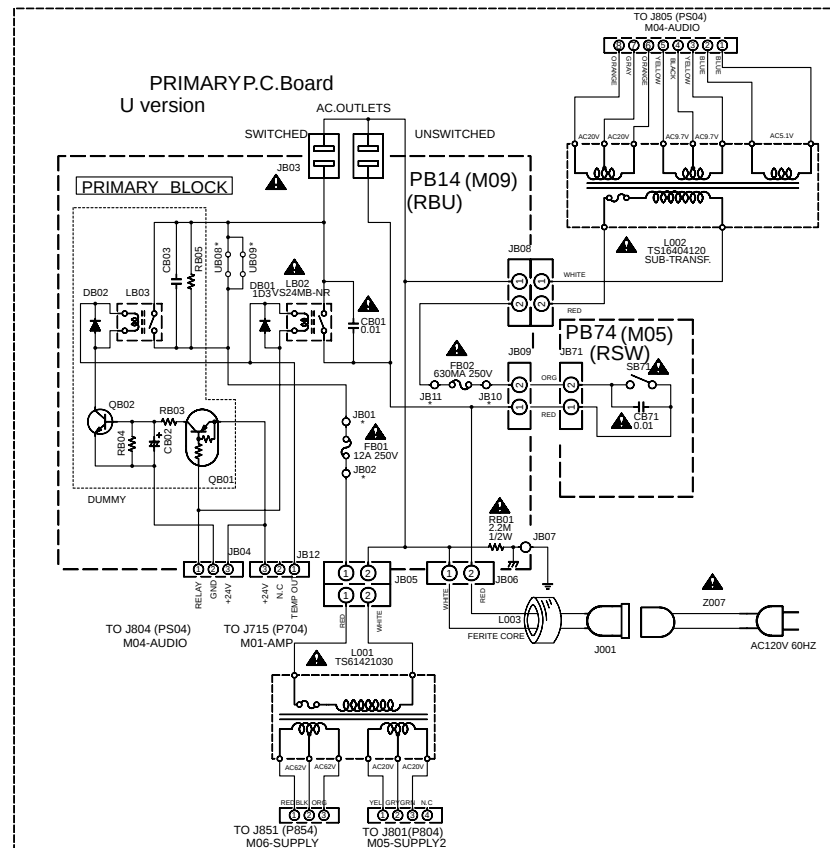
4. SCHEMATIC DIAGRAM





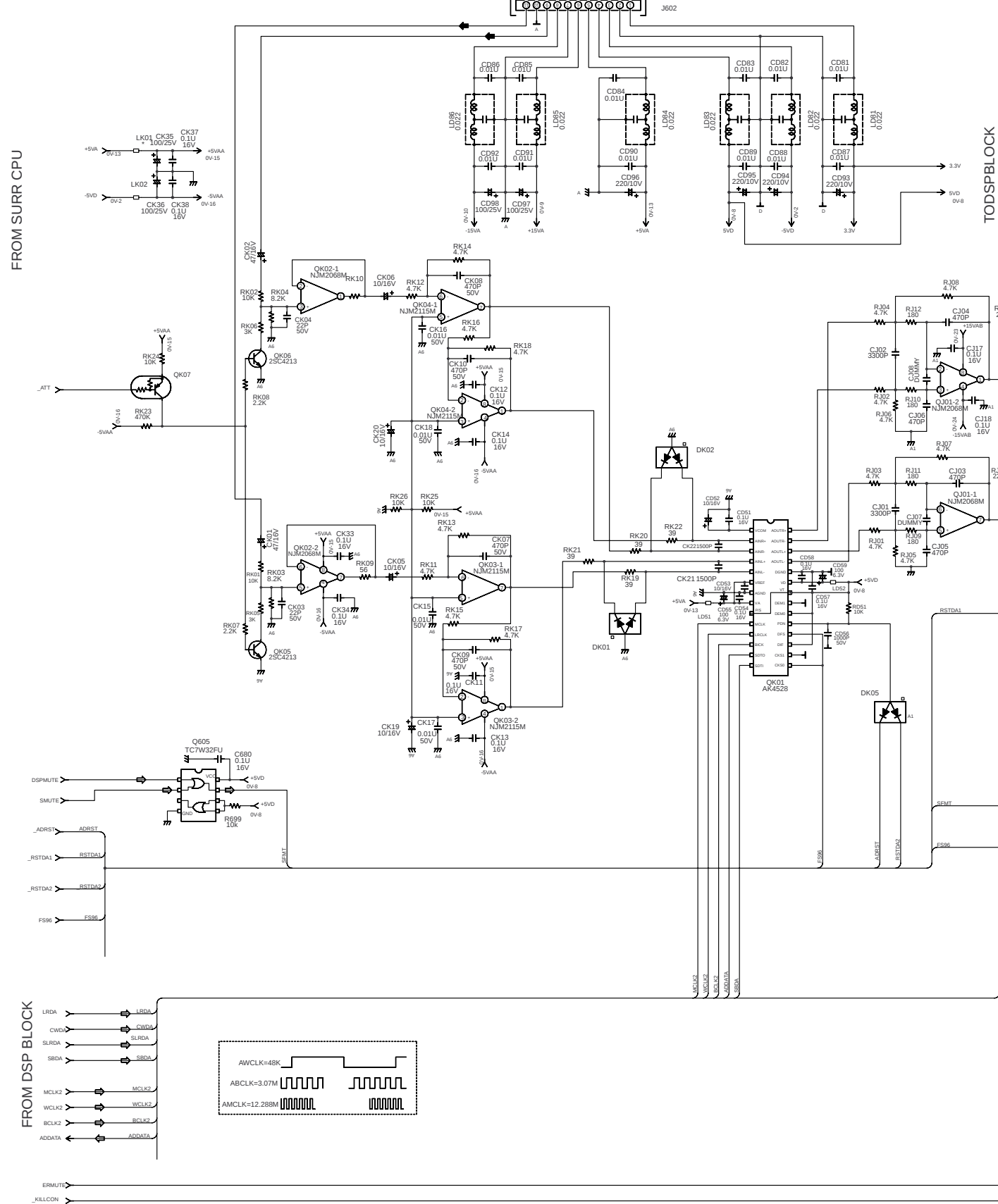








FROM SURR CPU



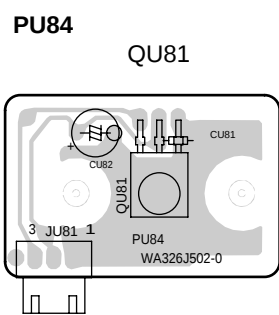
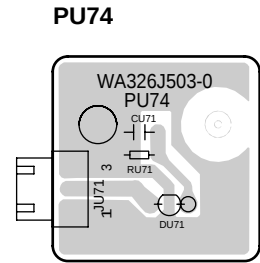
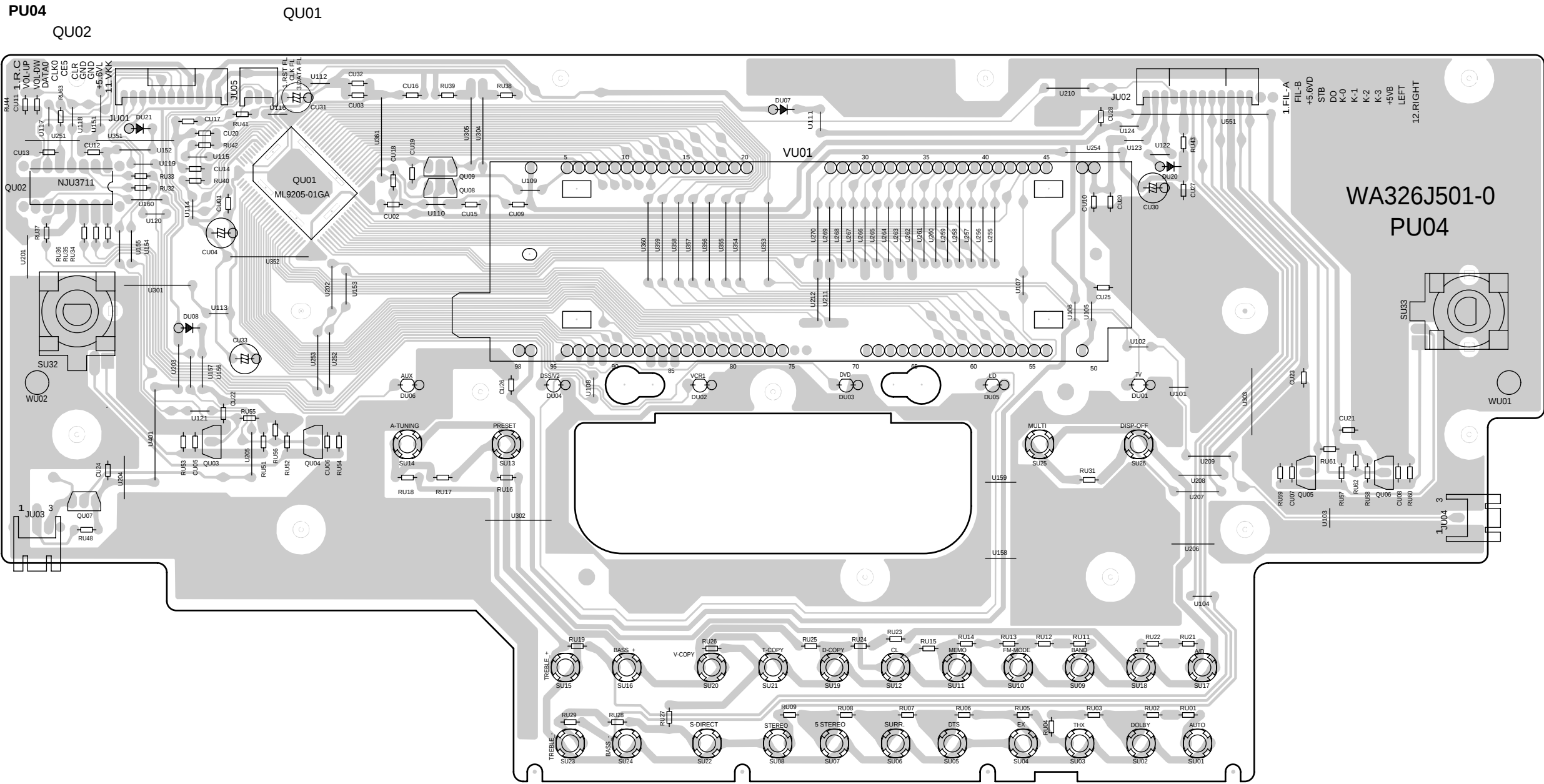
P604
(M08)

TODSPBLOCK

RDD
DACBLOCK

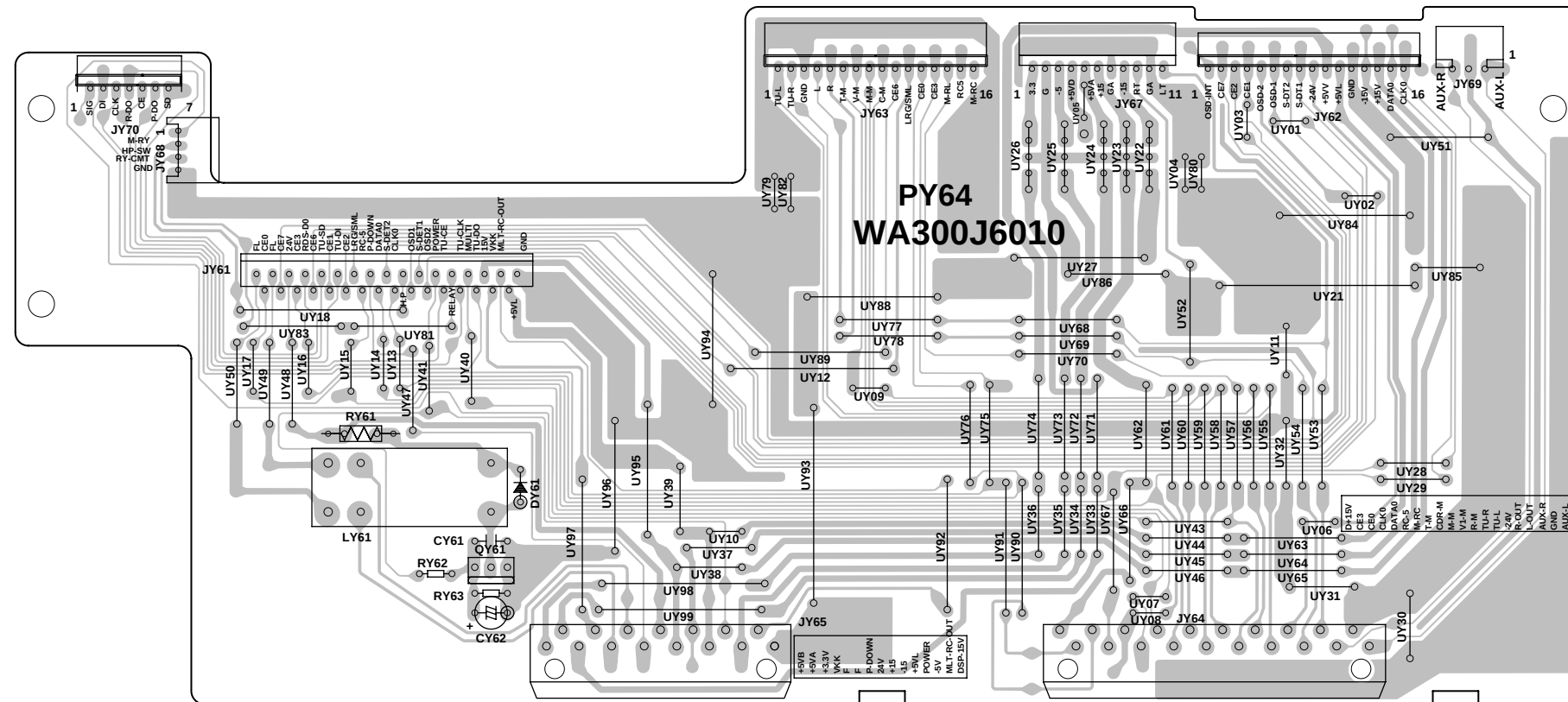
TOJC02(P104)
M03-VOLUME

5. PARTS LOCATION (Pattern Side)



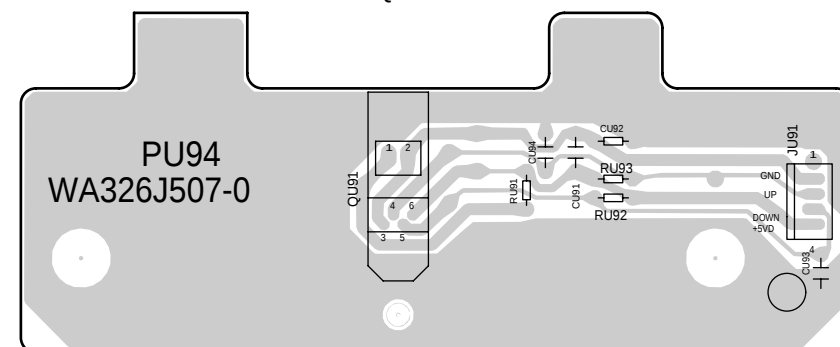
PY64

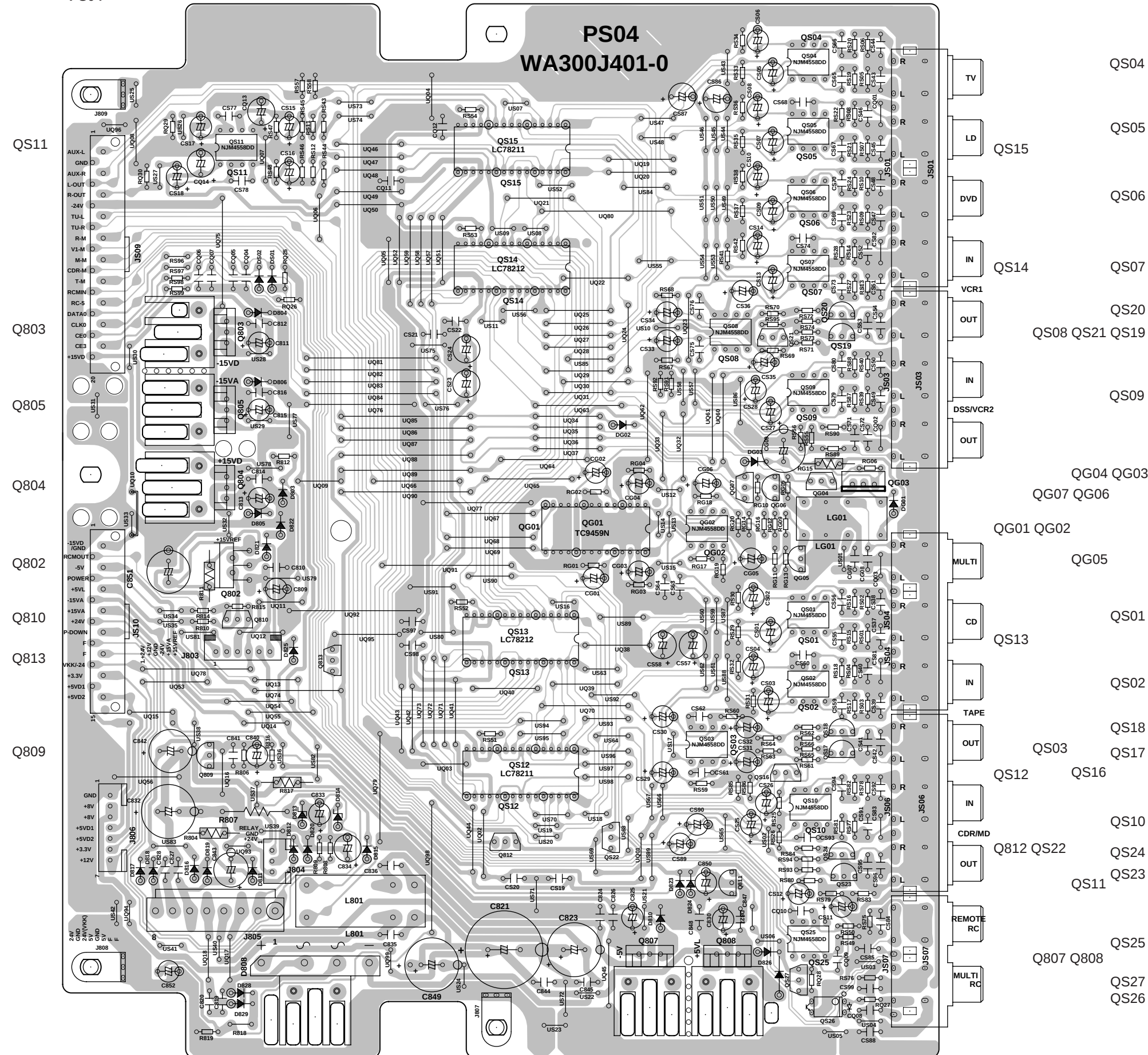
QY61



PU94

QU91

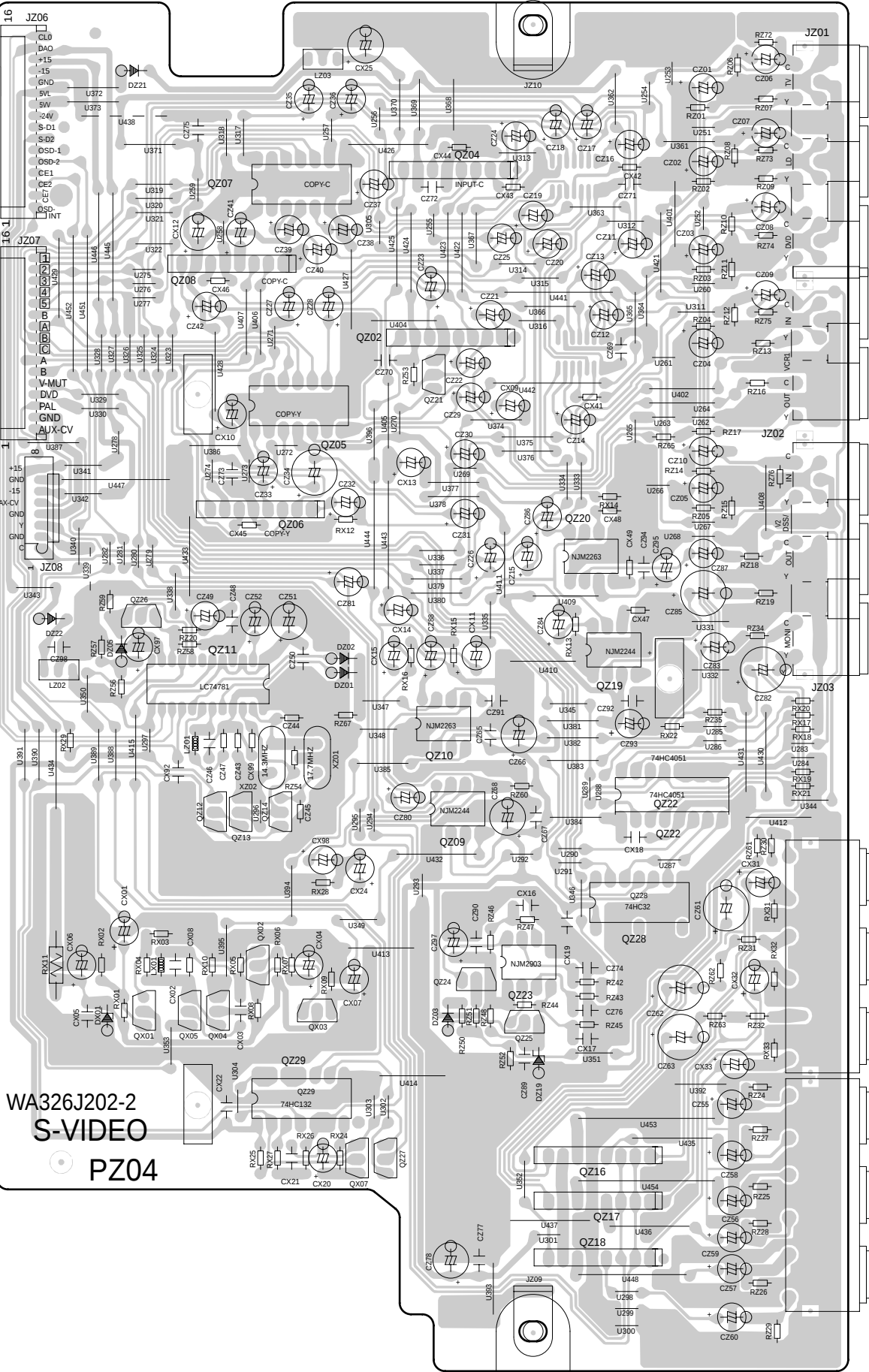




QL16
QL02
QL09 QL15 QL17
QL08
QL10
QL11 QL12
QL07 QL06 QL05
QL14
QL19 QL04 QL03
QC95 QL18
QL21
QC71
QV52
QC73 QC72
QV51

Q801
Q806

34



QZ07 QZ04

QZ08

QZ02

QZ21

QZ05

QZ06

QZ20

QZ26

QZ19

QZ11

QZ10

QZ22

QZ12 QZ13 QZ14 QZ09

QZ28

QX02

QZ19

QX03 QZ24

QX01 QX05 QX04 QZ25

QZ29

QX07 QX27 QZ16

QZ17

QZ18

P104

Q205 Q203

Q501

Q353 - Q351

Q202

Q202

Q204

Q354

Q301

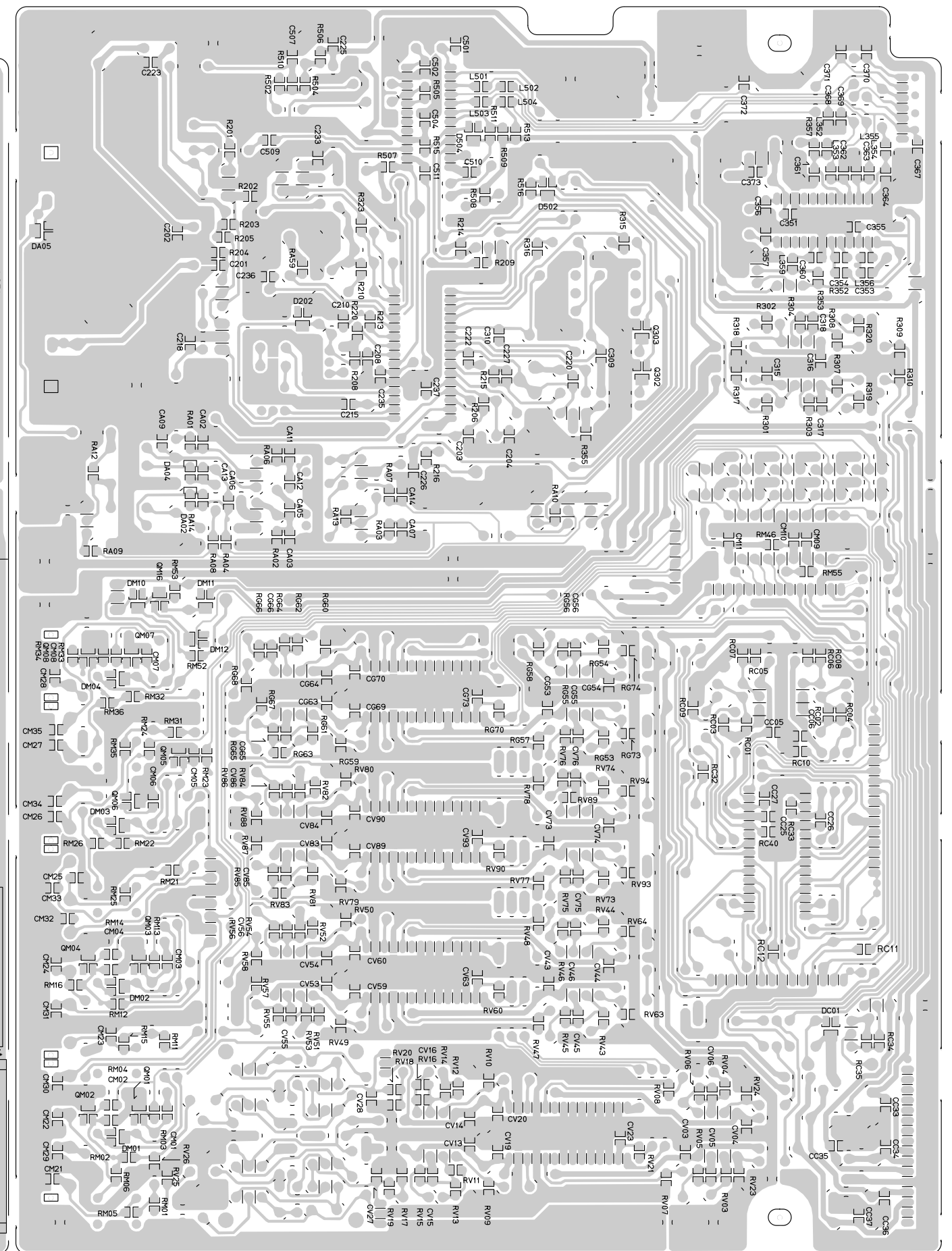
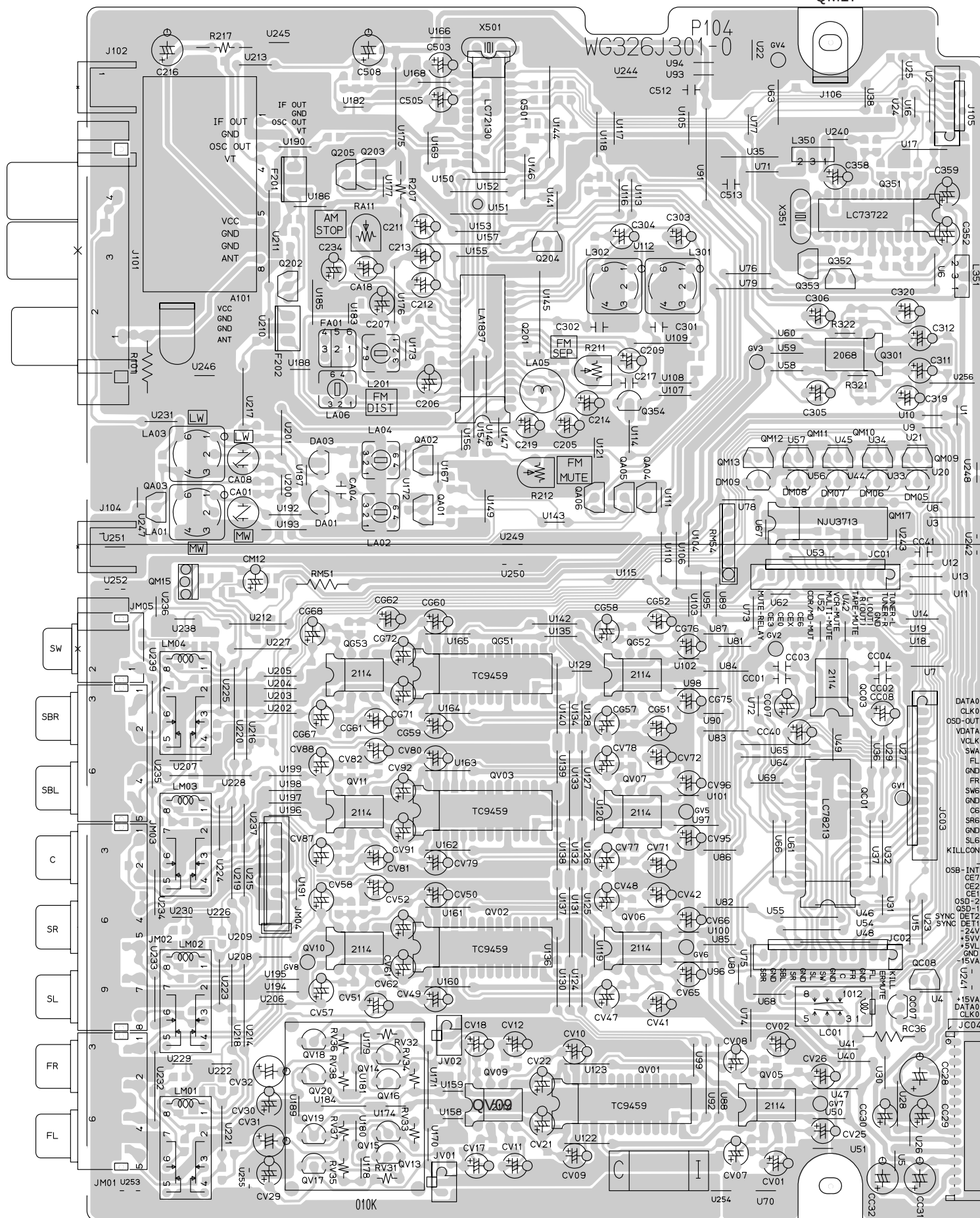
QA03

QA02 QA01

QA06 - QA04

QM13 - QM11 - QM09

QM17



QM15

QG53

QV11

QV03

QV20 - QV13

37

QV07

QV06

QV01

QC03

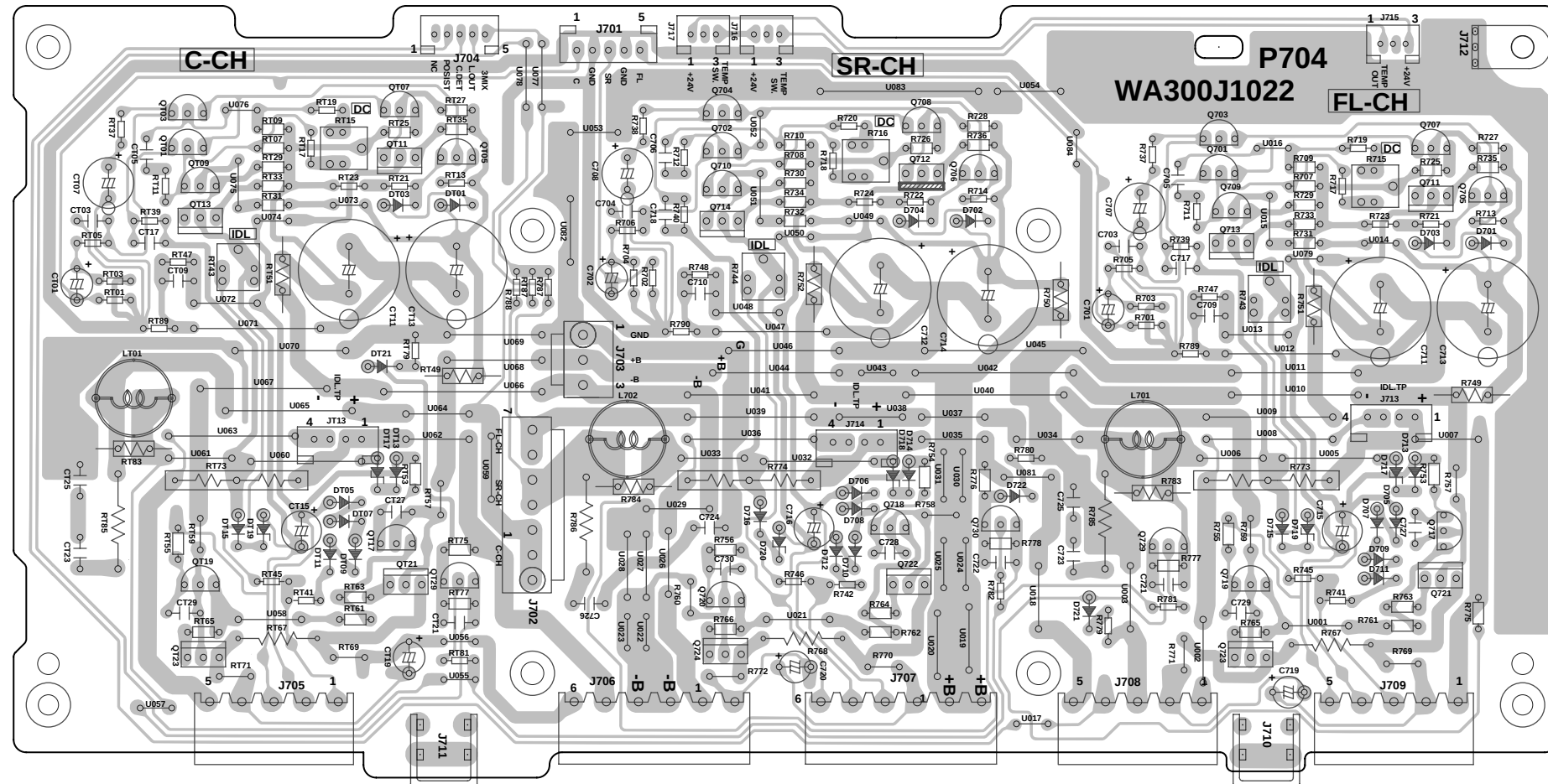
QC01

QC07 QC08

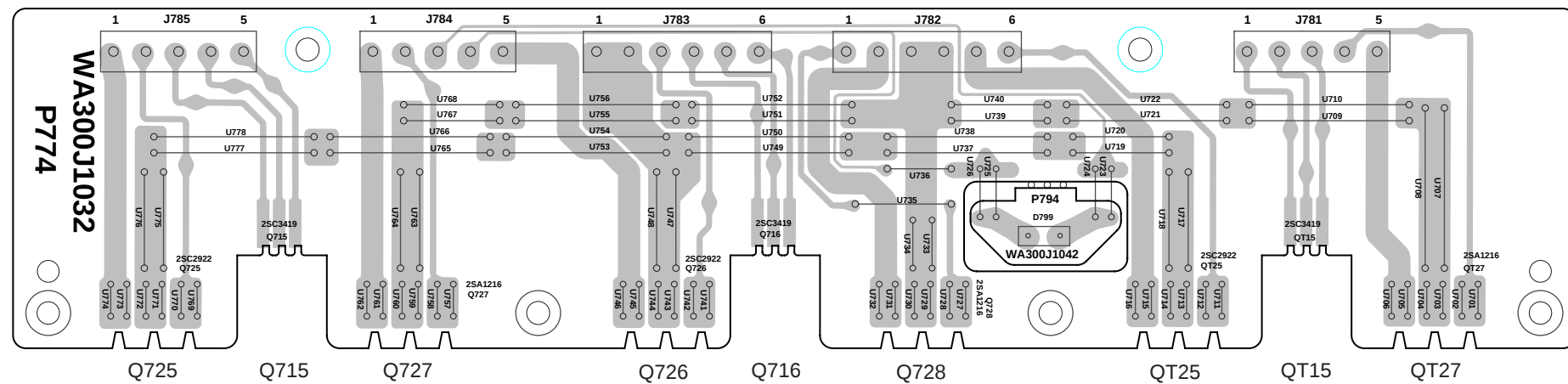
QV05

38

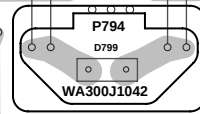
P704 QT03 QT01 QT07 Q704 Q702 Q708 Q703 Q701 Q707
 QT09 QT13 QT11 QT05 Q710 Q714 Q712 Q706 Q709 Q713 Q711 Q705
 QT19 QT23 QT17 QT21 QT29 Q720 Q724 Q718 Q722 Q730 Q728 Q719 Q717 Q721



P774



P794



P754

QN14

QN13

QN05 QN04 QN06

QN02 QN10 QN12 QN11

QN09 QN08 QN07

QP04 QP02

QP10 QP14

QP08

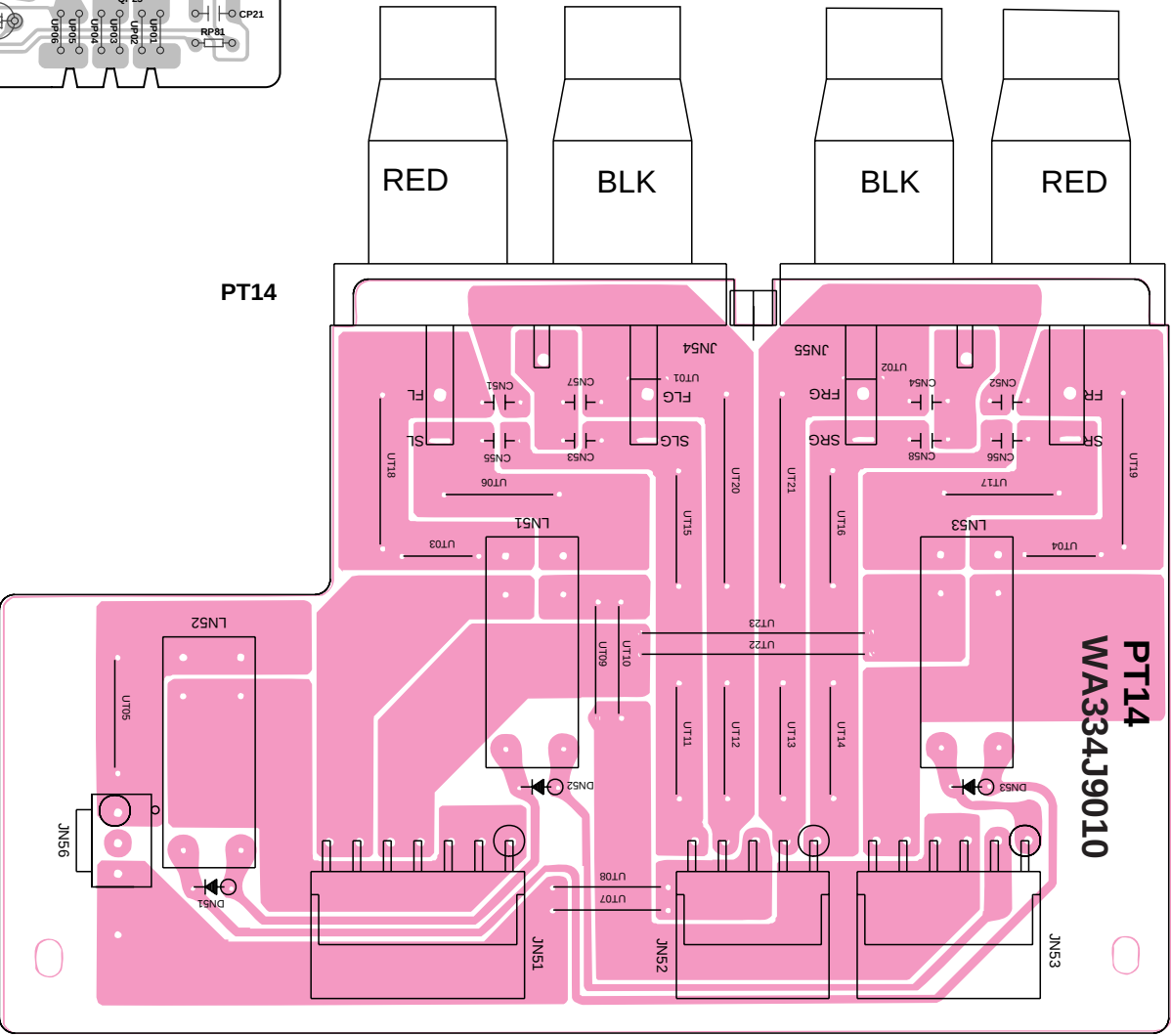
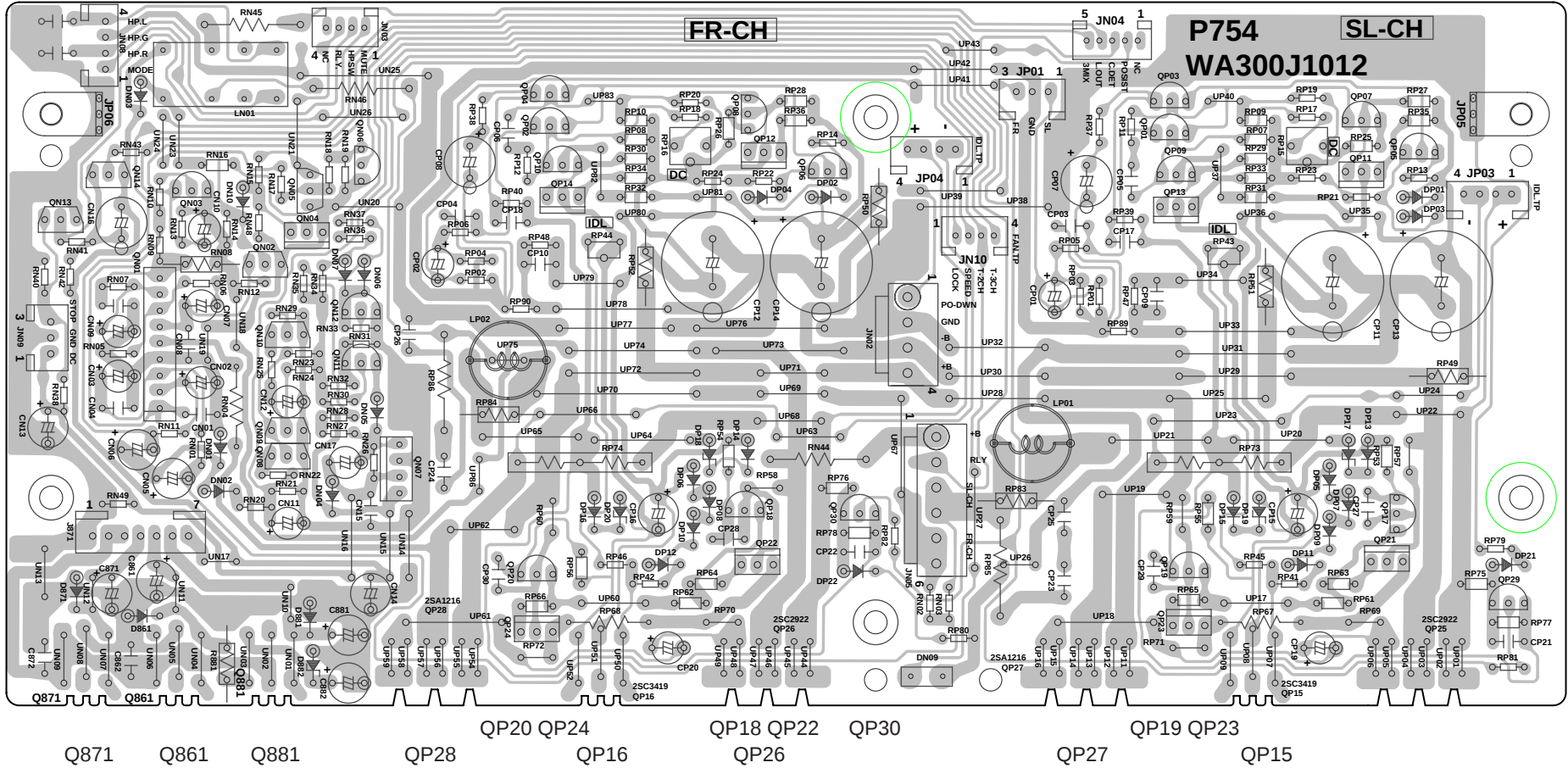
QP12 QP06

QP03 QP01

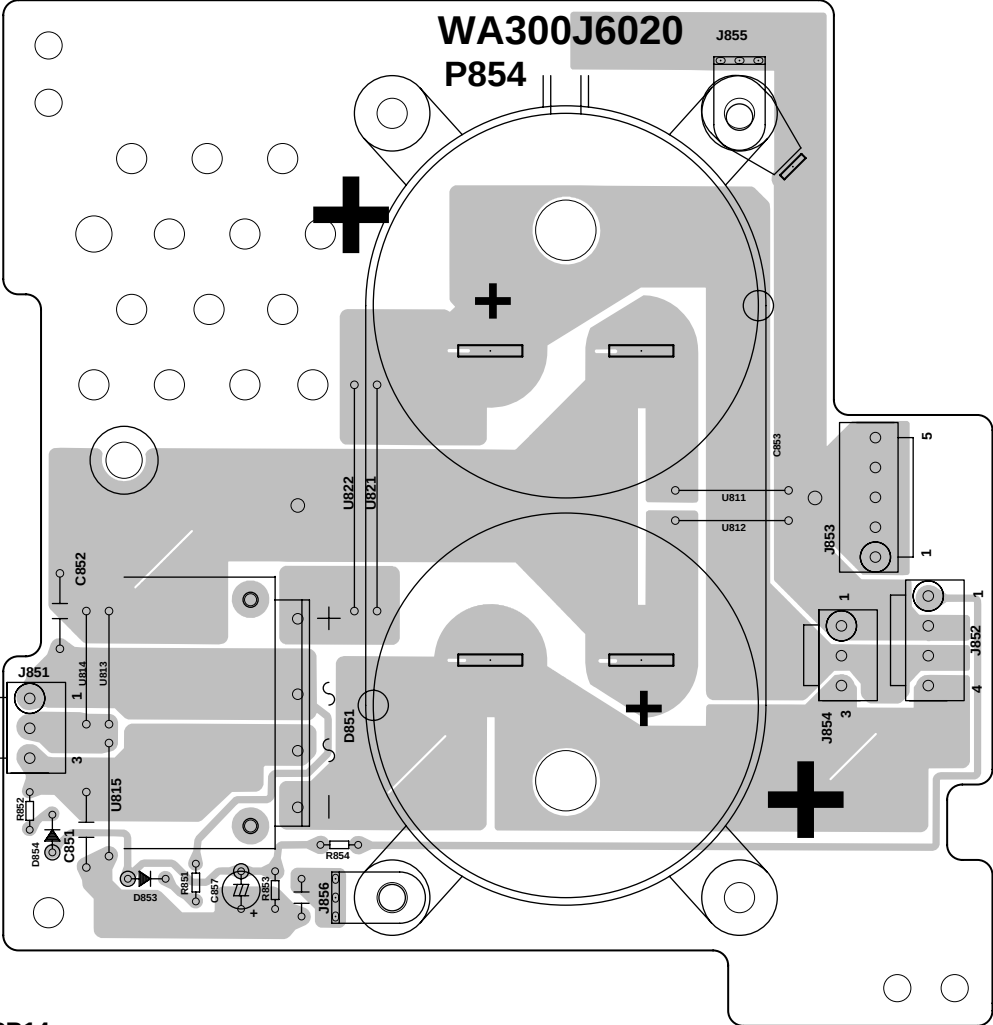
QP09 QP13

QP07

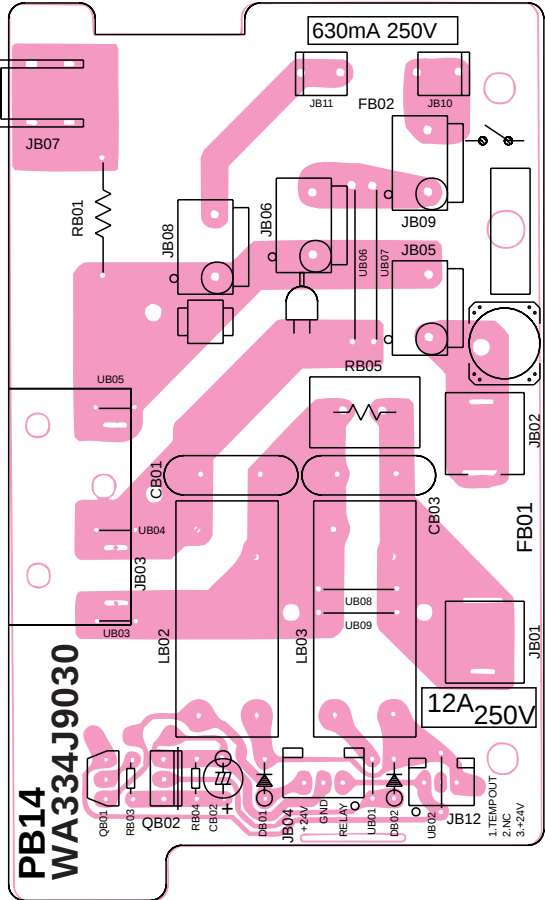
QP11 QP05



P854



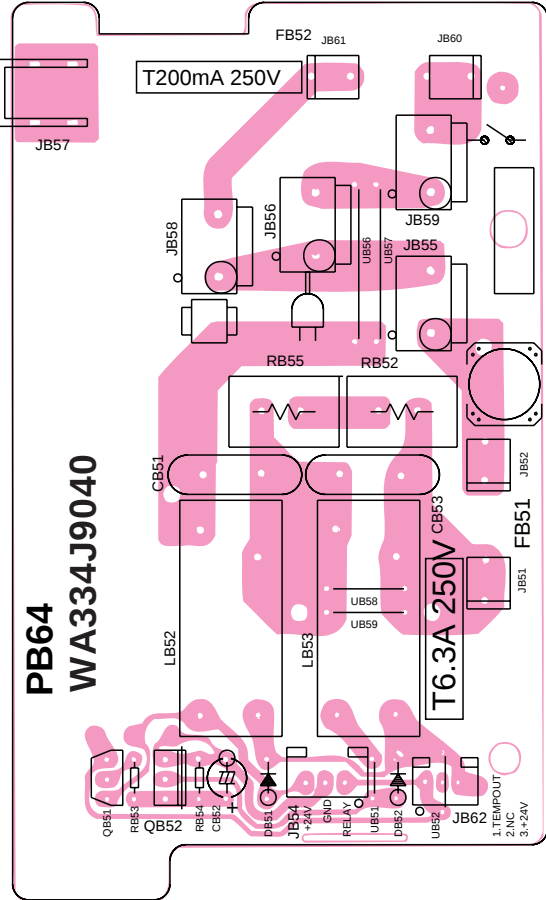
PB14



QB01 QB02

U version

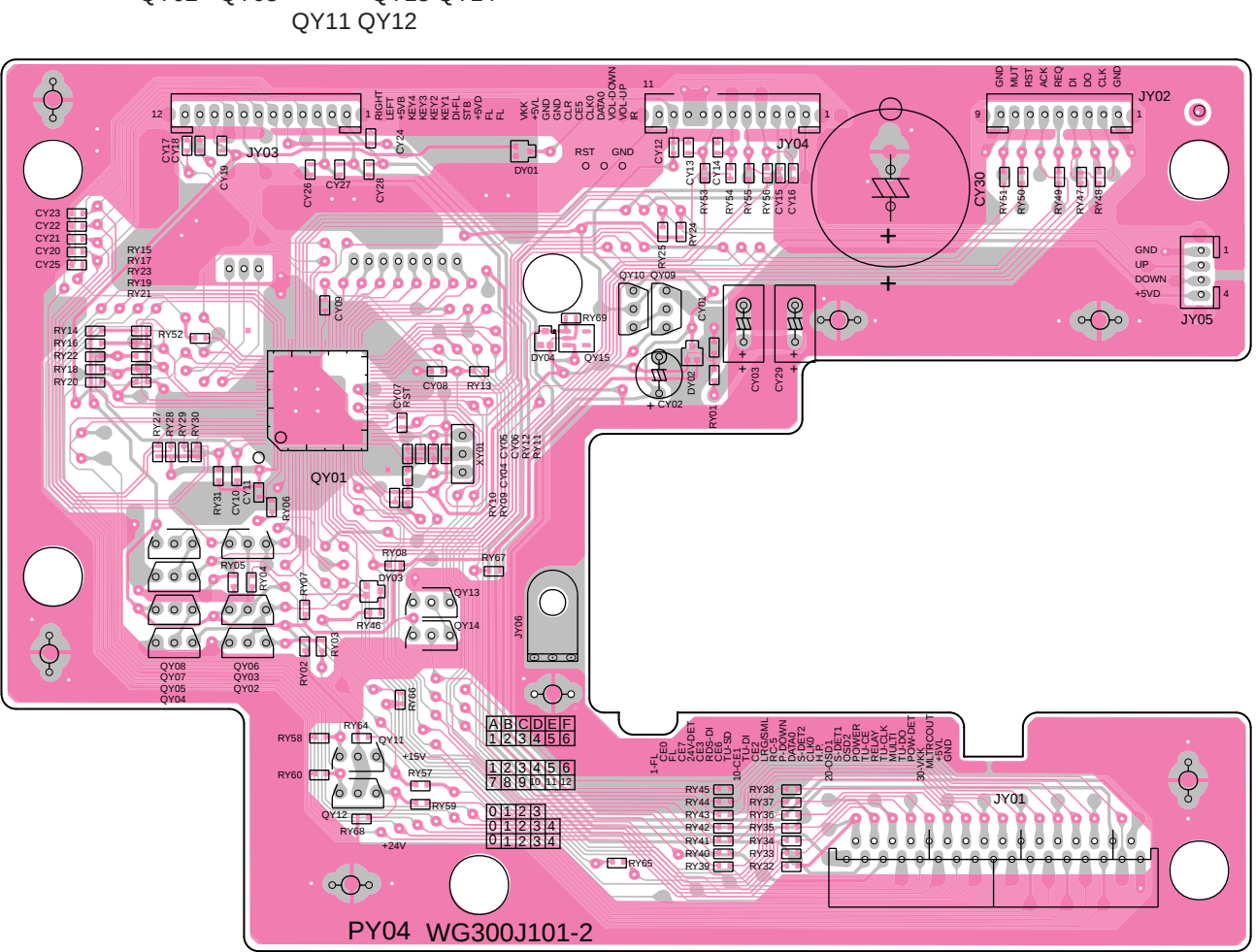
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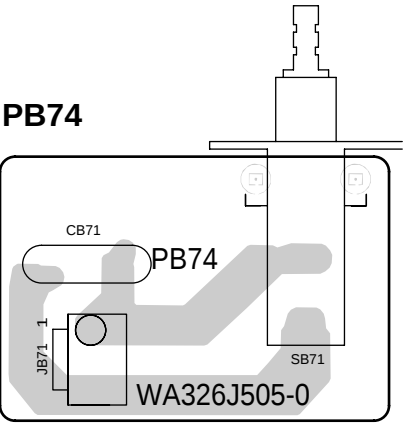
QB51 QB52

C, K, S version

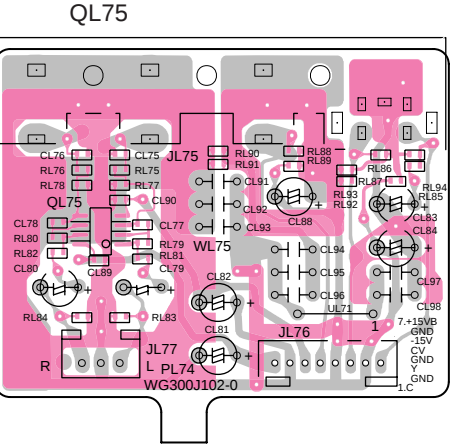
PY04



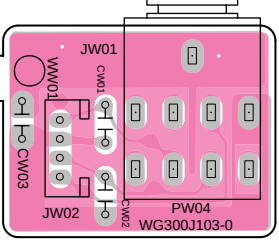
PB74



PL74



PW04

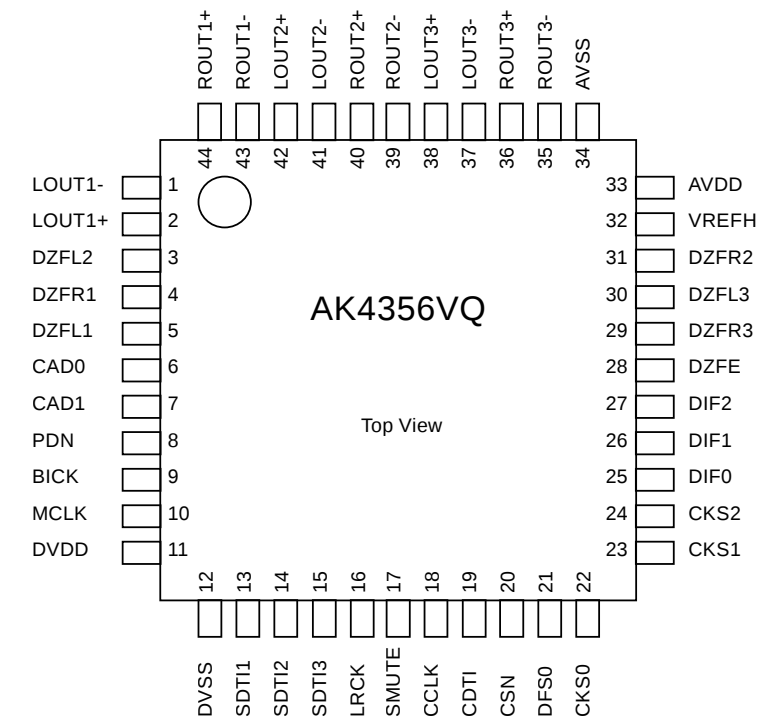


The PCB layout is a complex, multi-layered design for a 64-bit microcontroller system. The central component is a large microcontroller (U1) with a 64-bit architecture. It is surrounded by various peripheral components, including memory (RAM, ROM), logic (decoders, buffers), and I/O (UART, SPI, I2C). The components are densely packed and interconnected with a complex network of traces. The layout includes a top layer (blue) and a bottom layer (green). The components are labeled with their part numbers and values, and the layout is organized into functional blocks.

Component Labels and Values:

- Microcontroller:** U1 (64-bit)
- Memory:**
 - RAM: R691, R692, R693, R694, R695, R696, R697, R698, R699, R700, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R716, R717, R718, R719, R720, R721, R722, R723, R724, R725, R726, R727, R728, R729, R730, R731, R732, R733, R734, R735, R736, R737, R738, R739, R740, R741, R742, R743, R744, R745, R746, R747, R748, R749, R750, R751, R752, R753, R754, R755, R756, R757, R758, R759, R760, R761, R762, R763, R764, R765, R766, R767, R768, R769, R770, R771, R772, R773, R774, R775, R776, R777, R778, R779, R780, R781, R782, R783, R784, R785, R786, R787, R788, R789, R790, R791, R792, R793, R794, R795, R796, R797, R798, R799, R800, R801, R802, R803, R804, R805, R806, R807, R808, R809, R810, R811, R812, R813, R814, R815, R816, R817, R818, R819, R820, R821, R822, R823, R824, R825, R826, R827, R828, R829, R830, R831, R832, R833, R834, R835, R836, R837, R838, R839, R840, R841, R842, R843, R844, R845, R846, R847, R848, R849, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863, R864, R865, R866, R867, R868, R869, R870, R871, R872, R873, R874, R875, R876, R877, R878, R879, R880, R881, R882, R883, R884, R885, R886, R887, R888, R889, R890, R891, R892, R893, R894, R895, R896, R897, R898, R899, R900, R901, R902, R903, R904, R905, R906, R907, R908, R909, R910, R911, R912, R913, R914, R915, R916, R917, R918, R919, R920, R921, R922, R923, R924, R925, R926, R927, R928, R929, R930, R931, R932, R933, R934, R935, R936, R937, R938, R939, R940, R941, R942, R943, R944, R945, R946, R947, R948, R949, R950, R951, R952, R953, R954, R955, R956, R957, R958, R959, R960, R961, R962, R963, R964, R965, R966, R967, R968, R969, R970, R971, R972, R973, R974, R975, R976, R977, R978, R979, R980, R981, R982, R983, R984, R985, R986, R987, R988, R989, R990, R991, R992, R993, R994, R995, R996, R997, R998, R999, R1000, R1001, R1002, R1003, R1004, R1005, R1006, R1007, R1008, R1009, R1010, R1011, R1012, R1013, R1014, R1015, R1016, R1017, R1018, R1019, R1020, R1021, R1022, R1023, R1024, R1025, R1026, R1027, R1028, R1029, R1030, R1031, R1032, R1033, R1034, R1035, R1036, R1037, R1038, R1039, R1040, R1041, R1042, R1043, R1044, R1045, R1046, R1047, R1048, R1049, R1050, R1051, R1052, R1053, R1054, R1055, R1056, R1057, R1058, R1059, R1060, R1061, R1062, R1063, R1064, R1065, R1066, R1067, R1068, R1069, R1070, R1071, R1072, R1073, R1074, R1075, R1076, R1077, R1078, R1079, R1080, R1081, R1082, R1083, R1084, R1085, R1086, R1087, R1088, R1089, R1090, R1091, R1092, R1093, R1094, R1095, R1096, R1097, R1098, R1099, R1100, R1101, R1102, R1103, R1104, R1105, R1106, R1107, R1108, R1109, R1110, R1111, R1112, R1113, R1114, R1115, R1116, R1117, R1118, R1119, R1120, R1121, R1122, R1123, R1124, R1125, R1126, R1127, R1128, R1129, R1130, R1131, R1132, R1133, R1134, R1135, R1136, R1137, R1138, R1139, R1140, R1141, R1142, R1143, R1144, R1145, R1146, R1147, R1148, R1149, R1150, R1151, R1152, R1153, R1154, R1155, R1156, R1157, R1158, R1159, R1160, R1161, R1162, R1163, R1164, R1165, R1166, R1167, R1168, R1169, R1170, R1171, R1172, R1173, R1174, R1175, R1176, R1177, R1178, R1179, R1180, R1181, R1182, R1183, R1184, R1185, R1186, R1187, R1188, R1189, R1190, R1191, R1192, R1193, R1194, R1195, R1196, R1197, R1198, R1199, R1200, R1201, R1202, R1203, R1204, R1205, R1206, R1207, R1208, R1209, R1210, R1211, R1212, R1213, R1214, R1215, R1216, R1217, R1218, R1219, R1220, R1221, R1222, R1223, R1224, R1225, R1226, R1227, R1228, R1229, R1230, R1231, R1232, R1233, R1234, R1235, R1236, R1237, R1238, R1239, R1240, R1241, R1242, R1243, R1244, R1245, R1246, R1247, R1248, R1249, R1250, R1251, R1252, R1253, R1254, R1255, R1256, R1257, R1258, R1259, R1260, R1261, R1262, R1263, R1264, R1265, R1266, R1267, R1268, R1269, R1270, R1271, R1272, R1273, R1274, R1275, R1276, R1277, R1278, R1279, R1280, R1281, R1282, R1283, R1284, R1285, R1286, R1287, R1288, R1289, R1290, R1291, R1292, R1293, R1294, R1295, R1296, R1297, R1298, R1299, R1300, R1301, R1302, R1303, R1304, R1305, R1306, R1307, R1308, R1309, R1310, R1311, R1312, R1313, R1314, R1315, R1316, R1317, R1318, R1319, R1320, R1321, R1322, R1323, R1324, R1325, R1326, R1327, R1328, R1329, R1330, R1331, R1332, R1333, R1334, R1335, R1336, R1337, R1338, R1339, R1340, R1341, R1342, R1343, R1344, R1345, R1346, R1347, R1348, R1349, R1350, R1351, R1352, R1353, R1354, R1355, R1356, R1357, R1358, R1359, R1360, R1361, R1362, R1363, R1364, R1365, R1366, R1367, R1368, R1369, R1370, R1371, R1372, R1373, R1374, R1375, R13

QD01 : AK4536



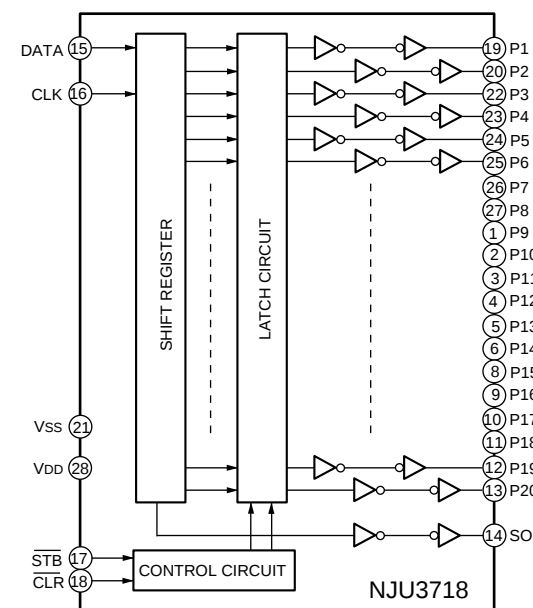
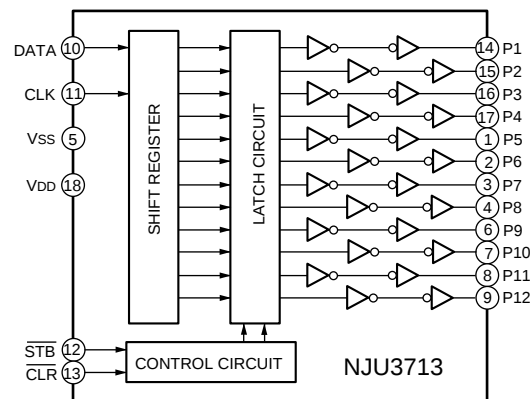
DATA (8)
CLK (9)
Vss (4)
VDD (14)
STB (10)
CLR (11)

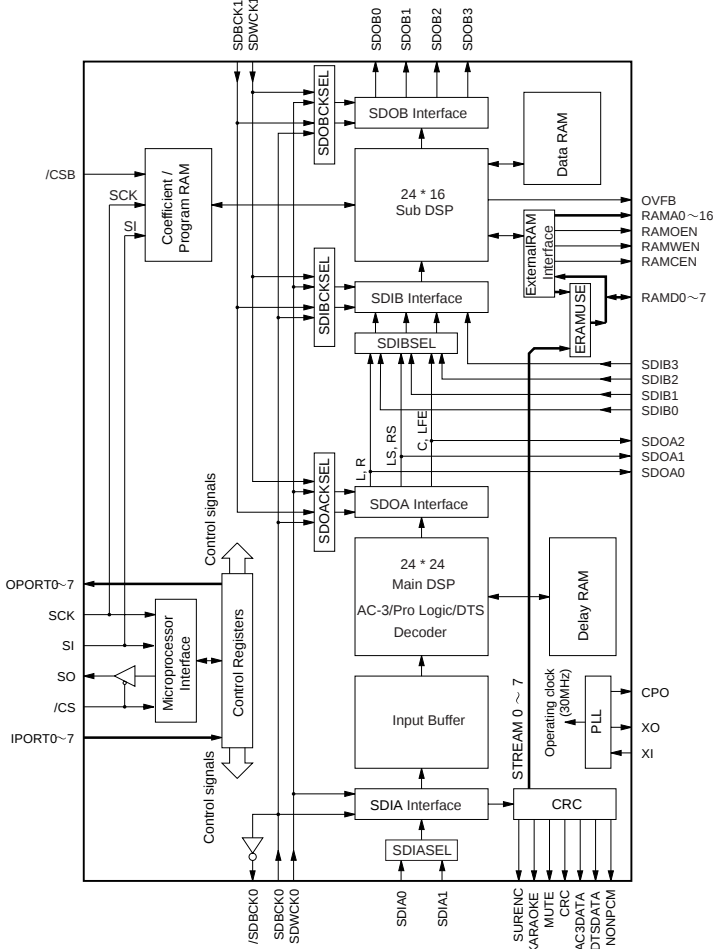
SHIFT REGISTER
LATCH CIRCUIT
CONTROL CIRCUIT

NJU3711

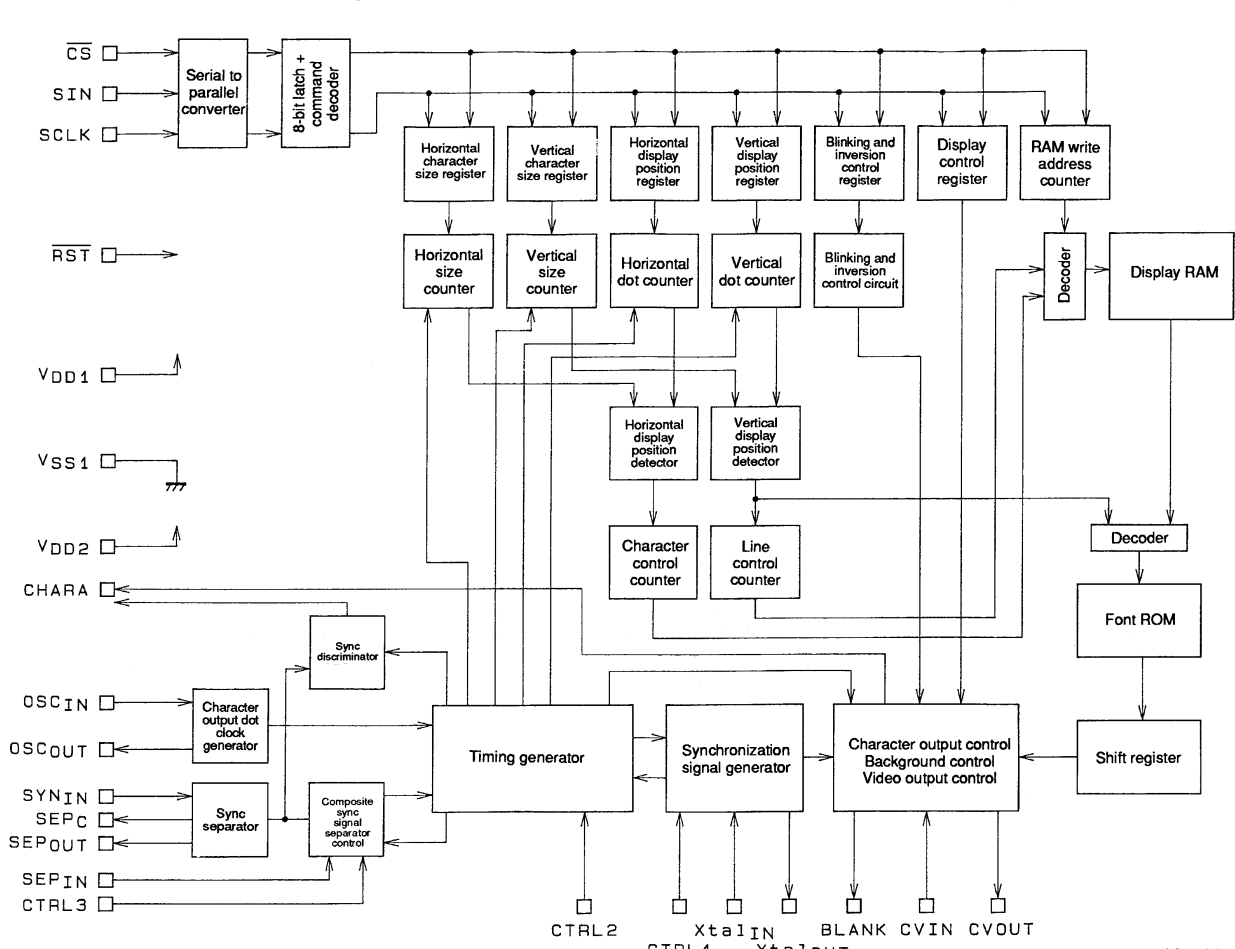
No.	Pin Name	I/O	Function
21	DFS0	I	Double Speed Sampling Mode 0 Pin (Note) "L": Normal Speed, "H": Double Speed at DFS1 bit ="0".
22	CKS0	I	Input Clock Select 0 Pin (Note)
23	CKS1	I	Input Clock Select 1 Pin (Note)
24	CKS2	I	Input Clock Select 2 Pin (Note)
25	DIF0	I	Audio Data Interface Format 0 Pin (Note)
26	DIF1	I	Audio Data Interface Format 1 Pin (Note)
27	DIF2	I	Audio Data Interface Format 2 Pin (Note)
28	DZFE	I	Zero Input Detect Enable Pin (Note)
29	DZFR3	O	DAC3 Rch Zero Input Detect Pin
30	DZFL3	O	DAC3 Lch Zero Input Detect Pin
31	DZFR2	O	DAC2 Rch Zero Input Detect Pin
32	VREFH	I	Positive Voltage Reference Input Pin, AVDD
33	AVDD	-	Analog Power Supply Pin
34	AVSS	-	Analog Ground Pin +4.75 ~+5.25V
35	ROUT3-	O	DAC3 Rch Negative Analog Output Pin
36	ROUT3+	O	DAC3 Rch Positive Analog Output Pin
37	LOUT3-	O	DAC3 Lch Negative Analog Output Pin
38	LOUT3+	O	DAC3 Lch Positive Analog Output Pin
39	ROUT2-	O	DAC2 Rch Negative Analog Output Pin
40	ROUT2+	O	DAC2 Rch Positive Analog Output Pin
41	LOUT2-	O	DAC2 Lch Negative Analog Output Pin
42	LOUT2+	O	DAC2 Lch Positive Analog Output Pin
43	ROUT1-	O	DAC1 Rch Negative Analog Output Pin
44	ROUT1+	O	DAC1 Rch Positive Analog Output Pin

QL07:NJU3718L



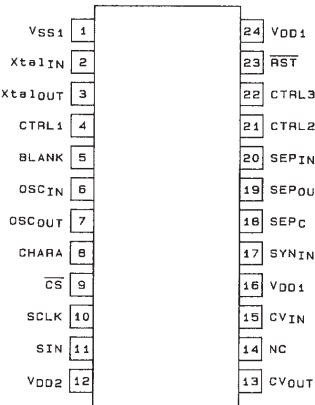


No.	NAME	I/O	FUNCTION
1	VDD1	-	+5V power supply (for I/Os)
2	RAMCEN	O	External SRAM Interface /CE
3	RAMA16	O	External SRAM Interface address 16
4	RAMA15	O	External SRAM Interface address 15
5	SDIB0	I+	PCM input 0 to Sub DSP
6	SDIB1	I+	PCM input 1 to Sub DSP
7	SDIB2	I+	PCM input 2 to Sub DSP
8	XI	I	Crystal oscillator connection or input external clock (12.288 MHz)
9	XO	O	Crystal oscillator connection
10	VSS	-	Ground
11	AVDD	-	+3.3V power supply (for PLL circuit)
12	SDIB3	I+	PCM input 3 to Sub DSP
13	TEST		Test terminal (to be open in normal use)
14	TEST		Test terminal (to be open in normal use)
15	OVFB	O	Detection of overflow at Sub DSP
16	DTSDATA	O	DTS data detection (Refer to "Status Register".)
17	AC3DATA	O	AC-3 data detection (Refer to "Status Register".)
18	SDOB3	O	PCM output from Sub DSP
19	CPO	A	Output terminal for PLL, to be connected to ground through the external analog filter circuit. (Refer to "External Circuit for PLL".)
20	AVSS	-	Ground (for PLL circuit)
21	VDD2	-	+3.3V power supply (for core logic)
22	SDOA2	O	PCM output from Main DSP (C, LFE)
23	SDOA1	O	PCM output from Main DSP (LS, RS)
24	SDOA0	O	PCM output from Main DSP (L, R)
25	RAMA14	O	External SRAM Interface address 14
26	RAMA13	O	External SRAM Interface address 13
27	RAMA12	O	External SRAM Interface address 12
28	RAMA11	O	External SRAM Interface address 11
29	RAMA10	O	External SRAM Interface address 10
30	VSS	-	Ground
31	VDD1	-	+5V power supply (for I/Os)
32	OPORT0	O	Output port for general purpose. (Refer to "OPORT Register")
33	OPORT1	O	Output port for general purpose. (Refer to "OPORT Register")
34	OPORT2	O	Output port for general purpose. (Refer to "OPORT Register")
35	OPORT3	O	Output port for general purpose. (Refer to "OPORT Register")
36	OPORT4	O	Output port for general purpose. (Refer to "OPORT Register")
37	OPORT5	O	Output port for general purpose. (Refer to "OPORT Register")
38	OPORT6	O	Output port for general purpose. (Refer to "OPORT Register")
39	OPORT7	O	Output port for general purpose. (Refer to "OPORT Register")
40	VSS	-	Ground
41	VDD2	-	+3.3V power supply (for core logic)
42	RAMA9	O	External SRAM interface address 9
43	RAMA8	O	External SRAM interface address 8
44	RAMA7	O	External SRAM interface address 7
45	SDOB2	O	PCM output from Sub DSP
46	SDOB1	O	PCM output from Sub DSP
47	SDOB0	O	PCM output from Sub DSP
48	SDBCK1	I+	Bit clock input for SDOA, SDIB, SDOB. (Refer to "SDOA, SDIB, SDOB Register")
49	SDWCK1	I+	Word clock input for SDOA, SDIB, SDOB. (Refer to "SDOA, SDIB, SDOB Register")
50	VSS	-	Ground

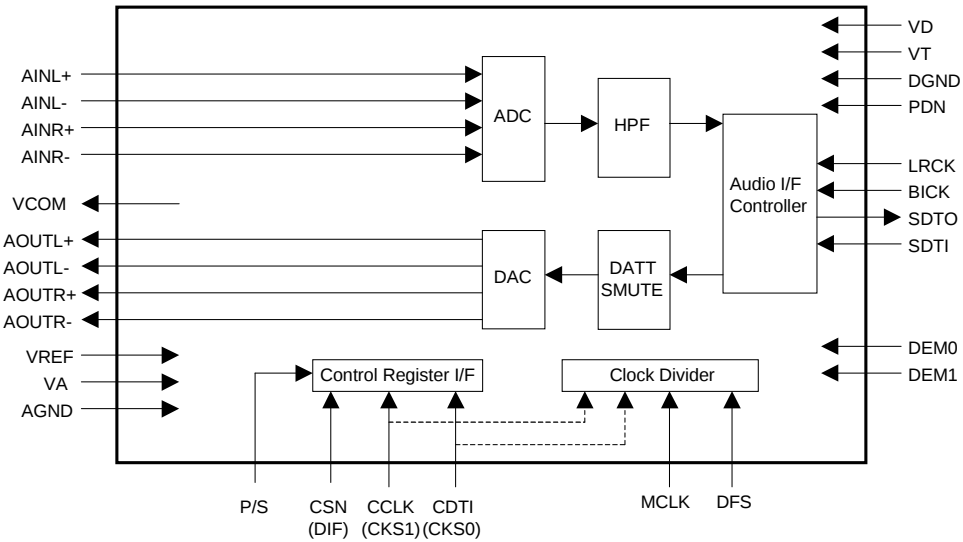


No.	NAME	I/O	FUNCTION
51	VDD2	-	+3.3V power supply (for core logic)
52	NONPCM	O	Detection of non PCM data. (Refer to "Status Register")
53	CRC	O	Detection of AC-3 CRC error. (Refer to "Status Register")
54	MUTE	O	Detection of auto-mute. (Refer to "Status Register")
55	KARAOKE	O	Detection of AC-3 karaoke data. (Refer to "Status Register")
56	SURENC	O	Detection of AC-3 2/0 mode Dolby surround encoded input (Refer to "Status Register")
57	/SDBCK0	O	Inverted SDBCK0 clock output (refer to "Block diagram")
58	RAMA6	O	External SRAM Interface address 6
59	RAMA5	O	External SRAM Interface address 5
60	VSS	-	Ground
61	RAMA4	O	External SRAM Interface address 4
62	/IC	Is	Initial clear
63	TEST		Test terminal (to be open in normal use)
64	RAMA3	O	External SRAM Interface address 3
65	/CSB	Is+	Sub DSP Chip select
66	/ICS	Is	Microprocessor interface Chip select
67	SO	Ot	Microprocessor interface Serial data output
68	SI	Is	Microprocessor interface/Sub DSP Serial data input
69	SCK	Is	Microprocessor interface/Sub DSP clock input
70	RAMA2	O	External SRAM Interface address 2
71	VDD1	-	+5V power supply (for I/Os)
72	RAMD0	I+O	External SRAM Interface data (STREAM 0 output when External SRAM is not in use)
73	RAMD1	I+O	External SRAM Interface data (STREAM 1 output when External SRAM is not in use)
74	RAMD2	I+O	External SRAM Interface data (STREAM 2 output when External SRAM is not in use)
75	RAMD3	I+O	External SRAM Interface data (STREAM 3 output when External SRAM is not in use)
76	RAMD4	I+O	External SRAM Interface data (STREAM 4 output when External SRAM is not in use)
77	RAMD5	I+O	External SRAM Interface data (STREAM 5 output when External SRAM is not in use)
78	RAMD6	I+O	External SRAM Interface data (STREAM 6 output when External SRAM is not in use)
79	RAMD7	I+O	External SRAM Interface data (STREAM 7 output when External SRAM is not in use)
80	VSS	-	Ground
81	VDD2	-	+3.3V power supply (for core logic)
82	SDWCK0	I	Word clock input for SDIA, SDOA, SDIB, SDOB (Refer to "SDIA, SDOA, SDIB, SDOB Register")
83	SDBCK0	I	Bit clock input for SDIA SDOA SDIB SDOB (Refer to "SDIA, SDOA, SDIB, SDOB Register")
84	SDIA0	I	AC-3/DTS bitstream (or PCM) data input for Main DSP (Refer to "SDIA Register")
85	SDIA1	I	AC-3/DTS bitstream (or PCM) data input for Main DSP (Refer to "SDIA Register")
86	RAMA1	O	External SRAM Interface address 1
87	RAMA0	O	External SRAM Interface address 0
88	RAMWEN	O	External SRAM Interface /WE
89	RAMOEN	O	External SRAM Interface /OE
90	VSS	-	Ground
91	VDD2	-	+3.3V power supply (for core logic)
92	IPO7	I+	Input port for general purpose (Refer to "IPOINT Register")
93	IPO6	I+	Input port for general purpose (Refer to "IPOINT Register")
94	IPO5	I+	Input port for general purpose (Refer to "IPOINT Register")
95	IPO4	I+	Input port for general purpose (Refer to "IPOINT Register")
96	IPO3	I+	Input port for general purpose (Refer to "IPOINT Register")
97	IPO2	I+	Input port for general purpose (Refer to "IPOINT Register")
98	IPO1	I+	Input port for general purpose (Refer to "IPOINT Register")
99	IPO0	I+	Input port for general purpose (Refer to "IPOINT Register")
100	VSS	-	Ground

Note) Is : Schmidt trigger input terminal
I+ : Input terminal with a pull-up resistor
O : Digital output terminal
Ot : Tri-state digital output terminal
A : Analog terminal

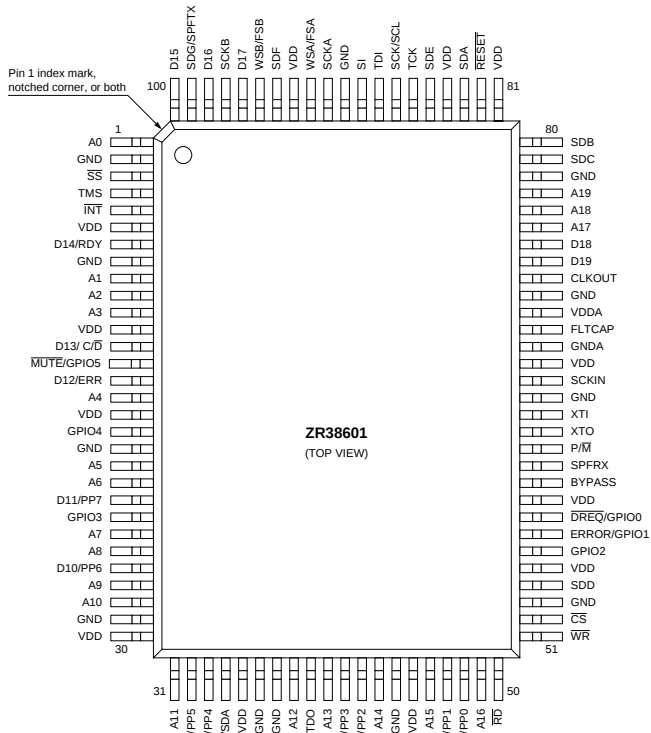
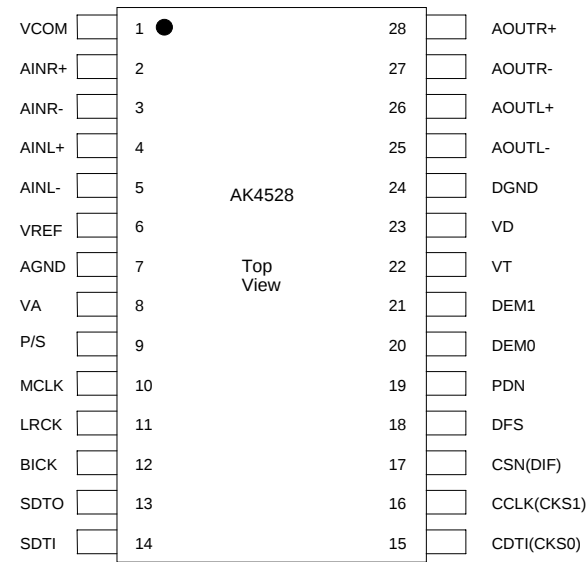


QK01 : AK4528



No.	Pin Name	I/O	Function
1	V COM	O	Common Voltage Output Pin, VA /2 Bias voltage of ADC inputs and DAC outputs.
2	AINR+	I	Rch Positive Input Pin
3	AINR-	I	Rch Negative Input Pin
4	AINL +	I	Lch Positive Input Pin
5	AINL -	I	Lch Negative Input Pin
6	V REF	I	Voltage Reference Input Pin, VA Used as a voltage reference by ADC & DAC. VREF is connected externally to filtered VA.
7	AGND	-	Analog Ground Pin
8	VA	-	Analog Power Supply Pin, 4.75 ~ 5.25V
9	P/S	I	Parallel/Serial Mode Select Pin L: Serial Mode, H: Parallel Mode
10	MCLK	I	Master Clock Input Pin
11	LRCK	I	Input/Output Channel Clock Pin
12	BICK	I	Audio Serial Data Clock Pin
13	SDTO	O	Audio Serial Data Output Pin
14	SDTI	I	Audio Serial Data Input Pin
15	CDTI	I	Control Data Input Pin in Serial Mode
	CKS0	I	Master Clock Select Pin
16	CCLK	I	Control Data Clock Pin in Serial Mode
	CKS1	I	Master Clock Select Pin
17	CSN	I	Chip Select Pin in Serial Mode
	DIF	I	Digital Audio Interface Select Pin L: 24bit MSB justified, H: I ² S compatible
18	DFS	I	Double Speed Sampling Mode Pin
19	PDN	I	Power-Down Mode Pin H: Power up, L: Power down reset and initialize the control register.
20	DEM0	I	De-emphasis Control Pin
21	DEM1	I	De-emphasis Control Pin
22	VT	-	Output Buffer Power Supply Pin, 2.7 ~ 5.25V
23	VD	-	Digital Power Supply Pin, 4.75 ~ 5.25V
24	DGND	-	Digital Ground Pin
25	AOUTL-	O	Lch Negative Analog Output Pin
26	AOUTL+	O	Lch Positive Analog Output Pin
27	AOUTR-	O	Rch Negative Analog Output Pin
28	AOUTR+	O	Rch Positive Analog Output Pin

Note: All input pins should not be left floating.



Q651:ZR38601

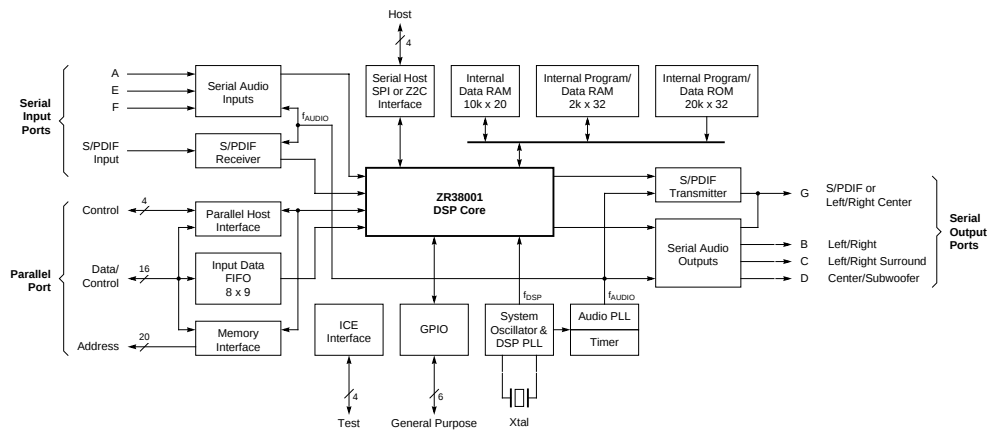


Figure 5. ZR38601 Simplified Block Diagram

ZR38601 Signal Description Summary

Name	Number	Type ^[1]	Description
Parallel Port (40)			
A[19:0]	20	O	Address bus of parallel port
D[19:15]	5	I/O	Data bus of parallel port when selected for external memory (P/M = 0)
D14/RDY	1	I/O or O	Data bus (P/M = 0) or Ready output signal of parallel port when selected for parallel I/O (P/M = 1)
D13/ C/D	1	I/O or I	Data bus (P/M = 0) or Command/Data select input of parallel port when selected for parallel I/O (P/M = 1)
D12/ERR	1	I/O or I	Data bus (P/M = 0) or Error input signal of parallel port when selected for parallel I/O (P/M = 1)
D[11:4]/PP[7:0]	8	I/O	Data bus of parallel port when selected for external memory (P/M = 0) or Parallel Port I/O (P/M = 1)
CS	1	I/O	Chip Select output for external memory or Chip Select input for parallel I/O
RD	1	I/O	Read enable output for external memory or Read enable input for parallel I/O
WR	1	I/O	Write enable output for external memory or Write enable input for parallel I/O
P/M	1	I	Parallel I/O or Memory select for parallel port. Determined at time of RESET.
Serial Ports (13)			
SPFRX	1	I	S/PDIF Receiver input port
SDA, SDE, SDF	3	I	Serial Data inputs. Ports A, E and F.
WSA/FSA	1	I/O	Word Select or Frame Synchronization for input ports. An output when a master, an input when a slave.
SCKA	1	I/O	Serial Clock for input ports. An output when a master, an input when a slave.
SDB	1	O	Serial left and right Data output. Port B. Also, at RESET defines SPI/Z2C for host serial interface.
SDC	1	O	Serial left and right surround Data output. Port C. Also, at RESET defines Z2CADR[0] of Z2C address.
SDD	1	O	Serial center and sub-woofer Data output. Port D. Also, at RESET defines Z2CADR[1] of Z2C address.
SDG/SPFTX	1	O	Serial Data output. Port G or S/PDIF Transmitter port. Also, at RESET defines the SCKP value.
WSB/FSB	1	I/O	Word Select or Frame Synchronization for output ports. An output when a master, an input when a slave.
SCKB	1	I/O	Serial Clock for output ports. An output when a master, an input when a slave.
SCKIN	1	I/O	Serial master Clock output or master clock Input for output ports
General Purpose Ports (6)			
MUTE/GPIO5	1	I or I/O	Mute input signal or can be programmed as General Purpose Input/Output 5
GPIO[4:2]	3	I/O	Can be programmed as General Purpose Input/Output 4, 3 and 2
ERROR/GPIO1	1	O or I/O	Error output signal or can be programmed as General Purpose Input/Output 1
DREQ/GPIO0	1	O or I/O	Data Request output signal or can be programmed as General Purpose Input/Output 0
Serial Host Interface (4)			
SI	1	I	Host Serial interface data Input. Also, at RESET defines Z2CADR[5] of Z2C address.
SO/SDA	1	I/O/T	SPI host Serial interface data Output or Serial Data for Z2C
SCK/SCL	1	I	SPI host Serial interface Clock input or Slave Clock input for Z2C
SS	1	I	SPI host serial interface Slave Select input. Also, at RESET defines Z2CADR[4] of Z2C address.
ICE Interface (4)			
TDI	1	I	ICE Test interface Data Input
TDO	1	O/T	ICE Test interface Data Output
TCK	1	I	ICE Test interface Clock input
TMS	1	I	ICE Test interface Mode Select
System Interface (7)			
INT	1	I	External Interrupt request input
RESET	1	I	Reset input to start operation in known state
XTI	1	I	External system clock Input or connection to external crystal, at frequency f _{XTI}
XTO	1	O	Output connection to external crystal
CLKOUT	1	O	Clock Output from the ZR38601 at frequency f _{DSP} /2
BYPASS	1	I	Bypass internal DSP core PLL to use external system clock input on XTI
FLTCAP	1	I	External Filter Capacitor connection for PLL. A value of 47nF is recommended.
Power (26)			
VDD	12	Power	+3.3 volt power supply
VDDA	1	Power	+3.3 volt power supply, Analog for PLL
GND	12	Power	Power supply Ground
GNDA	1	Power	Power supply Ground, Analog for PLL
Total (100)			

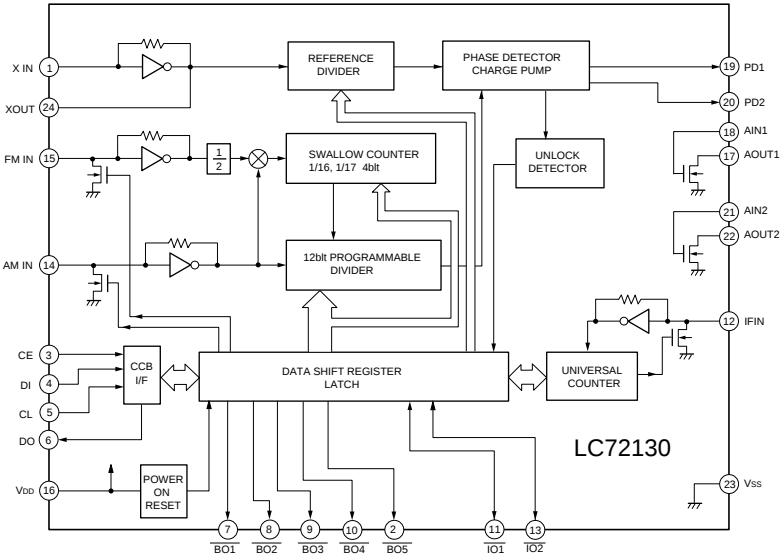
1. O = Output, I = Input, T = Tri-state in normal use. May be different at Reset time as shown in Table 23 on page 42.

Q691:TMP93CW44ADF

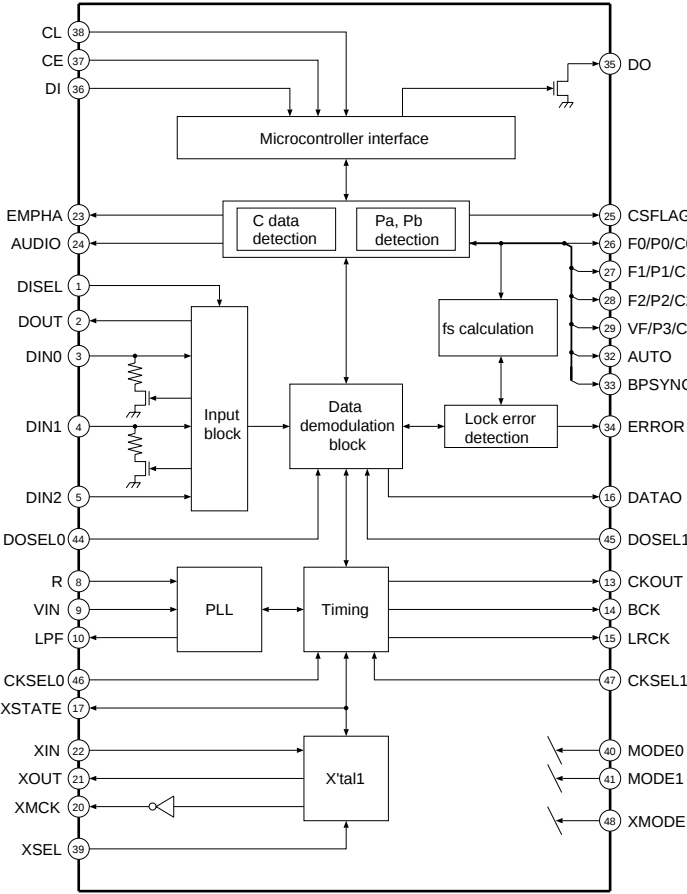
pin	port name	I/O	use	Name	Act.	Note
1	P55/AN5	I		MODE_SW0	-	Link Host or _Stand alone
2	P56/AN6	I		MODE_SW1	-	_HDCD available
3	P57/AN7	I		MODE_SW2	-	_RF available
4	NMI	I	-	-	-	to GND
5	P60/TXD0	I/O	O	DO0		Data out to DSP1&2
6	P61/RXD0	I/O	I	DI0		Data In from DSP1&2
7	P62/SCLK0	I/O	O	SCLK0		Clock Out to DSP1&2
8	P63/TXD1	I/O	O	DO1		Data out to DIR
9	P64/RXD1	I/O	I	DI1		Data In from DIR
10	P65/SCLK1	I/O	O	SCLK1		Clock Out to DIR
11	P70/WAIT	I/O	O	T0	L	to check LED
12	P71	I/O	O	T1	L	to check LED
13	Vss	I	Vss	GND	-	GND
14	P72	I/O	O	T2	L	to check LED
15	P73	I/O	O	T3	L	to check LED
16	P74	I/O	O	T4	L	to check LED
17	P75	I/O	O	X2GAIN	L	HDCD PE
18	P76	I/O	I	HDCD	H	detect HDCD
19	P77	I/O	O	K_TEST	L	to check LED
20	CLK	O	-	n.c.	-	pull μP
21	AM8/16	I	-	n.c.	-	pull μP
22	X1	I	X1	20MHz	-	

pin	port name	I/O	use	Name	Act.	Note
41	P10/AD8	I/O	O	RSTRF	L	Reset RF demodulate
42	P11/AD9	I/O	O	D_A	-	Digital / _Analog select
43	P12/AD10	I/O	O	DEMP	H	Emphasis to S-Direct
44	P13/AD11	I/O	O	UMUTE	L	Hard Mute for Tr
45	P14/AD12	I/O	O	FS96	H	96kHz fs
46	P15/AD13	I/O	O	BYPASS 1	H	Bypass DSP1
47	P16/AD14	I/O	O	BYPASS 2	L	Bypass DSP2
48	P17/AD15	I/O	O	_CS_DSP1	L	_CS_DSP1(main DSP)
49	P20/A0	I/O	O	_CSB_DSP1	L	_CS_DSP1(sub DSP)
50	P21/A1	I/O	O	_SS_DSP2	L	_SS_DSP2(Zoran)
51	P22/A2	I/O	O	_CE_DIR	L	_CE for DIR
52	P23/A3	I/O	O	RSTDSP2	L	Reset DSP2
53	P24/A4	I/O	O	RSTDA1	L	Reset DAC for L/R
54	P25/A5	I/O	O	RSTDA2	L	Reset DAC except L/R
55	P26/A6	I/O	O	_IC	L	Reset DSP1
56	P27/A7	I/O	O	_XMODE	L	_Reset DIR
57	Vcc	I	Vcc	+5VD	-	Vcc
58	P30/RD	O	O	RSTAD	L	Reset & Cal for ADC
59	P31/WR	O	O	_IFACK	L	Ack to main CPU
60	P32/SCK	I/O	I	IFSCK	-	Clock from main CPU
61	P33/SO	I/O	O	IFDO	-	Data to main CPU
62	P34/SI	I/O	I	IFDI	-	Data from main CPU
63	P35/INT0	I/O	INT	OVFB	H	Over Level (sub DSP)
64	P40/INT1	I/O	INT	XSTATE	H	MCLK status(L./unstable)
65	P41/TO3	I/O	I	CAL	H	ADC Calibration
66	P42/INT4	I/O	INT	_RFNODET	L	_No RF signal
67	P43/INT5	I/O	INT	ERF	H	DIR Error
68	P44/TO4	I/O	O	-	-	-
69	P45/INT6	I/O	INT	_IFREQ	L	Request from main CPU
70	P46/INT7	I/O	I	CSFLAG	H	Ch. Status(fall edge DIR)
71	P47/TO6	I/O	O	-	-	-
72	VrefH	I	VrefH	+5VD	-	ref High voltage for int. AD
73	VrefL	I	VrefL	GND	-	ref Low voltage for int. AD
74	Avss	I	Avss	GND	-	GND for Int. AD
75	Avcc	I	Avcc	+5VD	-	Vcc for Int. AD
76	P50/AN0	I	AN	KEY_INPUT0	-	Optional 8 key input 0
77	P51/AN1	I	AN	KEY_INPUT1	-	Optional 8 key input 1
78	P52/AN2	I	AN	KEY_INPUT2	-	Optional 8 key input 2
79	P53/AN3	I	AN	KEY_INPUT3	-	Optional 8 key input 3
80	P54/AN4	I	AN	KEY_INPUT4	-	Optional 8 key input 4

Q501:LC72130



QR01:LC89055Q



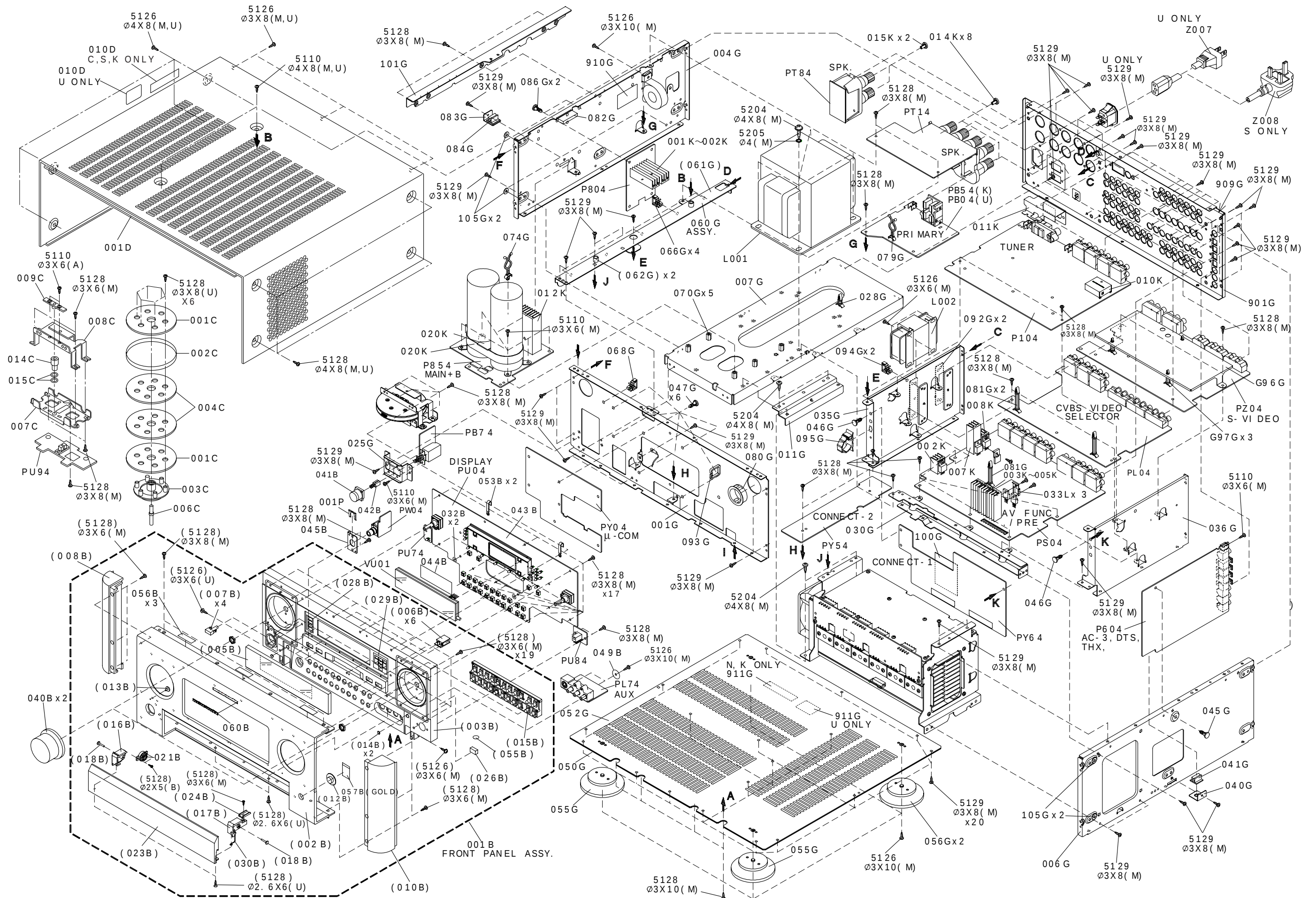
QY01:TMP93PW40DF

no	port name	I/O	USE	Sig. Name	act.	Description
1	VREFL	I	-	-	-	A/D VREFL.
2	AVSS	I	-	-	-	A/D VSS
3	AVCC	I	-	-	-	A/D VCC
4	NMI	I	NMI	-	-	Pull Up
5	P70/TI0	I/O	O	_POWER OFF	L	
6	P71/TO1	I/O	O	KILL IR	H	
7	P72/TO2	I/O	O	RC-5 OUT	H	
8	P73/TO3	I/O	O	SPEAKER OFF	H	SPK RELAY
9	P80/INT4/	I/O	I	RC-5 IN	H	Both Edge
10	P81/INT5/	I/O	I	SYNC0	H	Rising Edge
11	P82/TO4	I/O	I	_HEAD PHONE	L	
12	P83/TO5	I/O	I	-	-	Pull Up
13	P84/INT6/	I/O	I	_SURR. ACK	L	Both Edge
14	P85/INT7/	I/O	I	SYNC1	H	Rising Edge
15	P86/TO6	I/O	I	MULTI RC-5 IN	L	
16	P87/INT0	I/O	I	_POWER DOWN	L	
17	P90/TXD0	I/O	TXD	DO0	-	I/F to SURR. μP
18	P91/RXD0	I/O	RXD	DI0	-	I/F to SURR. μP
19	P92/SCLK0	I/O	CLK	CLK0	-	I/F to SURR. μP
20	P93/TXD1	I/O	O	DO1	-	I/F to ICs
21	P94/RXD1	I/O			-	
22	P95/SCLK1	I/O	O	CLK1	-	I/F to ICs
23	AM8/_16	I	-	-	-	Pull Up
24	CLK	O	-	-	-	Pull Up
25	VCC	I	-	-	-	Pull Up
26	VSS	I	-	-	-	to VSS
27	X1	I	-	-	-	20MHz
28	X2	O	-	-	-	20MHz
29	EA	I	-	-	-	Pull Up
30	RESET	I	-	-	-	
31	P96/XT1	I/O	I	-	-	to VSS
32	P97/XT2	I/O	I	-	-	to VSS
33	TEST1	I	-	-	-	to TEST2
34	TEST2	I	-	-	-	to TEST1
35	PA0	I/O	O	OSD ON0	H	
36	PA1	I/O	O	OSD ON1	H	
37	PA2	I/O	O	CLR LED	L	NJU3718 CLR
38	PA3	I/O	O	MULTI RC-5 OUT	H	
39	PA4	I/O	O	_CE8 (Volume 8ch)	L	
40	PA5	I/O	O	SMUTE	H	

no	port name	I/O	USE	Sig. Name	act.	Description
41	PA6	I/O	O	_RST SURR	L	
42	PA7/SCOUT	I/O	O	_REQ SURR	L	I/F to SURR. μP
43	ALE	O	-	-	-	Pull Up
44	VCC	I	-	-	-	to VCC
45	P00	I/O	O	TU_CE(TUNER)	H	
46	P01	I/O	O	CLK(TUNER)	-	
47	P02	I/O	O	DO(TUNER)	-	
48	P03	I/O	I	DI(TUNER)	-	
49	P04	I/O	I	SD(TUNER)	L	
50	P05	I/O	I	DI(RDS)	-	
51	P06	I/O	O	_KILL CON	L	
52	P07	I/O	O	-	-	
53	P10	I/O	O	-CLKFL	-	
54	P11	I/O	O	-DATAFL	-	
55	P12	I/O	O		-	
56	P13	I/O	O	-	-	
57	P14	I/O	O	-	-	
58	P15	I/O	O	-	-	
59	P16	I/O	O	-	-	
60	P17	I/O	O	-	-	
61	WDTOUT	O	-	-	-	N.C
62	VSS	I	-	-	-	to VSS
63	VCC	I	-	-	-	to VCC
64	P20	I/O	I	FUNC. ENC. A	-	
65	P21	I/O	I	FUNC. ENC. B	-	
66	P22	I/O	I	VOL. ENC. A	-	
67	P23	I/O	I	VOL. ENC. B	-	
68	P24	I/O	I	GYRO A	-	
69	P25	I/O	I	GYRO B	-	
70	P26	I/O	I	-	-	to VSS
71	P27	I/O	I	-	-	to VSS
72	P30	I/O	O	CE0(AUDIO)	H	
73	P31	I/O	O	_CE7(VIDEO)	L	
74	P32	I/O	O	CE3(Multi Vol.)	H	
75	P33	I/O	O	_CE6(MUTE)	L	
76	P34	I/O	O	_CE5(LED)	L	
77	P35	I/O	O	_CE4(FL)	L	
78	P36	I/O	O	_CE1(OSD C)	L	
79	P37	I/O	O	_CE2(OSD S)	L	
80	P40	I/O	O	(RESERVED)	-	

no	port name	I/O	USE	Sig. Name	act.	Description
81	P41	I/O	O	(RESERVED)	-	
82	P42	I/O	O	(RESERVED)	-	
83	P60/	I/O	I	(RESERVED)	-	to VSS
84	P61/	I/O	I	(RESERVED)	-	to VSS
85	P62/	I/O	I	(RESERVED)	-	to VSS
86	P63/	I/O	I	SWITCH0	-	
87	P64/	I/O	I	SWITCH1	-	
88	P65/	I/O	I	SWITCH2	-	
89	P66/	I/O	I	SWITCH3	-	
90	P67/	I/O	I	SWITCH4	-	
91	VSS	I	-	-	-	to VSS
92	P50/AN0	I	AN	-	-	pull down
93	P51/AN1	I	AN	POWER DET.	-	see below
94	P52/AN2	I	AN	ABNORMAL	-	see below
95	P53/AN3	I	AN	KEY IN0	-	
96	P54/AN4	I	AN	KEY IN1	-	
97	P55/AN5	I	AN	KEY IN2	-	
98	P56/AN6	I	AN	KEY IN3	-	
99	P57/AN7	I	AN	KEY IN4	-	
100	VREFH	I	-	-	-	A/D VREFH

7. EXPLODED VIEW AND PARTS LIST



POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
001B	GOLD		FRONT PANEL KIT GOLD	334J248510	JL21				
001B	BLACK		FRONT PANEL KIT BLACK	334J248500	JL25			SHOTE PLUG SHORT PIN WITH COVER	YQ01000080
002B	GOLD		FRONT PANEL GOLD	334J248110					
002B	BLACK		FRONT PANEL BLACK	334J248010	▲ J001		9965 000 01313	JACK 2P AC INLET PW1910-H	YJ04002440
003B	GOLD		FRONT MOULD PANEL GOLD	300J248160	▲ L001	/C,/K		MAINS TRANSF.220V 50/60Hz	TS61421010
003B	BLACK		FRONT MOULD PANEL BLACK	300J248060	▲ L001	/S		MAINS TRANSF.230V 50Hz	TS61421020
005B	GOLD		FL WINDOW GOLD	326J158110	▲ L001	/U		MAINS TRANSF.120V 60Hz	TS61421030
005B	BLACK		FL WINDOW BLACK	326J158010	▲ L002	/C,/K		MAINS TRANSF.220V 50/60Hz	TS17205090
006B		9965 000 01794	LENS FUNCTION LED	300J355010	▲ L002	/S	9965 000 01779	MAINS TRANSF.230V 50Hz	TS17205100
007B	GOLD	9965 000 01795	BUTTON GYRO SIDE	300J270120	▲ L002	/U		MAINS TRANSF.120V 60Hz	TS16404120
			FUNCTION GOLD						
007B	BLACK		BUTTON GYRO SIDE	300J270020					
			FUNCTION BLACK						
008B	GOLD		ESCUTCHEON CORNER SIDE	300J063110				PACKING	
008B	BLACK		ESCUTCHEON CORNER SIDE	300J063010	001T	/C,/K,/S		USER GUIDE FOR /K, /S, /C	334J851350
010B	GOLD		ESCUTCHEON CORNER	300J063120	001T	/C,/K,/S		USER GUIDE FOR /U	334J851250
			R SIDE GL						
010B	BLACK		ESCUTCHEON CORNER	300J063020					
			R SIDE BL						
012B	GOLD	4822 381 12016	IR LENS GOLD	256J355030	Z001		9965 000 01382	REMOTE COMMANDER	ZK300J0010
012B	BLACK	4822 381 12015	IR LENS BLACK	256J355040				RC-18SR	
013B		4822 381 11677	POWER LED LENS	230K355020	Z007	/C		MAINS CORD	ZC02009010
014B		4822 462 71955	BUFFER DOOR BUFFER	446T056010				7A 250V KOREAN	
015B	GOLD	9965 000 01798	BUTTON FUNCTION BLOCK	300J270110	Z007	/K		MAINS CORD CCEE 2.5A 250V	ZC01803090
015B	BLACK		BUTTON FUNCTION BLOCK	300J270010	Z007	/U		MAINS CORD	ZC01802100
016B	GOLD	9965 000 01799	ARM DOOR HINGE L SIDE GL	300J002110				13A 125V UL/CSA	
016B	BLACK		ARM DOOR HINGE L SIDE BL	300J002010	Z008	/S		MAINS CORD	ZC01804100
017B	GOLD	9965 000 01800	ARM DOOR HINGE R SIDE GL	300J002120				10A 250V/UK VOLEX	
017B	BLACK		ARM DOOR HINGE R SIDE BL	300J002020					
018B		9965 000 01801	SHAFT DOOR SHAFT	300J112010					
021B		4822 529 10215	DAMPER DOOR DUMPPER	391H130030					
023B	GOLD		DOOR PANEL GOLD	334J162110					
023B	BLACK		DOOR PANEL BLACK	334J162010					
026B		4822 526 20213	DOOR MAGNET	271K305500					
030B		9650 000 01803	SPRING DOOR ESD	300J115010					
040B	GOLD		KNOB MASTER GOLD	334J154110					
040B	BLACK		KNOB MASTER BLACK	334J154010					
041B	GOLD	4822 410 11276	BUTTON POWER GOLD	176J270150					
041B	BLACK	4822 410 11275	BUTTON POWER BLACK	176J270050					
042B		4822 404 21012	JOINT POWER BUTTON	025J125010					
043B		4822 256 92097	FL HOLDER	183J271020					
044B		4822 459 11158	STICKER FL ADHESIVE TAPE	056J122010					
057B	GOLD		MASK IR	300J303030					
060B	GOLD	9965 000 01554	BADGE MARANTZ GOLD	313J251110					
060B	BLACK	9965 000 01553	BADGE MARANTZ BLACK	313J251010					
001C	GOLD	4822 410 11676	ESCUTCHEON GYRO ESC. UP & DOWN GOLD	290J063110					
001C	BLACK	4822 410 11675	ESCUTCHEON GYRO ESC. UP & DOWN BLACK	290J063010					
002C	GOLD	9965 000 01396	RUBBER RING GYRO GOLD	290J066110					
002C	BLACK		RUBBER RING GYRO BLACK	290J066010					
003C		9965 000 01397	FLYWHEEL GYRO BASE	290J273110					
006C		9965 000 01398	SHAFT GYRO MAIN	290J112010				NOT STANDARD SPARE PARTS	
009C			RETAINER GYRO UPPER	290J104050	001S			PACKING CASE	334J801010
014C		9965 000 01805	SHAFT	300J112020	002S			CUTION L SIDE	300J809010
			GYRO SUSTAINER UNDER		003S			CUTION R SIDE	300J809020
002D	GOLD	4822 501 11008	TOPCOVER SIDE SCREW	51260408M0					
002D	BLACK	4822 532 11276	TOPCOVER SIDE SCREW	51260408U0	Z003	/C,/K,/S		FM ANTENNA 931222R	ZA02800020
					Z003	/U	4822 303 30314	FM EXT ANT	ZA02000070
055G			LEGS FRONT GOLD	264J057040	Z004		4822 157 63083	LOOP ANT. LA-700HB	LA00055010
056G			LEGS REAR GOLD	264J057140	Z005	/U	4822 264 30265	ANT ADAPTOR	YP90000310

8. SERVICE PROGRAM

REMARK

If these service programs are set, All user preset memories will be cleared.

1. FACTORY mode (Tracking point memory)

This **FACTORY mode** can be use for measurement of the tuner circuit.

When the product is POWER ON, press both [**MEMO**] and [**DISPLAY OFF**] buttons simultaneously over 3 seconds.

FLD shows "**FACTORY**" for 3 seconds. Press [**PRESET**] button, FLD shows "**PRESET SEL**".

The tuning frequencies are memorized as follows.

Band	VERSION	P1	P2	P3	P4
FM AUTO [MHz]	C,U, K, S	90.0	98.0	106.0	87.5

Band	SCAN STEP	P5	P6	P7	P8	P9	P10	P11	P12
AM [kHz]	10 kHz(U)	600	1000	1400	520				
	9kHz(C, K, S)	603	999	1404	531				

2. Version of microprocessor (CPU) and FLD segment check mode

This mode is available to confirm the version of each CPU and to check all luminous segments by the following steps.

1. When the product is FACTORY mode (Refer to the above mentioned "**1. FACTORY mode**"), press [**DISPLAY OFF**] button. FLD shows "**MARANTZ SR-19EX**".
2. Press [**DISPLAY OFF**] button. FLD shows the version of program code for QU01(main CPU).
3. Press [**DISPLAY OFF**] button. FLD shows the version of program code for Q961(SURROUND CPU).
4. Press [**DISPLAY OFF**] button. All segments turn off and LED's (TV, LD, DVD, VCR1, DSS/VCR2, AUX, STANDBY) light up.
5. Press [**DISPLAY OFF**] button. G1 and G2 segments light up step by step.
6. Press [**DISPLAY OFF**] button. Segments of checker pattern light up step by step.
7. Press [**DISPLAY OFF**] button. All segment of FLD and LED's turn off.
8. Press [**DISPLAY OFF**] button. It will return to 1. (FLD shows "**MARANTZ SR-19EX**".)

3. Input and output test mode

This mode is available for the functions as shown in Fig 1 by the following steps.

1. When the product is FACTORY mode (Refer to above mentioned "**1. FACTORY mode**"), press both [**MEMO**] and [**TREBLE ▼**] buttons simultaneously.
2. FLD shows "**AUTO CD**". By pressing both [**MEMO**] and [**TREBLE ▼**] buttons simultaneously each time, the mode is changed in the following order.

Fig 1 Input and output test mode

ORDER	INDICATION for FLD	MODE FUNCTION
1	AUTO CD	Input selection mode (without using system setup menu)
2	ALL CH CD	5 or 6 channels output mode (This mode is available for 2 channels input)

3.1. Input selection mode (without setting to system setup menu)

This mode is available to select the input without setting to system setup menu by the following steps.

1. When FLD shows "AUTO CD"(Refer to "**3. Input and output test mode**"), the input can be shifted by pressing [**MODE**] button for the remote commander only each time as shown in Fig 2. ([**MODE**] button is in page4 of **AMP** function for RC-18SR*)

Fig 2. Input selection order by pressing [**MODE**] button each time

ORDER	INDICATION for FLD	INPUT STATUS
1	AUTO D1	DIG. 1 IN
2	AUTO D2	DIG. 2 IN
3	AUTO D3	DIG. 3 IN
4	AUTO D4	DIG. 4 IN
5	AUTO D5	DIG. 5 IN
6	AUTO D6	DIG. 6 IN
7	AUTO CD	CD IN (Analog)

Note: Surround mode is fixed "AUTO" mode automatically.

3.2. 5.1 channels output mode

This mode is available to output the same signal from 5 channels, even though 2 channels audio signal comes in.

As the result, all channels output can be confirmed by using analog stereo signal or PCM audio signal.

AC-3 or DTS source is not necessary to output from any channel in this mode.

1. When FLD shows "ALL CH CD" (Refer to "**3. Input and output test mode**"), the input can be shifted by pressing [**MODE**] button for the remote commander only each time as shown in Fig 3.
([**MODE**] button is in page4 of **AMP** function for RC-18SR*)
2. Supply to 2 channels PCM signal for digital input or 2 channels analog signal for analog input. But, Left channel and Right channel of input signal should be equal.
3. Then each output from the product is the same as the input signal. (Subwoofer channel is respond to lower than 80Hz signal)

Fig 3. Input selection order by pressing [**MODE**] button each time

ORDER	INDICATION for FLD	INPUT STATUS
1	ALL CH D1	DIG. 1 IN
2	ALL CH D2	DIG. 2 IN
3	ALL CH D3	DIG. 3 IN
4	ALL CH D4	DIG. 4 IN
5	ALL CH D5	DIG. 5 IN
6	ALL CH D6	DIG. 6 IN
7	ALL CH CD	CD IN (Analog)

4. Transistor MUTE mode

In mute situation on the product, output signal is muted by Volume control IC and muting transistor.

But, this mode is available to work the muting transistor only by the following steps.

1. When the product is FACTORY mode (Refer to "**1. FACTORY mode**"), press [**MUTE**] button for remote commander only.
2. FLD shows "TrMUTE ON", then muting transistor circuit is active only.

5. How to reset the product

When the product is POWER ON, press both [**CL**] and [**DISPLAY OFF**] buttons simultaneously.

FLD shows "DEFAULT" for 3 seconds, then all memories are cleared.

Note

* : The remote controller RC2000mkII is available instead of RC-18SR for [**MODE**] button.

9. ELECTRICAL ADJUSTMENTS

1. DC offset adjustment

Master Volume : Minimum, Speaker out : non Load

Step	Power	Channel	Adjustment Point	Test Point	Adjustment Vaule
1	on	Front L	R715	Speaker Output Terminal	$\pm 20\text{mV}$
		Center	RT15		
		Front R	RP16		
		Surr. L	RP15		
		Surr. R	R716		

Note : If the measured value is not exceed $\pm 20\text{mV}$, no need to adjust the DC offset.

2. Idling current adjustment

Master Volume : Minimum, Speaker out : non Load

Step	Power	Channel	Adjustment Point	Test Point	Adjustment Vaule
1	Power on	Front L	R743	J713 or R773	within 1 minute 0.4mV
		Center	RT43	JT13 or RT73	
		Front R	RP44	JP04 or RP74	
		Surr. L	RP43	JP03 or RP73	
2	after 4 minutes	Surr. R	R744	J714 or R774	see table for adjustment vaule
				J***:4P Connector [between 1p-4p] R***:Emitter Resister [0.1 Ω x 2 (0.18 Ω x 2)]	

Time since power on	Idling current adjust.	Time since power on	Idling current adjust.
4–4 minutes 30 seconds	5.6mV	11-12 minutes	8.0mV
4m30s–5 minutes	6.4mV	12-14 minutes	7.6mV
5–5 minutes 30 seconds	7.2mV	14-16 minutes	7.2mV
5m30s–6 minutes	7.7mV	16-18 minutes	6.5mV
6–7 minutes	8.2mV	18-22 minutes	5.6mV
7-8 minutes	8.6mV	22-26 minutes	4.9mV
8-9 minutes	8.8mV	26-30 minutes	4.4mV
9-10 minutes	8.6mV	more than 30 minutes	4.0mV
10-11 minutes	8.4mV		The taget is 4.0mV

3. Thermostat circuit confirmation

- 1) When the product is POWER ON, remove the wire W701 from the connector J715 (P704).
- 2) FLD shows "**ERROR PWR1**".
- 3) Confirm the product is POWER OFF after 3 seconds.
- 4) Connect the wire W701 to the connector J715 (on P704).
- 5) Confirm the product is standby status.

4. Cooling fan confirmation

4.1 Fan failure sensor confirmation

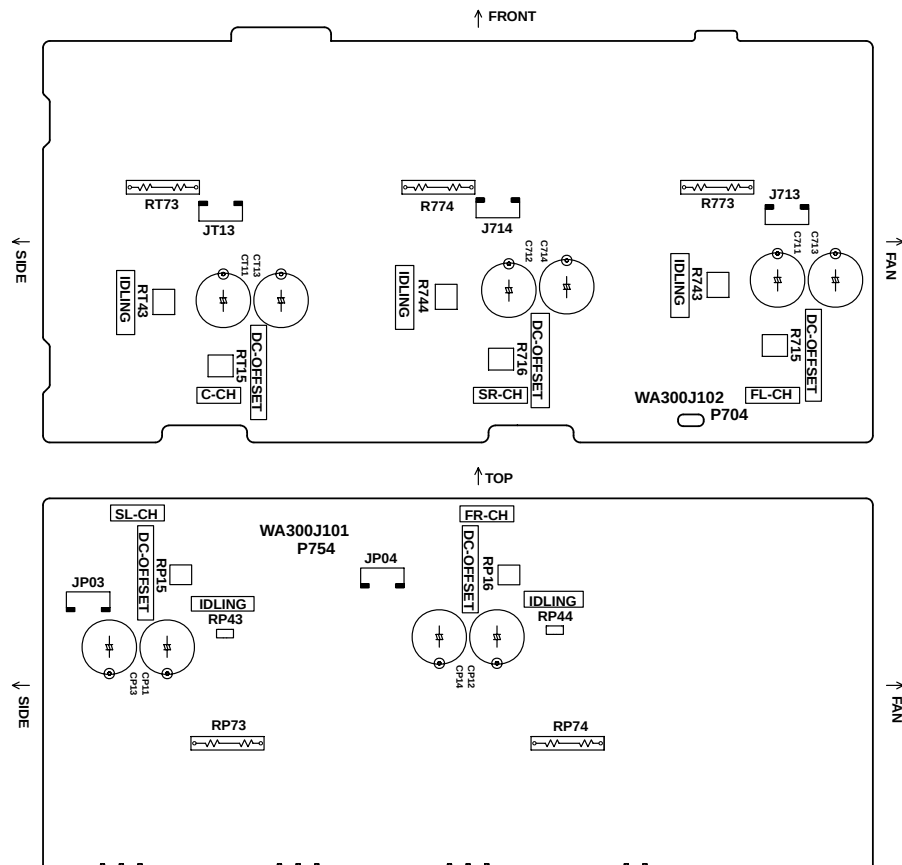
- 1) Set to be SPK output 1W from the front channel.
- 2) Connect the 1pin (LOCK) of the connector JN10 (on P754) to chassis (GND level) by a wire.
- 3) After 6 seconds the SPK relay works, and the SPK output isn't output.

4.2 Temperature sensor confirmation

- 1) Connect a resistor (470ohms 1W) between JN10 3pin (T-2CH) and DC +12Voltagess.
- 2) Confirm the cooling fan starts working. (Status : JN09 between 1pin and 2pin = **+7.5Voltage**, Fan speed = **Low**)
- 3) Remove the resistor.
- 4) Confirm the cooling fan stops.
- 5) Connect the resistor between JN10 4pin (T-3CH) and DC +12Voltage.
- 6) Confirm the cooling fan starts working again.
- 7) Remove the resistor.
- 8) Confirm the cooling fan stops.
- 9) Connect the resistor between JN10 3pin (T-2CH) and DC +12Voltage. And then connect another resistor between JN10 4pin (T-3CH) and DC +12Voltage.
- 10) Confirm the cooling fan starts working.
- 11) And then connect the resistor between JN10 2pin (SPEED) and DC +12Voltage.
- 12) Confirm the cooling fan changes to work with high speed. (Status : JN09 between 1pin and 2pin = **+11.5Voltage**, Fan speed = **High**)

4.3 Fan catching a foreign body sensor confirmation

- 1) Connect the resistor (470ohms 1W) between JN10 3pin (T-3CH) and DC +12Voltage.
 - 2) Confirm the cooling fan starts working. (Status : JN09 between 1pin and 2pin=**+7.5Voltage**, Fan speed = **Low**)
 - 3) Set to be SPK output 1W from the front channel.
 - 4) Hold the cooling fan by hand and stop it.
- Notes: Take care of wound in the hand!**
- 5) After 6 seconds the SPK relay works and the SPK output isn't output.



10. ALIGNMENT PROCEDURES

1. AM IF Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	999 kHz (C, K, S) 1000 kHz (U)	Level 300 μ V/m (50dB/m) Mod. 400 Hz 30%	Tuning point	LA06	Output level (L or R) Maximum at TAPE-OUT

REMARK: For receiving antenna, the adapted one is available.

This adjustment is not necessary normally, because the coil LA06 is preset by the original supplier.

It is necessary when the incorrect usable sense and frequency response.

2. AM Tracking Adjustment

Step	**Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	603 kHz (C, K, S) 600 kHz (U)	Level 300 - 400 μ V/m Mod. 400 Hz 30%	603 kHz (C, K, S) 600 kHz (U)	LA01	Output level (L or R) Maximum at TAPE-OUT
2		1404 kHz (C, K, S) 1400 kHz (U)	Level 300 - 400 μ V/m Mod. 400 Hz 30%	1404 kHz (C, K, S) 1400 kHz (U)	CA01	Output level (L or R) Maximum at TAPE-OUT
3	Repeat step 1 and 2 until sensitivity be maximized.					

3. AM auto stop Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	999 kHz (C, K, S) 1000 kHz (U)	500 μ V/m (54 dB/m)	999 kHz (C, K, S) 1000 kHz (U)	RA11	"TUNED" indicate on FLD
2			1000 μ V/m (60 dB/m)	AUTO SCAN	Only Confirm	"TUNED" indicate on FLD

4. FM MONO. Distortion Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (C, K, S, U)	500 μ V (54 dB) MONO 1 kHz / Dev.40kHz 53.3% (C, K, S) MONO 1 kHz / Dev. 75 kHz 100% (U)	98 MHz (P2)	L201	Distortion level Minimum at TAPE-OUT

5. FM Muting Level Adjustment

Turn the variable resistor **R212** to no indication ("TUNED") point. And return that valuable resistor in opposite to the "TUNED" indicate point.

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (C, K, S, U)	10 V (20 dB) MONO 1 kHz / Dev.40 kHz 53.3% (C, K, S) MONO 1 kHz / Dev. 75 kHz 100% (U)	98 MHz (C, K, S, U)	R212	"TUNED" indicate on FLD
2			Over mentioned level +3 dB	AUTO SCAN	Only Confirm	"TUNED" indicate on FLD

6. FM STEREO Distortion Adjustment

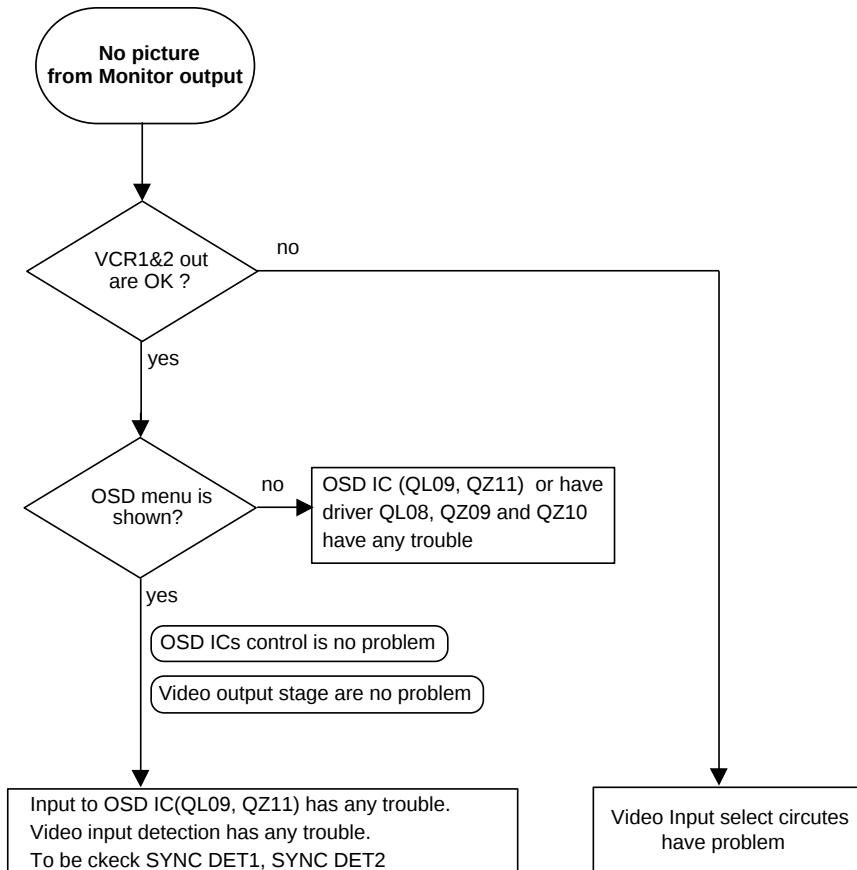
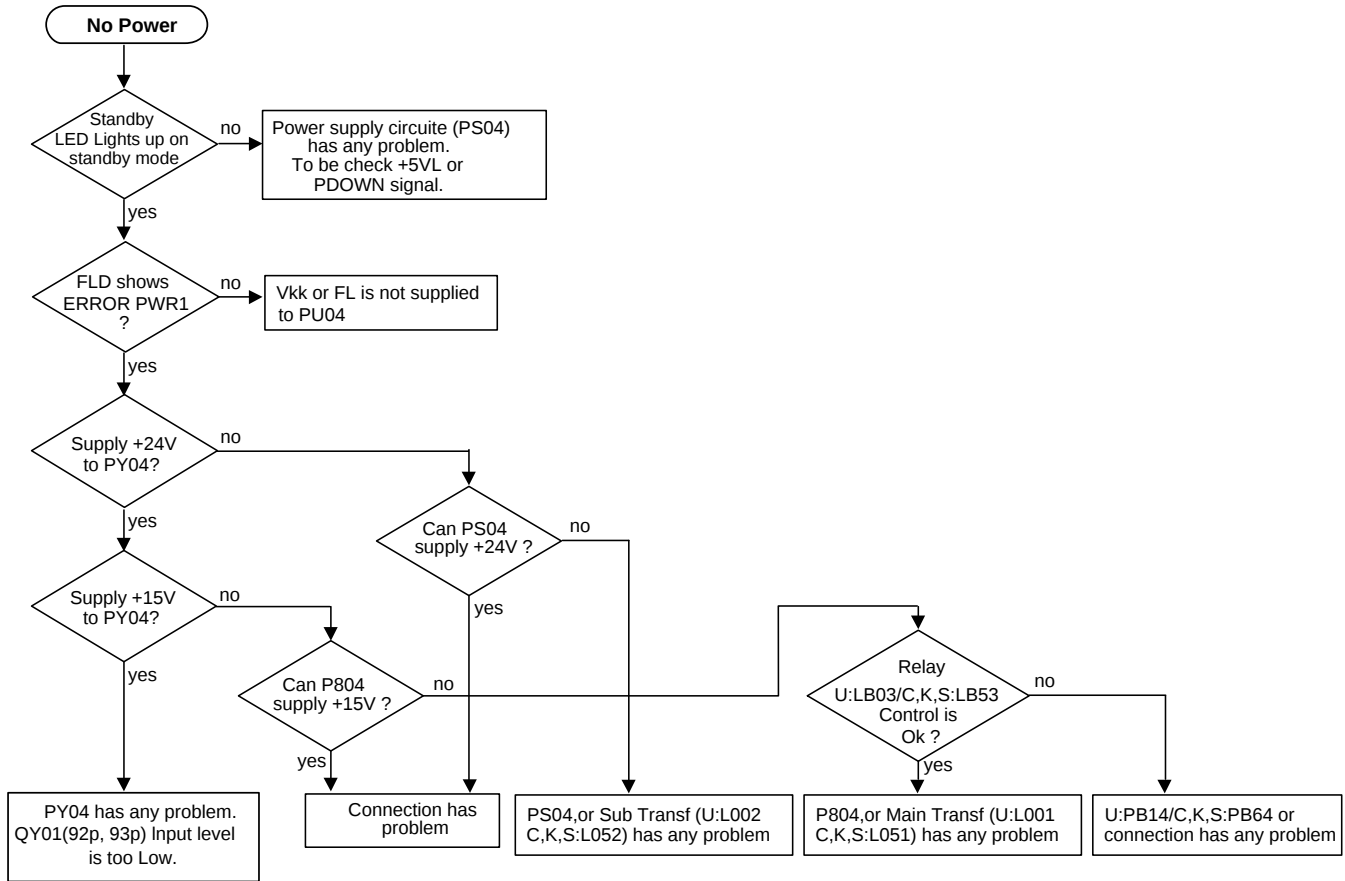
Adjust the **L channel** with the RF signal modulated only **L channel** first and confirm the **R channel** with the RF signal modulated only **R channel**.

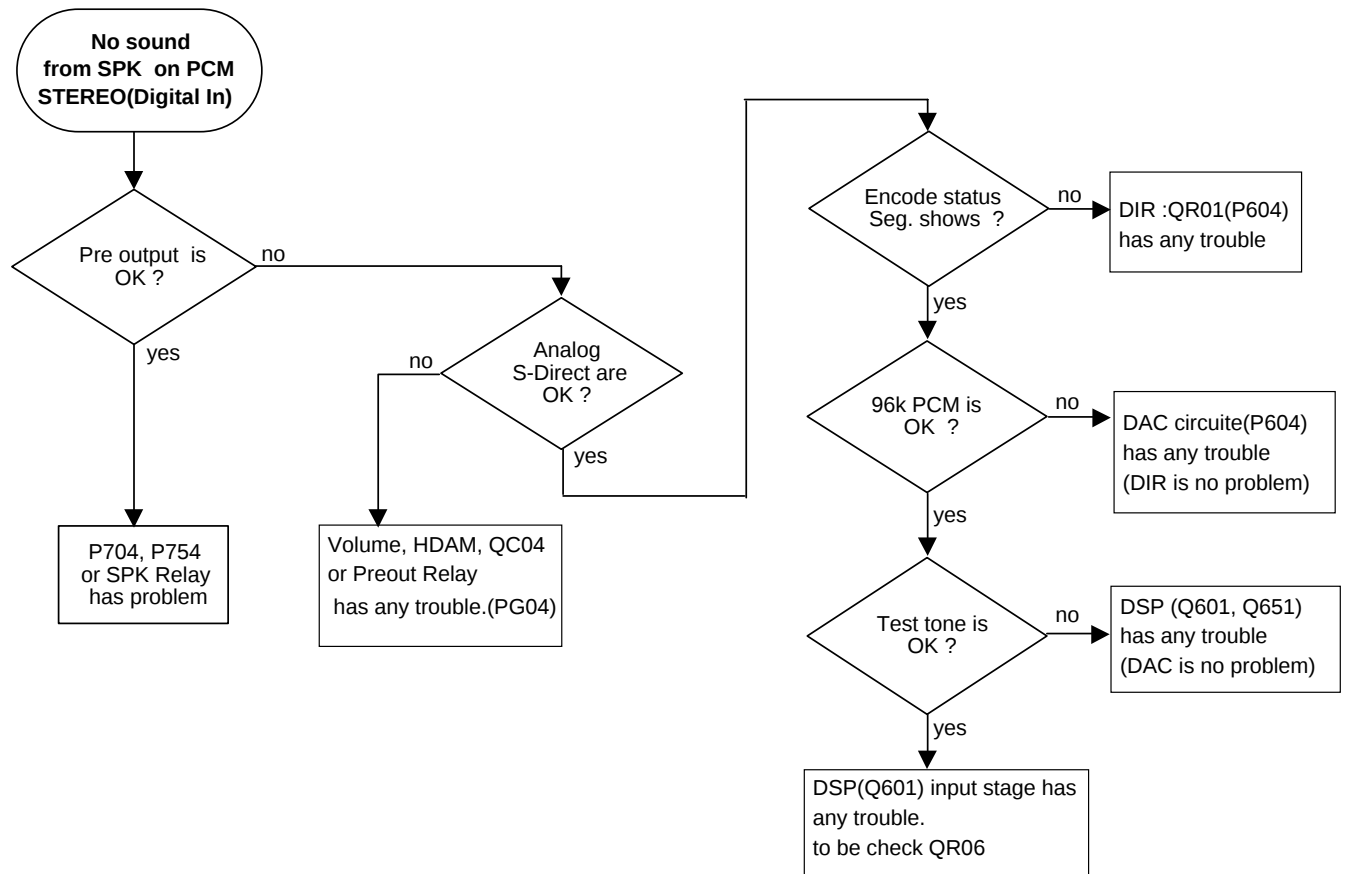
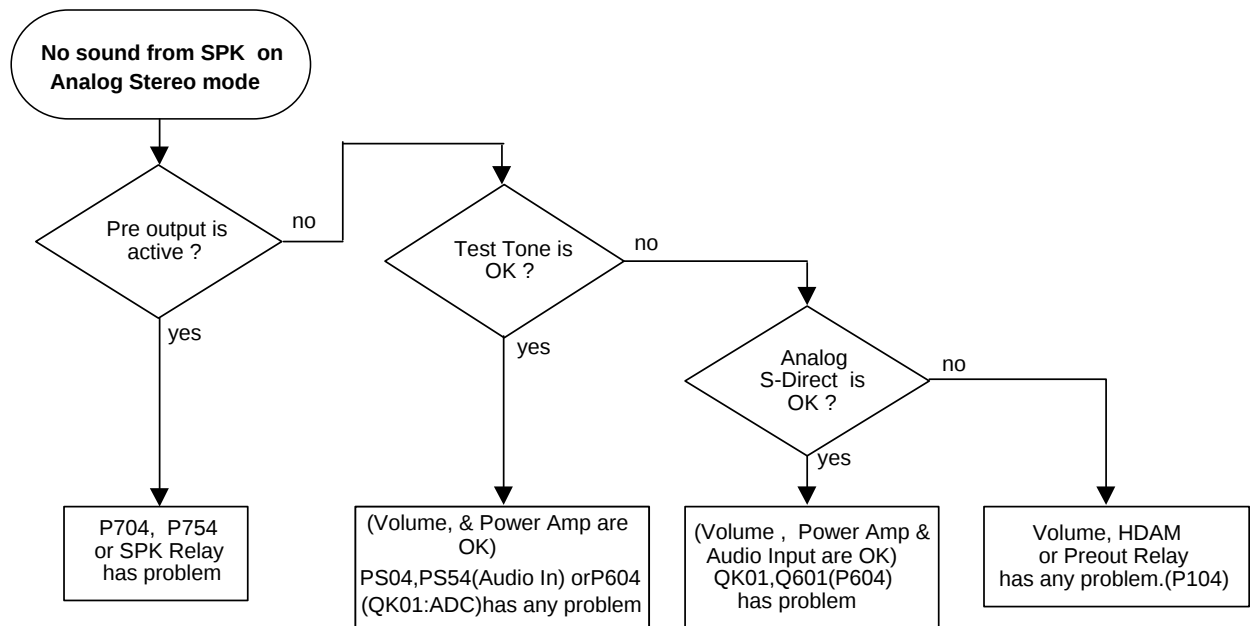
Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (C, K, S, U)	500 V (54 dB) L or R 1 kHz / Dev. 40 kHz 53.3% PILOT 19 kHz / Dev. 6 kHz 8% (C, K, S)	98 MHz (C, K, S, U)	IF COIL in FRONT END	Distortion level Minimum at TAPE-OUT
2			L or R 1 kHz / Dev. 67.5 kHz 90% PILOT 19 kHz / Dev. 6.75 kHz 9% (U)		Only Confirm	Distortion level Similar as L ch. at TAPE-OUT R ch.

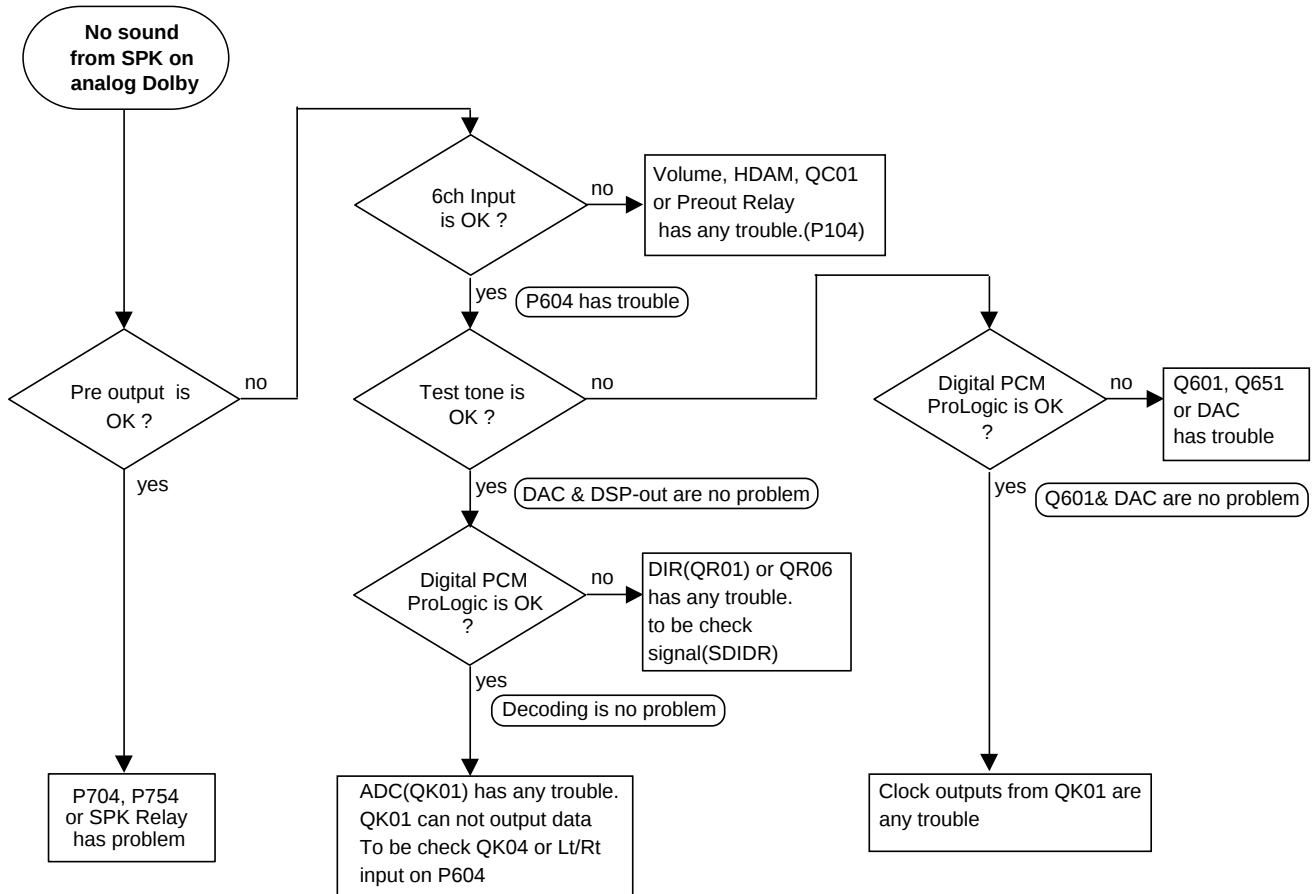
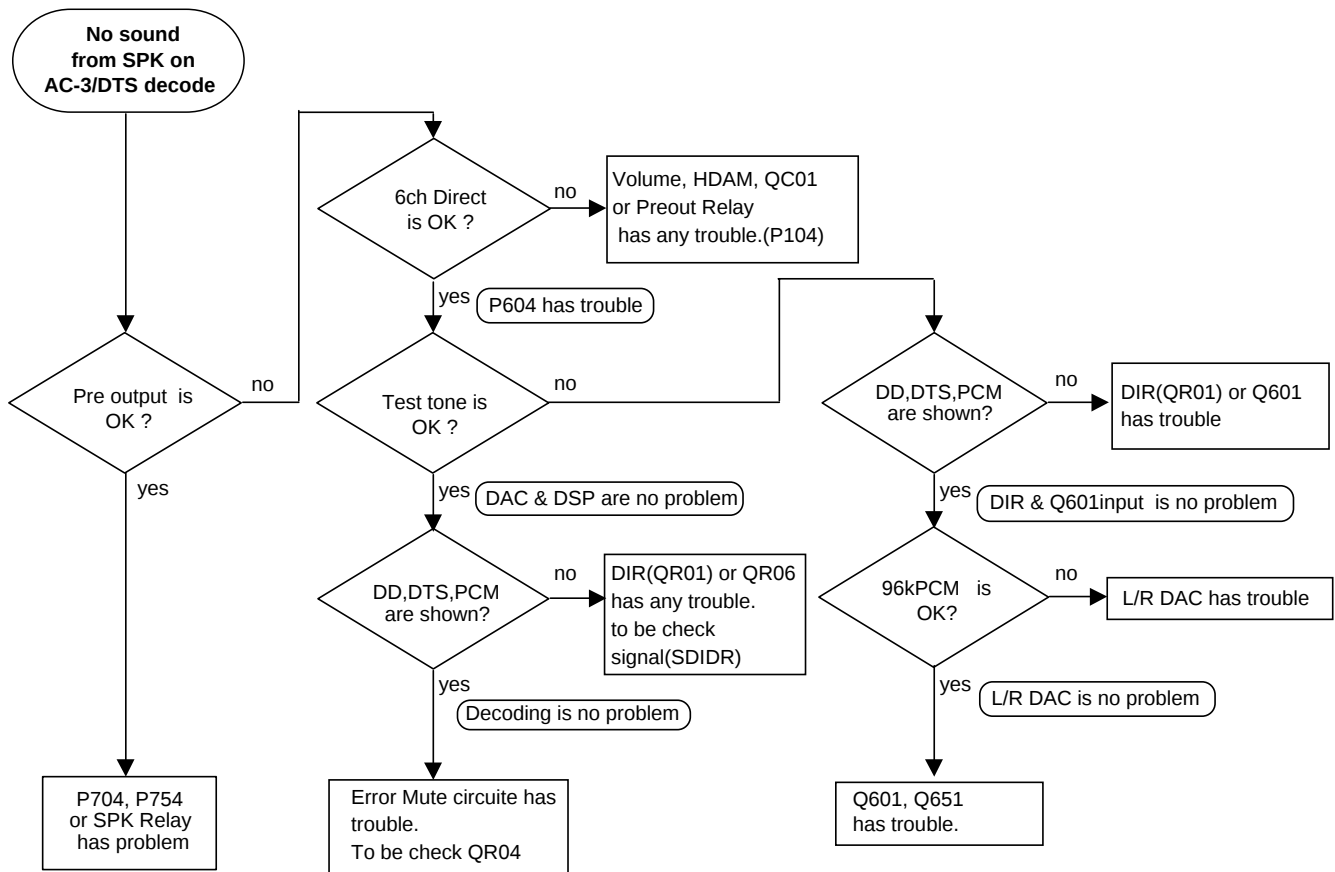
7. FM STEREO Separation Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (C, K, S, U)	same specification as FM STEREO distortion adjustment. Input only L channel.	98 MHz (C, K, S, U)	R211	Output level Minimum at TAPE-OUT channel R
2		98 MHz (C, K, S, U)	same specification as FM STEREO distortion adjustment. Input only R channel.	98 MHz (C, K, S, U)	R211	Output level Similar as Rch at TAPE-OUT channel L

11. TROUBLE SHOOTING







12. TECHNICAL DESCRIPTION

This product has two DSP ICs, one is for Dolby Digital (AC-3) decoding or DTS (Digital Theater System) decoding, another is for THX processing.

Multi channel sound is reproduced by connecting with DVD player or LD player.

Also Dolby Pro Logic decode is available to analog audio and PCM digital audio.

Additionally, 96kHz PCM stereo audio playback is possible.

Decoding circuit is consist of 13 ICs (DIR, two DSP, ADC, five DAC, AC-3 RF demodulator, two data separator and CPU).

DOLBY DIGITAL (AC-3)

Dolby Digital delivers six totally separate (discrete) channels of sound. Like Dolby Surround Pro Logic, it includes Left, Center and Right channels across the front of the room. Dolby Surround Pro Logic provides a single limited-bandwidth (100 Hz to 7,000 Hz) surround channel which is typically played back in the home through two channels of amplification and two speakers. In comparison, Dolby Digital provides separate (discrete) left surround and right surround channels, for more precise localization of sounds and a more convincing, realistic ambience. And, with Dolby Digital, all five main channels are full range (3 Hz to 20,000 Hz). A subwoofer could be added to each channel, if desired.

The sixth channel, the Low Frequency Effects Channel, will, at times, contain additional bass information to maximize the impact of scenes such as explosions, crashes, etc. Because this channel has only a limited frequency response (3 Hz to 120 Hz), it is sometimes referred to as the “.1” channel. When added to the 5 full range channels, the Dolby Digital system is sometimes referred to as having “5.1” channels.

DTS

An amazing new technology for surround-sound entertainment, DTS Digital Surround is an encode/decode system that delivers six channels (5.1) of master-quality, 20-bit audio. In the encoding process, the DTS algorithm encrypts six channels of 20-bit digital audio information in the space previously allotted for only two channels of 16-bit linear PCM. Then during playback, the DTS decoder reconstructs the original six channels of 20-bit digital audio. Each of these six channels is audibly superior to the 16-bit linear PCM audio found on conventional compact discs.

THX ULTRA

Home THX Controller Technologies : Dubbing stages (where soundtracks are created) and movie theatres do not change their acoustics, equipment, or system equalization when mixing or playing back 5.1 channel sound tracks. They merely divide the surround array of speakers into two symmetrical arrays (hence the term “split surround”). All of the remaining system equalization and setup remains the same. The Home THX Technologies of Re-Equalization, Timbre Matching, and Decorrelation, as well as the Home THX Crossover are still necessary for 5.1 channel formats. Because of the nature of the split surround soundtrack, Home THX Timbre Matching and Decorrelation technologies have been altered to provide correct surround sound balance and spaciousness. Here is a representation of how Home THX Controller Technologies work with the various surround sound formats.

THX SURROUND EX

THX Surround EX - Dolby Digital Surround EX is a joint development of Dolby Laboratories and the THX division of Lucasfilm Ltd.

In a movie theater, film soundtracks that have been encoded with Dolby Digital Surround EX technology are able to reproduce an extra channel which has been added during the mixing of the program.

This channel, called Surround Back, places sounds behind the listener in addition to the currently available front left, front center, front right, surround right, surround left and subwoofer channels.

This additional channel provides the opportunity for more detailed imaging behind the listener and brings more depth, spacious ambience and sound localization than ever before.

Movies that were created using the Dolby Digital Surround EX technology when released into the home consumer market may exhibit a Dolby Digital Surround EX logo on the packaging.

A list of movies created using this technology can be found on the Dolby web site at <http://www.dolby.com>.

“SURROUND EX™” is a trademark of Dolby Laboratories. Used under authorization.

THX SURROUND EX

DIR (Digital audio Interface Receiver : QR01 / LC89055)

This circuit extract synchronized clock signals and data from SPDIF signal input.
QR01(LC89055) generates these signals, this chip supports 96kHz sample rate.

1st DSP (Digital Signal Processor for Dolby Digital, Pro Logic, DTS : Q601 / YSS912)

Q601(YSS912) decodes 6 channels audio from encoded data signal input.
Some effects are processed in addition to multi channel decoding on HALL, MATRIX, and MOVIE mode.

2nd DSP (Digital Signal Processor for THX processing : Q651 / ZR38601)

Q651(ZR38601) has the THX 5.1 processing functions. These functions include **Re-equalization, Surround Timbre-Matching, Adaptive Decorrelation, Bass Management, Bass Peak Level Manager, and Loudspeaker Position Time Synchronization.**

Re-equalization takes the edginess or “brightness” out of your home cinema sound, compensating for the fact that sound mixed for theatres will sound too bright when played back through flat response speakers in your home.

Timbre Matching matches the tone of your front speakers to your surrounds to compensate for the fact that only two surround speakers are used in a typical Home Theatre system instead of a full array as in a movie theatre.

Adaptive Decorrelation gives a stereo “feel” when your surrounds are playing mono and automatically switches off when they are playing stereo.

Bass Management Electronic Crossover allows you to use more compact, easier-to-place speakers, while sending bass to a subwoofer system, improving frequency response, lowering distortion and increasing dynamic range.

Bass Peak Level Manager protects your subwoofer from overloading due to the great amount of bass a 5.1 soundtrack delivers.

Loudspeaker Position Time Synchronization lets you easily set up your system for an optimum listening position, which is difficult to achieve within the space constraints of most homes.

CODEC (QK01 / AK4528)

The AK4528 is a high performance 24bit CODEC for the 96kHz recording system . The ADC has an Enhanced Dual Bit architecture with wide dynamic range. The DAC uses the new developed Advanced Multi Bit architecture and achieves low outband noise and high jitter tolerance by use of SCF (switched capacitor filter) techniques.

The DAC is used for surround Back Left & Right channel.

DAC (Digital to Analog Converter : QD01 / AK4356)

The AK4356 is a high performance six channels DAC corresponding to 96kHz sampling mode of DVD.

Two channels of them can operate up to 192kHz sampling fully correspond to DVD-Audio standards. The AK4356 introduces the advanced multi-bit architecture for $\Delta\Sigma$ modulator. This new architecture achieves the wider dynamic range, while keeping much the same superior distortion characteristics as conventional Single Bit way.

In the AK4356, the analog outputs are filtered in the analog domain by switched-capacitor filter (SCF) with high tolerance to clock jitter. The analog outputs are full differential output, so the device is suitable for hi-end applications. The DAC is used for Left, Right, Center, Surround Left & Right and Sub woofer channel.

CPU (Q691 / TMP93CW44ADF)

This chip controls some ICs in P604 and communicates with QU01.
Connect to QU01 with serial interface lines.

13. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTORS

R*** : 1) GD05 x x x 140, Carbon film fixed resistor, ±5% 1/4W
 R*** : 2) GD05 x x x 160, Carbon film fixed resistor, ±5% 1/6W
 ① Resistance value

Examples

① Resistance value

0.1Ω 001 10Ω 100 1kΩ 102 100kΩ 104
 0.5Ω 005 18Ω 180 2.7kΩ 272 680kΩ 684
 1Ω 010 100Ω 101 10kΩ 103 1MΩ 105
 6.8Ω 068 390Ω 391 22kΩ 223 4.7MΩ 475

Note : Please distinguish 1/4W from 1/6W by the shape of parts used actually.

CAPACITORS

C*** : CERAMIC CAP.

3) DD1 x x x x 370, Ceramic capacitor
 Disc type
 Temp.coef. P350~N1000, 50V
 ③ Capacity value
 ② Tolerance

Examples

② Tolerance (Capacity deviation)

±0.25 pF 0
 ±0.5 pF 1
 ±5 % 5

Tolerance of COMMON PARTS handled here are as follows :

0.5 pF - 5 pF ± 0.25 pF
 6 pF - 10 pF ± 0.5 pF
 12 pF - 560 pF ... ± 5 %

③ Capacity value

0.5 pF 005 3 pF 030 100 pF 101
 1 pF 010 10 pF 100 220 pF 221
 1.5 pF 015 47 pF 470 560 pF 561

C*** : CERAMIC CAP.

4) DK16 x x x 300, High dielectric constant ceramic capacitor
 Disc type
 Temp.chara. 2B4, 50V
 ④ Capacity value

Examples

④ Capacity value

100 pF 101 1000 pF 102 10000 pF 103
 470 pF 471 2200 pF 222

C*** : 5) ELECTROLY CAP. (), 6) FILM CAP ()

5) EA x x x x x 10, Electrolytic capacitor
 One-way lead type, Tolerance ±20%
 ⑥ Working voltage
 ⑤ Capacity value

Examples

⑤ Capacity value

0.1μ F 104 4.7μ F 475 100μ F 107
 0.33μ F 334 10μ F 106 330μ F 337
 1μ F 105 22μ F 226 1100μ F 118
 2200μ F 228

⑥ Working voltage

6.3 V 006 25 V 025
 10 V 010 35 V 035
 16 V 016 50 V 050

6) DF15 x x x 350 → Plastic film capacitor
 DF15 x x x 310 → One-way type, Mylar ±5% 50V
 DF16 x x x 310 → Plastic film capacitor
 One-way type, Mylar ±10% 50V

⑦ Capacity value

Examples

⑦ Capacity value

0.001μ F (1000 pF) 102 0.1μ F 104
 0.0018μ F 182 0.56μ F 564
 0.01μ F 103 1μ F 105
 0.015μ F 153

NOTE 1) The above CODES(R***, R***, C***, C*** and C***) are omitted on the schematic diagram in some case.
 2) On the occasion, be confirmed the common parts on the parts list.
 3) Refer to "Common Parts List" for the other common parts(RI05, DD4, DK4).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows ;

1. KOA Corporation

Part No.(MJI)	Type No.(KOA)	Description
NH05 x x x 140	RF25S x x x x Ω	J ±5% (1/4W)
NH05 x x x 120	RF50S x x x x Ω	J ±5% (1/2W)
NH85 x x x 110	RF73B2A x x x x Ω	J ±5% (1/10W)
NH95 x x x 140	RF73B2E x x x x Ω	J ±5% (1/4W)

* Resistance value

Resistance value(0.1Ω - 10k Ω)

2. Matsushita Electronic Components Co., Ltd

Part No.(MJI)	Type No.(MEC)	Description
NF05 x x x 140	ERD-2FCJ x x x	(±5% 1/4W)
RF05 x x x 140		
NF02 x x x 140	ERD-2FCG x x x	(±2% 1/4W)
RF02 x x x 140		

* Resistance value

Examples

* Resistance value

0.1Ω 001 10Ω 100 1kΩ 102 100kΩ 104
 0.5Ω 005 18Ω 180 2.7kΩ 272 680kΩ 684
 1Ω 010 100Ω 101 10kΩ 103 1MΩ 105
 6.8Ω 068 390Ω 391 22kΩ 223 4.7MΩ 475

ABBREVIATION AND MARKS

ANT.	: ANTENNA	BATT.	: BATTERY
CAP.	: CAPACITOR	CER.	: CERAMIC
CONN.	: CONNECTING	DIG.	: DIGITAL
HP	: HEADPHONE	MIC.	: MICROPHONE
μ-PRO	: MICROPROCESSOR	REC.	: RECORDING
RES.	: RESISTOR	SPK	: SPEAKER
SW	: SWITCH	TRANSF.	: TRANSFORMER
TRIM.	: TRIMMING	TRS.	: TRANSISTOR
VAR.	: VARIABLE	X' TAL	: CRYSTAL

NOTE ON SAFETY:

Symbol  Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol  Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

 がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CA01		4822 125 50384	P104-7CH ELE. VOL. TUNER CIRCUIT BOARD P104-CAPACITORS TRIM VCT51E 20pF	CT12000200	CV04		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CA02			CER. CHIP 0.047μF B 50V	DK56473300	CV05		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CA03		4822 122 33204	CER. CHIP 15pF ±5%	DD55150300	CV06		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CA04		4822 121 42466	FILM 390pF 100V ECQ-P	DF15391550	CV07			ELECT 22μF 25V	EA22602520
CA05		5322 122 32452	CER. CHIP 47pF ±5% CH	DD55470300	CV08			ELECT 22μF 25V	EA22602520
CA06		5322 122 34098	CER. CHIP 0.01UF ±10%	DK56103300	CV09		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
CA18		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	CV10		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
CC05		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV11		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CC06		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV12		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CC07		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV13		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CC08		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV14		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CC25		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV15		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CC26		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV16		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CC27		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	CV17		4822 124 22782	ELECT 47μF 16V	EA47601620
CC29					CV18		4822 124 22782	ELECT 47μF 16V	EA47601620
CC32		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	CV19		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200
CC33					CV20		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200
CC37		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	CV21		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520
CC40		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620	CV22		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520
CM01					CV23		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CM08			CER. CHIP 470pF ±5%	DD55471300	CV25			ELECT 22μF 25V	EA22602520
CM09		5322 122 32531	CER. CHIP 470pF ±5%	DD55101300	CV26			ELECT 22μF 25V	EA22602520
CM10		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	CV27		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CM11		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	CV28		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CM12		4822 124 22277	ELECT 470μF 16V M RA-2	OA47701620	CV29			ELECT 22μF 25V	EA22602520
CM21					CV30			ELECT 22μF 25V	EA22602520
CM28		4822 122 33575	CER. CHIP 220pF ±5%	DD55221300	CV31		4822 124 90362	ELECT 22μF M 50V RA-2	OA22605020
CM29					CV32		4822 124 90362	ELECT 22μF M 50V RA-2	OA22605020
CM35			CER. CHIP 470pF ±5%	DD55471300	CV41		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CG51		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV42		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CG52		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV43		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CG53		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV44		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CG54		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV45		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CG55		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	CV46		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CG56		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	CV47			ELECT 22μF 25V	EA22602520
CG57			ELECT 22μF 25V	EA22602520	CV48			ELECT 22μF 25V	EA22602520
CG58			ELECT 22μF 25V	EA22602520	CV49		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
CG59		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620	CV50		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
CG60		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620	CV51		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CG61		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV52		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CG62		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV53		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CG63		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV54		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CG64		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV55		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CG65		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	CV56		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CG66		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	CV57		4822 124 22782	ELECT 47μF 16V	EA47601620
CG67		4822 124 22782	ELECT 47μF 16V	EA47601620	CV58		4822 124 22782	ELECT 47μF 16V	EA47601620
CG68		4822 124 22782	ELECT 47μF 16V	EA47601620	CV59		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200
CG69		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	CV60		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200
CG70		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	CV61		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520
CG71		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520	CV62		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520
CG72		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520	CV63		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CG73		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	CV65		4822 124 41534	ELECT 10μF M 25V RA-2	OA10602520
CG75			ELECT 22μF 25V	EA22602520	CV66		4822 124 41534	ELECT 10μF M 25V RA-2	OA10602520
CG76			ELECT 22μF 25V	EA22602520	CV71		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CV01		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV73		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CV02		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CV74		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
CV03		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	CV75		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
					CV76		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
					CV77			ELECT 22μF 25V	EA22602520
					CV78			ELECT 22μF 25V	EA22602520
					CV79		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
					CV80		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
					CV81		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
					CV82		4822 124 22276	ELECT 47μF M 50V RA-2	OA47605020
					CV83		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
					CV84		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
					CV85		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CV86		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	C361	/S			
CV87		4822 124 22782	ELECT 47μF 16V	EA47601620	3		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CV88		4822 124 22782	ELECT 47μF 16V	EA47601620	C364	/S			
CV89		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	C367		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CV90		4822 126 12061	CER. CHIP 0.1μF B 25V	DK56104200	C368		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CV91		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520	C370		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CV92		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520	C371		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CV93		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	C372		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
CV95			ELECT 22μF 25V	EA22602520	C501		5322 122 32452	CER. CHIP 47pF ±5% CH	DD55470300
CV96			ELECT 22μF 25V	EA22602520	C502		5322 122 32452	CER. CHIP 47pF ±5% CH	DD55470300
					C503		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
C201		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	C504		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
C202		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	C505		4822 124 90357	ELECT 2.2μF M 50V RA-2	OA22505020
C203			CER. CHIP 0.047μF B 50V	DK56473300	C507		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
C204			CER. CHIP 0.047μF B 50V	DK56473300	C508		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
C205		4822 124 42182	ELECT 3.3μF M 50V RA-2	OA33505020	C509		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
C206		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	C510		5322 122 32531	CER. CHIP 100pF ±5%	DD55101300
C207		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	C511		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300
C208			CER. 0.047μF B 50V	DK56473300					
C209		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				P104-CAPACITORS(COMMON)	
C210		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	C***			PLATIC FILM CAPACITO	
C211		4822 124 90357	ELECT 2.2μF M 50V RA-2	OA22505020				±5% 50V : C217 C301 C302	
C212		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020				CC01-CC04	
C213		4822 124 22273	ELECT 0.47μF M 50V RA-2	OA47405020				P104-RESISTORS	
C214		4822 124 22698	ELECT 47μF M 25V RA-2	OA47602520	RA01		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
C215			CER. CHIP 0.047μF B 50V	DK56473300	RA02		4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
					RA11		4822 100 11351	TRIM. 10k Ω RH0638CJ4R	RA01030780
C216		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620	RA12		4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
C218		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RA13		4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
C219		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RA14		4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
C220		4822 122 33127	CER. CHIP 2200pF ±10%	DK56222300	RA59		4822 111 90894	CHIP 1k Ω ±5% 1/10W	NI05102110
C222		5322 126 10511	CER. CHIP 0.001μF ±10%	DK56102300					
C223		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC01		4822 111 90898	CHIP 12k Ω ±5% 1/10W	NI05123110
C225		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC02		4822 111 90898	CHIP 12k Ω ±5% 1/10W	NI05123110
C226		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC05		4822 111 90911	CHIP 27k Ω ±5% 1/10W	NI05273110
C227	/U	4822 122 33127	CER. CHIP 2200pF ±10%	DK56222300	RC06		4822 111 90911	CHIP 27k Ω ±5% 1/10W	NI05273110
C233		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC09		4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
C234		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RC10		4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
C235		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC32		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
C236		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC33		4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
C237		5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RC34		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
					RC35		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
C303		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RC36		4822 050 21021	100 Ω ±5% 1/2W	GG05101120
C304		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RC40		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
C305	/C,/K,/S	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020					
C305	/U	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM01		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C306	/C,/K,/S	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM02		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C306	/U	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM03		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C309	/C,/K,/S	4822 122 33134	CER. CHIP 15000pF ±10%	DK56153300	RM04		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C310	/C,/K,/S	4822 122 33134	CER. CHIP 15000pF ±10%	DK56153300	RM05		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C311	/C,/K,/S	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM06		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C312	/C,/K,/S	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM11		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C315	/C,/K,/S	5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RM12		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C316	/C,/K,/S	5322 122 34098	CER. CHIP 0.01μF ±10%	DK56103300	RM13		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C317	/C,/K,/S	5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	RM14		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C318	/C,/K,/S	5322 122 32531	CER. CHIP 100pF ±5%	DD55101300	RM15		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C319	/C,/K,/S	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM16		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C320	/C,/K,/S	4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	RM21		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
					RM22		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C351	/S	5322 122 34098	CER. CHIP 10000pF ±10%	DK56103300	RM23		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C352	/S	4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RM24		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C353	/S	4822 122 33805	CER. CHIP 330pF ±10%	DK56331300	RM25		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C354	/S	4822 122 33137	CER. CHIP 560pF ±10%	DK56561300	RM26		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C355	/S	5322 122 34098	CER. CHIP 10000pF ±10%	DK56103300	RM31		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C356	/S	5322 122 32658	CER. CHIP 22pF ±5%	DD55203000	RM32		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
C357	/S	5322 122 31946	CER. CHIP 27pF ±5%	DD55270300	RM33		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C358	/S	4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RM34		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
C359	/S	4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RM35		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
C360	/S	5322 126 10511	CER. CHIP 0.001μF ±10%	DK56102300					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
RM36		4822 116 90503	CHIP 150 Ω ±5% 1/10W	NI05151110
RM46		4822 111 90894	CHIP 1k Ω ±5% 1/10W	NI05102110
▲ RM51		4822 050 21021	100 Ω ±5% 1/2W	GG05101120
RM52		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
RM53		4822 111 90907	CHIP 22k Ω ±5% 1/10W	NI05223110
RM54			COMPO. RKL5105J	BW05105020
RM55		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
RG53				
}		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
RG56				
RG57				
}		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RG60				
RG61		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RG62		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RG63		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RG64		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RG65		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RG66		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RG67		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RG68		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RG70		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
RG73		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RG74		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV03				
}		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
RV06				
RV07				
}		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV10				
RV11		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RV12		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RV13		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RV14		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RV15		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RV16		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RV17		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV18		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV19		4822 111 91192	CHIP 470 Ω ±5% 1/10W	NI05471110
RV20		4822 111 91192	CHIP 470 Ω ±5% 1/10W	NI05471110
RV21		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
RV23		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV24		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV25		4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
RV26		4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
▲ RV31				
}		4822 052 10103	10k Ω ±5% 1/6W	GG05103160
▲ RV34				
▲ RV35				
}		4822 052 10229	22 Ω ±5% 1/6W	GG05220160
▲ RV38				
RV43				
}		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
RV46				
RV47				
}		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV50				
RV51		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RV52		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RV53		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RV54		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RV55		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RV56		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RV57		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV58		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV60		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
RV63		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
RV64		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV73		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
RV75		4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
RV76		4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
RV77				
}		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV80				
RV81		4822 111 90922	CHIP 5.6k Ω ±5% 1/10W	NI05562110
RV82		4822 111 91369	CHIP 1.5k Ω ±5% 1/10W	NI05152110
RV83		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
RV84		4822 111 90906	CHIP 2.2k Ω ±5% 1/10W	NI05222110
RV85		4822 111 90926	CHIP 8.2k Ω ±5% 1/10W	NI05822110
RV86		4822 111 90899	CHIP 15k Ω ±5% 1/10W	NI05153110
RV87		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV88		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV89		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
RV90		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
RV93		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
RV94		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
▲ R101	/U	4822 050 21003	10k Ω ±5% 1/2W	GG05103120
R201	/C,/K,/S	4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
R201	/U	4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
R202		4822 111 90915	CHIP 390 Ω ±5% 1/10W	NI05391110
R203		4822 111 90906	CHIP 2.2k Ω ±5% 1/10W	NI05222110
R204		4822 111 91192	CHIP 470 Ω ±5% 1/10W	NI05471110
R205		4822 111 91191	CHIP 330 Ω ±5% 1/10W	NI05331110
R206		4822 111 91139	CHIP 6.8k Ω ±5% 1/10W	NI05682110
▲ R207		4822 050 21801	180 Ω ±5% 1/4W	GG05181140
R208		9965 000 03405	CHIP 2.7k Ω ±5% 1/10W	NI05272110
R209		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
R210		4822 111 91076	CHIP 3.3k Ω ±5% 1/10W	NI05332110
R211	/C,/K,/S	4822 100 11352	TRIM. 22k Ω RH0638CJ4R	RA02230780
R211	/U	4822 100 11351	TRIM. 10k Ω RH0638CJ4R	RA01030780
R212		4822 100 11351	TRIM. 10k Ω RH0638CJ4R	RA01030780
R213			CHIP 47 Ω ±5% 1/6W	NI05470110
R214		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
R215	/C,/K,/S	4822 111 90925	CHIP 68k Ω ±5% 1/10W	NI05683110
R215	/U	4822 111 90911	CHIP 27k Ω ±5% 1/10W	NI05273110
R216		4822 111 90894	CHIP 1k Ω ±5% 1/10W	NI05102110
▲ R217		4822 050 21801	180 Ω ±5% 1/4W	GG05181140
R220		4822 111 90893	CHIP 100 Ω ±5% 1/10W	NI05101110
R301	/C,/K,/S		CHIP 47 Ω ±5% 1/10W	NI05470110
R301	/U	4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
R302	/C,/K,/S		CHIP 47 Ω ±5% 1/10W	NI05470110
R302	/U	4822 111 90892	CHIP 0 Ω ±5% 1/10W	NI05000110
R303	/C,/K,/S	4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
R304	/C,/K,/S	4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
R307		4822 111 90905	CHIP 220 Ω ±5% 1/10W	NI05221110
R308		4822 111 90905	CHIP 220 Ω ±5% 1/10W	NI05221110
R309		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
R310		4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
R315		9965 000 03405	CHIP 2.7k Ω ±5% 1/10W	NI05272110
R316		9965 000 03405	CHIP 2.7k Ω ±5% 1/10W	NI05272110
R317	/C,/K,/S	4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
R318	/C,/K,/S	4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
R319	/C,/K,/S	4822 111 90899	CHIP 15k Ω ±5% 1/10W	NI05153110
R320	/C,/K,/S	4822 111 90899	CHIP 15k Ω ±5% 1/10W	NI05153110
R323		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
R352	/S	4822 111 90896	CHIP 100k Ω ±5% 1/10W	NI05104110
R353	/S	4822 111 90919	CHIP 47k Ω ±5% 1/10W	NI05473110
R355	/S	4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
R357	/S	4822 111 90895	CHIP 10k Ω ±5% 1/10W	NI05103110
R502		4822 111 90906	CHIP 2.2k Ω ±5% 1/10W	NI05222110
R504		4822 111 90918	CHIP 4.7k Ω ±5% 1/10W	NI05472110
R505		4822 111 90894	CHIP 1k Ω ±5% 1/10W	NI05102110
R506		4822 111 90894	CHIP 1k Ω ±5% 1/10W	NI05102110
R507		4822 111 90925	CHIP 68k Ω ±5% 1/10W	NI05683110

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
R508		4822 111 90919	CHIP 47k Ω $\pm 5\%$ 1/10W	NI05473110	Q352	/S	4822 130 61227	DIG. TRS.	BA10001000
R509		4822 111 90907	CHIP 22k Ω $\pm 5\%$ 1/10W	NI05223110				DTA114ES UN4111 10k 10k	
R510		4822 111 90918	CHIP 4.7k Ω $\pm 5\%$ 1/10W	NI05472110	Q353	/S	4822 130 60588	DIG. TRS.	BA20001000
R511		4822 111 90926	CHIP 8.2k Ω $\pm 5\%$ 1/10W	NI05822110				DTC114ES UN4211 10k 10k	
R513		4822 111 90895	CHIP 10k Ω $\pm 5\%$ 1/10W	NI05103110	Q354	/S	4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000
R515		4822 111 90895	CHIP 10k Ω $\pm 5\%$ 1/10W	NI05103110				2SC3199	
					Q501		9965 000 01370	IC LC72130	HC10394030
			P104-SEMICONDUCTORS					P104-MISCELLANEOUS	
DA01		4822 125 50416	VARICAP SVC342-L	HD40009030	A101		9965 000 01368	VHF TUNER TFFJ4E	AV00903010
DA05		9965 000 03400	CHIP DIODE MA716	HZ20030020	FA01			CERAMIC FILTER SFZ450JL3	FF10045410
DC01		9965 000 03401	CHIP DIODE RB425D	HZ20030210				CERAFIL 451K	
DM01					F201	/C,/K,/S	4822 242 70665	CERAMIC FILTER	FF11070620
DM04		4822 130 33944	CHIP DIODE DAN202K	HZ20002210				SFE10.7MS3-A	
DM05					F201	/U	4822 242 70911	CERAMIC FILTER	FF11070610
DM09			DIODE 1SS200	HE10202050				SFF10.7MA8-A	
DM10		9965 000 03401	CHIP DIODE RB425D	HZ20030210	F202		4822 242 70665	CERAMIC FILTER	FF11070620
DM11		9965 000 03401	CHIP DIODE RB425D	HZ20030210				SFE10.7MS3-A	
DM12		9965 000 03401	CHIP DIODE RB425D	HZ20030210	JM01			TERMINAL RCA 4P BLACK	YT02041160
D202		9965 000 03403	CHIP DIODE ZENER 02CZ9.1-X	HZ30031050	JM02		4822 265 10681	TERMINAL RCA 6P BLACK	YT02060540
D504		9965 000 03401	CHIP DIODE RB425D	HZ20030210	JM03			TERMINAL RCA 4P BLACK	YT02041160
					JM05		4822 265 10684	TERMINAL RCA 1P BLACK	YT02011020
QC01		4822 209 32554	IC LC78213	HC10310030	J101		4822 290 81632	TERMINAL YKD31-0215A	YT03030020
QC03			IC NJM4580DD	HC10112090				FM AM ANT PAL	
QC07			TRS. 2SC2120 O	HT321201A0	LA01		4822 157 63084	ANT COIL MW ANT 280 μ H	LA10295170
QC08		4822 130 61227	DIG. TRS.	BA10001000	LA02		4822 157 70779	OSC. COIL MW OSC C01L	LO70013010
			DTA114ES UN4111 10k 10k		LA05		4822 157 53589	CHOKE COIL TL-8 393J	LC23960710
QM01					LA06		4822 148 81095	I.F.T. COIL AM IFT K7-H5	LI70033510
QM08		4822 130 11511	CHIP TRS. 2SC3326 A OR B	HX333262A0				FOR SFP450D	
QM09					LC01		9965 000 01570	RELAY ED2-24	LY20240470
QM13		4822 130 61227	DIG. TRS.	BA10001000	LM01				
QM15		4822 130 63634	DTA114ES UN4111 10k 10k	HT118372A0	LM04		9965 000 01576	RELAY MR82-24USR	LY20240480
QM16			TRS. 2SA1837 O OR Y	BA1000605R	L201		4822 157 63904	I.F.T. COIL FM DET	LI70376010
QM17		4822 209 90532	DIG. TRS. RN2402	HC10161090				M292BEAS-5968Z	
QG51		4822 209 90532	IC NJU3713D	HC10161090	L301		4822 157 71731	M.P.X. COIL	LS10293020
QG52		9965 000 01359	IC TC9459N ELE.VOLUME	HC10443050				LPF-V10-A1 19 38KHz	
QG53		4822 209 73064	IC NJM-2068-DD	HC10053090	L302		4822 157 71731	M.P.X. COIL	LS10293020
		4822 209 73064	IC NJM-2068-DD	HC10053090				LPF-V10-A1 19 38KHz	
QV01		9965 000 01359	IC TC9459N ELE.VOLUME	HC10443050	L350	/S	4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010
QV02		9965 000 01359	IC TC9459N ELE.VOLUME	HC10443050	L351	/S	4822 242 73843	EMI FILTER DSS306-91-F-233Z	FM12223010
QV03		9965 000 01359	IC TC9459N ELE.VOLUME	HC10443050	L352	/S			
QV05		4822 209 73064	IC NJM-2068-DD	HC10053090			4822 111 90892	CHIP 0 Ω $\pm 5\%$ 1/10W	NI05000110
QV06		4822 209 73064	IC NJM-2068-DD	HC10053090	L356	/S			
QV07		4822 209 73064	IC NJM-2068-DD	HC10053090	L359	/S	4822 111 90892	CHIP RES. 0 Ω $\pm 5\%$ 1/10W	NI05000110
QV09		4822 209 73064	IC NJM-2068-DD	HC10053090	L501		4822 111 90892	CHIP RES. 0 Ω $\pm 5\%$ 1/10W	NI05000110
QV10		4822 209 73064	IC NJM-2068-DD	HC10053090	L502		4822 111 90892	CHIP RES. 0 Ω $\pm 5\%$ 1/10W	NI05000110
QV11		4822 209 73064	IC NJM-2068-DD	HC10053090	L503		4822 111 90892	CHIP RES. 0 Ω $\pm 5\%$ 1/10W	NI05000110
QV13		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0	L504		4822 111 90892	CHIP RES. 0 Ω $\pm 5\%$ 1/10W	NI05000110
QV14		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0					
QV15					X351	/S	4822 242 10857	CRYSTAL 4.332MHz AT-49	JX04003260
QV18		4822 130 43233	TRS. 2SC2240 GR OR BL	HT322402A0	X501		4822 242 72333	CRYSTAL AD0618CTB 7.2MHz	JX07001260
QV19					U093		4822 122 30043	CER. CAP. 0.01 μ F Z 50V	DK18103310
QV20		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0				P604-AC-2 DTS&THX EX	
		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0				DECODE CIRCUIT BOARD	
Q201		9965 000 01369	IC LA1837 FM AM IF MPX IC	HC10384030	CD01		5322 126 11578	CER. CHIP 1000pF B 50V	DK96102300
Q202		4822 130 62294	TRS. 2SC1809S P	HT318091P0	CD02		4822 126 11687	CER. CHIP 0.1 μ F +80% -20%	DK98104200
			150MW 500MHz		CD03		4822 124 90353	ELECT 100 μ F M 10V RA-2	OA10701020
Q203		4822 130 61227	DIG. TRS.	BA10001000	CD04		4822 124 90353	ELECT 100 μ F M 10V RA-2	OA10701020
			DTA114ES UN4111 10k 10k		CD05		4822 126 11687	CER. CHIP 0.1 μ F +80% -20%	DK98104200
Q204		4822 130 42594	DIG. TRS.	BA20002000	CD51		4822 126 11687	CER. CHIP 0.1 μ F +80% -20%	DK98104200
			DTC144ES UN4213 47k 47k		CD52		4822 124 90352	ELECT 10 μ F M 16V RA-2	OA10601620
Q205		4822 130 42594	DIG. TRS.	BA20002000	CD53		4822 126 11687	CER. CHIP 0.1 μ F +80% -20%	DK98104200
			DTC144ES UN4213 47k 47k		CD54		4822 126 11687	CER. CHIP 0.1 μ F +80% -20%	DK98104200
Q301	/C,/K,/S	4822 209 73064	IC NJM-2068-DD	HC10053090	CD55		4822 124 90352	ELECT 10 μ F M 16V RA-2	OA10601620
Q351	/S		IC RDS DECODER LC72722	HC10404030					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CD56		5322 126 11578	CER. CHIP 1000pF B 50V	DK96102300	CK03		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300
CD57		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CK04		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300
CD58		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CK05		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620
CD59		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	CK06		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620
CD81					CK07				
}		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300	}		4822 126 11696	CER. CHIP 470pF ±5% J SL	DD95471370
CD92					CK10				
CD93					CK11				
}		9965 000 01318	ELECT 220μF M 10V RA-2	OA22701020	}		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CD96					CK14				
CD97		4822 124 41535	ELECT 100μF M 25V RA-2	OA10702520	CK15				
CD98		4822 124 41535	ELECT 100μF M 25V RA-2	OA10702520	}		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200
CH03					CK18				
}		9965 000 05891	FILM 470pF J 100V	OF15471540	CK19		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620
CH06					CK20		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620
CH11		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CK21		4822 126 12495	CER. CHIP 1500pF ±10%	DK96152300
CH12		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CK22		4822 126 12495	CER. CHIP 1500pF ±10%	DK96152300
CH13		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	CK33		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH14		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	CK34		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH15		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	CK35		4822 124 41535	ELECT 100μF M 25V RA-2	OA10702520
CH16		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	CK36		4822 124 41535	ELECT 100μF M 25V RA-2	OA10702520
CH17					CK37		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
}		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CK38		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH20					CR01		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH33					CR02		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
}		9965 000 05891	FILM 470pF J 100V	OF15471540	CR03		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH36					CR04		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
CH41		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CR05		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH42		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CR06		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
CH43		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	CR07		4822 126 13837	CER. CHIP 0.1μF ±10% B 10V	DK96104200
CH44		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	CR08		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH45		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	CR10		4822 126 11568	CER. CHIP 470pF ±10% GR39	DK96471300
CH46		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	CR11		4822 126 13837	CER. CHIP 0.1μF ±10% B 10V	DK96104200
CH47					CR12		4822 126 13837	CER. CHIP 0.1μF ±10% B 10V	DK96104200
}		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CR13		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH50					CR14		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH63					CR15		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
}		9965 000 05891	FILM 470pF J 100V	OF15471540	CR16		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH66					CR17		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH71		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CR18		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH72		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CR19		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200
CH73		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	CR20		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200
CH74		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	CR21		4822 126 13837	CER. CHIP 0.1μF ±10% B 10V	DK96104200
CH75		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	CR22		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH76		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	CR23		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH77					CR25		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
}		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CR26		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300
CH80					CR27		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300
CH91		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	CR28		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
CH92		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	CR29		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CH93		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CR30		5322 126 11578	CER. CHIP 1000pF ±10% B 50V	DK96102300
CH94		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	CR31		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CJ03					CR32		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
}		9965 000 05891	FILM 470pF J 100V	OF15471540	CR33		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CJ06					CR34		4822 126 13837	CER. CHIP 0.1μF ±10% B 10V	DK96104200
CJ11		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	CR35		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200
CJ12		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300	C601		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300
CJ13		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	C602		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300
CJ14		4822 124 90352	ELECT 10μF M 16V RA-2	OA10601620	C603		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
CJ15		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	C604		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300
CJ16		9965 000 01581	ELECT 22μF M 25V RA-2	OA22602520	C605		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300
CJ17					C606		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
}		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	C607		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
CJ20					C608		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300
CK01		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620	C609		4822 122 33761	CER. CHIP 22pF ±5% CG 50V	DD95220300
CK02		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620	C610		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200
					C611		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
C612		4822 126 11568	CER. CHIP 470pF ±10% GR39	DK96471300	RH26		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
C613		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH31				
C614		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	}		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
C615		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH38				
C616		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200	RH39				
C617		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	}		4822 051 30181	180 Ω ±5% 1/16W	NN05181610
C618		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH42				
C620		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RH43				
C621		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	}		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610
C622		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RH46				
C623		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH47		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
C624		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH48		4822 116 83208	12k Ω ±5% 1/16W	NN05123610
C625		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH49		4822 051 30223	22k Ω ±5% 1/16W	NN05223610
C651		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300	RH50		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610
C652		4822 126 11703	CER. CHIP 0.01μF +80% -20%	DK98103300	RH51		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
C653		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RH53		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
C654		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH54		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
C655		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH55		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
C656		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH56		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
C657		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RH61				
C658					}		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
}		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH68				
C662					RH69				
C663		4822 126 13396	CER. CHIP 0.047μF ±10% 16V	DK96473200	}		4822 051 30181	180 Ω ±5% 1/16W	NN05181610
C664		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH72				
C665		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH73				
C666		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	}		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610
C667		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RH76				
C668		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH77		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
C669		4822 126 14417	CER. CHIP 0.01μF B 50V	DK96103300	RH78		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
C670		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH79		4822 051 30223	22k Ω ±5% 1/16W	NN05223610
C680		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH80		4822 051 30223	22k Ω ±5% 1/16W	NN05223610
C690		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH81		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
C691		4822 126 14417	CER. CHIP 0.01μF B 50V	DK96103300	RH82		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
C692		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH83		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
C693		4822 126 11687	CER. CHIP 0.1μF +80% -20%	DK98104200	RH84		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
C694		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RH85		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
C696		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200	RH86		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
C697		5322 126 11583	CER. CHIP 0.01μF ±10% B 25V	DK96103200					
			P604-CAPACITORS(COMMON)		RJ01				
			PLASTIC FILM CAPACITOR		}		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
			±5% 50V : CH01 CH02 CH31		RJ08				
			CH32 CH61 CH62 CJ01 CJ02		RJ09				
					}		4822 051 30181	180 Ω ±5% 1/16W	NN05181610
			P604-RESISTORS CHIP		RJ12				
			10k Ω ±5% 1/16W	NN05103610	RJ13				
RD01		4822 051 30103			}		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610
RD02		4822 116 82487	0 Ω ±5% 1/16W	NN05000610	RJ16				
RD51		4822 051 30103	10k Ω ±5% 1/16W	NN05103610	RJ17		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
RE02		4822 051 30759	75 Ω ±5% 1/16W	NN05750610	RJ18		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
					RJ19		4822 051 30223	22k Ω ±5% 1/16W	NN05223610
RH01					RJ20		4822 051 30223	22k Ω ±5% 1/16W	NN05223610
}		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610	RJ21		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
RH08					RJ22		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
RH09					RJ23		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
}		4822 051 30181	180 Ω ±5% 1/16W	NN05181610	RJ24		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
RH12					RJ25		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
RH13					RJ26		4822 051 30104	100k Ω ±5% 1/16W	NN05104610
}		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610					
RH16					RK01				
RH17		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610	}		4822 051 30153	15k Ω ±5% 1/16W	NN05153610
RH18		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610	RK04				
RH19		4822 051 30223	22k Ω ±5% 1/16W	NN05223610	RK05		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
RH20		4822 051 30223	22k Ω ±5% 1/16W	NN05223610	RK06		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610
RH21		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610	RK07		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610
RH22		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610	RK08		4822 051 30222	2.2k Ω ±5% 1/16W	NN05222610
RH23		4822 051 30101	100 Ω ±5% 1/16W	NN05101610	RK09		9965 000 03187	56 Ω ±5% 1/16W	NN05560610
RH24		4822 051 30101	100 Ω ±5% 1/16W	NN05101610	RK10		9965 000 03187	56 Ω ±5% 1/16W	NN05560610
RH25		4822 051 30104	100k Ω ±5% 1/16W	NN05104610					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
RK11 { RK18 RK19 { RK22 RK23 RK24 RK25 RK26		4822 051 30472 4822 051 30331 4822 051 30474 4822 051 30103 4822 051 30332 4822 051 30472	4.7k Ω ±5% 1/16W 330 Ω ±5% 1/16W 470k Ω ±5% 1/16W 10k Ω ±5% 1/16W 3.3k Ω ±5% 1/16W 4.7k Ω ±5% 1/16W	NN05472610 NN05331610 NN05474610 NN05103610 NN05332610 NN05472610	QD01 QH01 QH02 QH31 QH32 QH61 QH62 QJ01 QJ02 QK01 QK02 QK03 QK04 QK05 QK06 QK07 QR01 QR02 QR03 QR04 QR06 QR07 QR10 Q601 Q602 Q603 Q604 Q605 Q651 Q652 Q691 Q693 Q694		4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 17155 4822 209 14615 4822 209 14615 4822 130 63601 4822 130 63601 4822 130 63601 9965 000 01342 9965 000 01342 4822 209 30426 4822 130 60856 9965 000 01321 9965 000 01322 9965 000 01324 9965 000 01326 9965 000 01338 4822 209 33521	IC AK4356 DAC 24BIT 192KHz IC NJM2068M IC NJM2068M IC NJM2068M IC NJM2068M IC NJM2068M IC NJM2068M IC NJM2068M IC NJM2068M IC AK4528 VSOP 24BIT 96KHz IC NJM2068M IC NJM2115M IC NJM2115M CHIP TRS. 2SC4213 CHIP TRS. 2SC4213 DIG. TRS. DTA114EU IC LC89055Q SPDIF RECEIVER IC TC74HC151AF IC TC74HC151AF IC CMOS 74HC00 IC TC74HCT7007AF IC CMOS 74HCU04 DIG. TRS. DTC144EC IC YSS912 DTS AC-3 DECODER IC TC7WT241FU IC 74HCT157 IC 1M SRAM 8X128K 15NS IC TCW32FU IC ZR38601 THX5.1 EX DECODE IC TC7SET04F MICROPROCESSOR TMP93PW44ADF IC S-80745AN IC TC7W04FU	HC10031480 HC10102090 HC10102090 HC10102090 HC10102090 HC10102090 HC10102090 HC10102090 HC10102090 HC10030480 HC10102090 HC10172090 HC10172090 HX342132A0 HX342132A0 BA10026210 HC10405030 HC715100Z0 HC715100Z0 HC700000Z0 HC800705Q0 HC700400Z0 BA20021210 HC10014640 HC007405K0 HC715705Q0 HC10088000 HC10419050 HC10102990 HC007205K0 HU326JT10F HC10048530 HC10382050
R601 R602 R606 R651 R652 R653 R654 R660 R661 R662 R664 R675 { R688 R689 R690 R692 R693 R699		4822 051 30105 4822 051 30103 4822 051 30104 4822 051 30103 4822 051 30103 4822 116 82487 4822 051 30472 4822 051 30103 4822 051 30102 4822 051 30102 4822 051 30682 4822 051 30103 4822 051 30102 4822 051 30104 4822 051 30472 4822 051 30473	1M Ω ±5% 1/16W 10k Ω ±5% 1/16W 100k Ω ±5% 1/16W 10k Ω ±5% 1/16W 10k Ω ±5% 1/16W 0 Ω ±5% 1/16W 4.7k Ω ±5% 1/16W 10k Ω ±5% 1/16W 100k Ω ±5% 1/16W 47k Ω ±5% 1/16W 47k Ω ±5% 1/16W 10k Ω ±5% 1/16W 47k Ω ±5% 1/16W 47k Ω ±5% 1/16W 47k Ω ±5% 1/16W 10k Ω ±5% 1/16W 47k Ω ±5% 1/16W 47k Ω ±5% 1/16W 0 Ω ±5% 1/16W 0 Ω ±5% 1/16W 10k Ω ±5% 1/16W	NN05105610 NN05103610 NN05104610 NN05103610 NN05103610 NN05000610 NN05472610 NN05103610 NN05104610 NN05473610 NN05473610 NN05103610 NN05473610 NN05473610 NN05473610 NN05103610 NN05473610 NN05473610 NN05000610 NN05000610 NN05103610	JE01 JR01 JR02 JR03 JR04 JR05 JR07 LD01 LD02 LD51 LD52 LD81 { LD86 LH91 LH92 LK01 LK02 LR01		4822 265 10328 4822 265 10683 4822 218 11487 4822 218 11487 4822 267 31369 4822 265 10328 4822 218 11487 4822 526 10584 4822 526 10584 4822 526 10584 4822 526 10584 4822 242 73843 4822 526 10584 4822 526 10584 4822 526 10584 4822 142 60422	P604-MISCELLANEOUS TERMINAL RCA 1P BLACK TERMINAL RCA 2P BLACK OPT. RECIVER GP1F32R OPT. RECIVER GP1F32R OPT. OUTPUT GP1F32T TERMINAL RCA 1P BLACK OPT. RECIVER GP1F32R FERRITE CORE ZBF503D-00TA FERRITE CORE ZBF503D-00TA FERRITE CORE ZBF503D-00TA EMI FILTER DSS306-91-F-223Z FERRITE CORE ZBF503D-00TA FERRITE CORE ZBF503D-00TA FERRITE CORE ZBF503D-00TA PULSE TRANSF. TPS247MN-0386AN	YT02010780 YT02021400 YJ15000150 YJ15000150 YJ15000090 YT02010780 YJ15000150 FC90090010 FC90090010 FC90090010 FC90090010 FM12223010 FC90090010 FC90090010 FC90090010 TP41042030
DK01 DK02 DK05 DR01 DR02 DR03 D692 D693		4822 130 80522 4822 130 80522 4822 130 80522 4822 130 81324 4822 130 81324 4822 130 81324 4822 130 80522 4822 130 83715	CHIP DIODE 1SS301 DAN202U CHIP DIODE 1SS301 DAN202U CHIP DIODE 1SS301 DAN202U CHIP DIODE 1SS302 CHIP DIODE 1SS302 CHIP DIODE 1SS302 CHIP DIODE 1SS301 DAN202U CHIP DIODE 1SS301 DAN202U	HZ21006000 HZ21006000 HZ21006000 HZ20018050 HZ20018050 HZ20018050 HZ21006000 HZ21005000					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
LR02		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ RT65		4822 052 10229	22 Ω ±5% 1/6W	GG05220160
L601		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ RT67		4822 116 60319	220 Ω J 1/2W FUSIBLE	NH05221120
L602		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ RT69		4822 052 10228	2.2 Ω ±5% 1/6W	GG05022160
L651		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ RT71		4822 052 10228	2.2 Ω ±5% 1/6W	GG05022160
L691					▲ RT73		4822 111 91422	COMPO. 0.1 Ω K 5WX2RGC-55	BW10000050
}		4822 157 10884	EMI FILTER BLM11A221S	FN31000010	▲ RT75		4822 052 10102	1k Ω ±5% 1/6W	GG05102160
L697					▲ RT77		4822 050 22202	2.2k Ω ±5% 1/6W	GG05222160
X601		4822 242 10851	CRYSTAL 12.288MHz AT-49	JX12013260	▲ RT83		4822 116 83929	220 Ω ±5% 1/4W	GG05221140
X691		9965 000 01346	SERAMIC VIB. CST20 00MXW	FQ02005030	▲ RT85		4822 053 10109	10 Ω ±5% 1W	GA05100010
			P704-3CH POWER-AMP. CIRCUIT BOARD		▲ R707			1.5k Ω ±5% 1/6W	GG05152160
			P704-CAPACIORS		▲ R710				
CT01		4822 124 22275	ELECT 47μF M 10V RA-2	OA47601020	R715		4822 100 11471	TRIM. 100k Ω RH0638CJ4R	RA01040780
CT03		9965 000 05891	FILM 470pF J 100V	OF15471540	R716		4822 100 11471	TRIM. 100k Ω RH0638CJ4R	RA01040780
CT05		9965 000 05891	FILM 470pF J 100V	OF15471540	▲ R725				
CT07		9965 000 01040	ELECT 470 μF M 6.3V RA-2	OA47700620	}		4822 052 10561	560 Ω ±5% 1/6W	GG05561160
CT11		9965 000 02644	ELECT 220μF M 100V RA-2	OA22710020	▲ R732				
CT13		9965 000 02644	ELECT 220μF M 100V RA-2	OA22710020	▲ R733				
CT15		4822 124 11533	ELECT 1μF M 100V RA-2	OA10510020	}		4822 052 10569	56 Ω ±5% 1/6W	GG05560160
CT17		9965 000 01561	MICA 10pF D 250WV	DF31100520	▲ R736				
CT19		9965 000 05892	ELECT 4.7μF 100V	EA47510010	R743		4822 100 20681	TRIM. 2.2k Ω RH0638CJ3R	RA02220780
CT27		9965 000 00438	FILM 120pF J 100V	OF15121540	R744		4822 100 20681	TRIM. 2.2k Ω RH0638CJ3R	RA02220780
CT29		9965 000 00438	FILM 120pF J 100V	OF15121540	▲ R749				
					}		4822 052 10109	10 Ω ±5% 1/4W	GG05100140
					▲ R752				
C701		4822 124 22275	ELECT 47μF M 10V RA-2	OA47601020	▲ R753				
C702		4822 124 22275	ELECT 47μF M 10V RA-2	OA47601020	}		4822 052 10101	100 Ω ±5% 1/6W	GG05101160
C703					▲ R756				
}		9965 000 05891	FILM 470pF J 100V	OF15471540	▲ R761		4822 052 10102	1k Ω ±5% 1/6W	GG05102160
C706					▲ R762		4822 052 10102	1k Ω ±5% 1/6W	GG05102160
C707					▲ R763				
C708		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620	}		4822 052 10229	22 Ω ±5% 1/6W	GG05220160
C711		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620	▲ R766				
C712		9965 000 02644	ELECT 220μF M 100V RA-2	OA22710020	▲ R767		4822 116 60319	220 Ω J 1/2W FUSIBLE	NH05221120
C713		9965 000 02644	ELECT 220μF M 100V RA-2	OA22710020	▲ R768		4822 116 60319	220 Ω J 1/2W FUSIBLE	NH05221120
C714		9965 000 02644	ELECT 220μF M 100V RA-2	OA22710020	▲ R769				
C715		4822 124 11533	ELECT 1μF M 100V RA-2	OA10510020	}		4822 052 10228	2.2 Ω ±5% 1/6W	GG05022160
C716		4822 124 11533	ELECT 1μF M 100V RA-2	OA10510020	▲ R772				
C717		9965 000 01561	MICA 10pF D 250WV	DF31100520	▲ R773		4822 111 91422	COMPO. 0.1 Ω K 5WX2RGC-55	BW10000050
C718		9965 000 01561	MICA 10pF D 250WV	DF31100520	▲ R774		4822 111 91422	COMPO. 0.1 Ω K 5WX2RGC-55	BW10000050
C719		9965 000 05892	ELECT 4.7μF 100V	EA47510010	▲ R775		4822 052 10102	1k Ω ±5% 1/6W	GG05102160
C720		9965 000 05892	ELECT 4.7μF 100V	EA47510010	▲ R776		4822 052 10102	1k Ω ±5% 1/6W	GG05102160
C727					▲ R777		4822 050 22202	2.2k Ω ±5% 1/6W	GG05222160
}		9965 000 00438	FILM 120pF J 100V	OF15121540	▲ R778		4822 050 22202	2.2k Ω ±5% 1/6W	GG05222160
C730					▲ R783		4822 116 83929	220 Ω ±5% 1/4W	GG05221140
					▲ R784		4822 116 83929	220 Ω ±5% 1/4W	GG05221140
			P704-CAPACITORS(COMMON)		▲ R785		4822 053 10109	10 Ω ±5% 1W	GA05100010
			PLASTIC FILM CAPACITOR		▲ R786		4822 053 10109	10 Ω ±5% 1W	GA05100010
			±5% 50V : C721-C726 CT21 CT23 CT25						
			P704-RESISTORS					P704-RESISTORS(COMMON)	
			1.5k Ω ±5% 1/6W	GG05152160				CARBON FILM FIXED RES.	
▲ RT07			1.5k Ω ±5% 1/6W	GG05152160				±5% 1/6W : R701-R706	
▲ RT09			1.5k Ω ±5% 1/6W	GG05152160				R711-R714 R717-R724	
RT15		4822 100 11471	TRIM. 100k Ω RH0638CJ4R	RA01040780				R737-R742 R745-R748	
▲ RT25		4822 052 10561	560 Ω ±5% 1/6W	GG05561160				R779-R782 R787-R790	
▲ RT27		4822 052 10561	560 Ω ±5% 1/6W	GG05561160				RT01 RT03 RT05 RT11 RT13	
▲ RT29		4822 052 10561	560 Ω ±5% 1/6W	GG05561160				RT17 RT19 RT21 RT23 RT37	
▲ RT31		4822 052 10561	560 Ω ±5% 1/6W	GG05561160				RT39 RT41 RT45 RT47 RT79	
▲ RT33		4822 052 10561	560 Ω ±5% 1/6W	GG05561160				RT81 RT87 RT89	
▲ RT35		4822 052 10569	56 Ω ±5% 1/6W	GG05560160					
RT43		4822 052 10569	56 Ω ±5% 1/6W	GG05560160				P704-SEMICONDUCTORS	
▲ RT49		4822 100 20681	TRIM. 2.2k Ω RH0638CJ3R	RA02220780	DT01		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000
▲ RT51		4822 052 10109	10 Ω ±5% 1/4W	GG05100140				30V 0.1A	
▲ RT53		4822 052 10109	10 Ω ±5% 1/4W	GG05100140	DT03		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000
▲ RT55		4822 052 10101	100 Ω ±5% 1/6W	GG05101160				30V 0.1A	
▲ RT61		4822 052 10101	100 Ω ±5% 1/6W	GG05101160	DT13		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010
▲ RT63		4822 052 10102	1k Ω ±5% 1/6W	GG05102160	DT15		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010
		4822 052 10229	22 Ω ±5% 1/6W	GG05220160	DT17		4822 130 80317	ZENER DIODE ZENER 5.1V	HD30511000

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
DT19		4822 130 80317	ZENER DIODE ZENER 5.1V	HD30511000				P704-MISCELLANEOUS	
DT21		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010	LT01		4822 157 70022	AIR COIL SPK CHOCK	ML08010030
D701					L701		4822 157 70022	AIR COIL SPK CHOCK	ML08010030
∫		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	L702		4822 157 70022	AIR COIL SPK CHOCK	ML08010030
D704									
D713					▲ S701		9965 000 01765	CIRCUIT BREAKER TEMP-SW 120DEG. OHD3-120B	FR31200020
∫		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010	▲ S702		9965 000 01765	CIRCUIT BREAKER TEMP-SW 120DEG. OHD3-120B	FR31200020
D716									
D717									
∫		4822 130 80317	ZENER DIODE ZENER 5.1V	HD30511000					
D720								P754-2CH POWER-AMP. CIRCUIT BOARD	
D721		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010				P754-CAPACITORS	
D722		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010					
▲ K761			TRS. KIT 2SA1360 2SC3423 O OR Y	HK136019C0	CN01		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
▲ K762			TRS. KIT 2SA1360 2SC3423 O OR Y	HK136019C0	CN02		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
▲ K763			TRS. KIT 2SA1360 2SC3423 O OR Y	HK136019C0	CN03		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
▲ K766			TRS. KIT A1837 C4793 HFE	HK183719C0	CN04		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
▲ K767			TRS. KIT A1837 C4793 HFE	HK183719C0	CN05		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
▲ K768			TRS. KIT A1837 C4793 HFE	HK183719C0	CN06		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
▲ K771		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O Y	HK121619F0	CN07		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020
▲ K772		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O Y	HK121619F0	CN08		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
▲ K773		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O Y	HK121619F0	CN09		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
					CN10		4822 124 90362	ELECT 22μF M 50V RA-2	OA22605020
QT01		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0	CN11		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
QT03		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0	CN12		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
QT05		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CN13		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
QT07		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CN14		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
QT09		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CN15		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
▲ QT11		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0	CN16		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
▲ QT13		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0	CN17			ELECT 47μF 16V	EQ47601630
QT17		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0					
QT19		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CP01		4822 124 22275	ELECT 47μF M 10V RA-2	OA47601020
▲ QT21		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0	CP02		4822 124 22275	ELECT 47μF M 10V RA-2	OA47601020
▲ QT23		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0	CP03				
QT29		4822 130 43233	TRS. 2SC2240 GR OR BL	HT322402A0	∫		9965 000 05891	FILM 470pF J 100V	OF15471540
					CP06				
Q701					CP07		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
∫		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0	CP08		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
Q704					CP11				
Q705		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	∫		9965 000 02644	ELECT 220μF M 100V RA-2	OA22710020
Q706		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CP14				
Q707					CP15		4822 124 11533	ELECT 1μF M 100V RA-2	OA10510020
∫		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CP16		4822 124 11533	ELECT 1μF M 100V RA-2	OA10510020
Q710					CP17		9965 000 01561	MICA 10pF D 250WV	DF31100520
▲ Q711		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0	CP18		9965 000 01561	MICA 10pF D 250WV	DF31100520
▲ Q712		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0	CP19		9965 000 05892	ELECT 4.7μF 100V	EA47510010
▲ Q713		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0	CP20		9965 000 05892	ELECT 4.7μF 100V	EA47510010
▲ Q714		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0	CP27				
Q717		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	∫		9965 000 00438	FILM 120pF J 100V	OF15121540
Q718		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CP30				
Q719		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0					
Q720		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	C861		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
▲ Q721		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0	C862		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
▲ Q722		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0	C871		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
▲ Q723		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0	C872		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
▲ Q724		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0	C881		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
Q729		4822 130 43233	TRS. 2SC2240 GR OR BL	HT322402A0	C882		4822 126 10935	ELECT 100μF 6.3V	EJ10700610
Q730		4822 130 43233	TRS. 2SC2240 GR OR BL	HT322402A0					
					C***			P754-CAPACITORS(COMMON)	
								PLASTIC FILM CAPACITOR ±5% 50V : CP21-CP26	
								P754-RESISTORS	
					▲ RN04		4822 050 21503	15k Ω ±5% 1/2W	GG05153120
					▲ RN08		4822 050 23303	33k Ω ±5% 1/4W	GG05333140
					▲ RN16		4822 052 10109	10 Ω ±5% 1/6W	GG05100160
					▲ RN44		4822 053 10221	220 Ω ±5% 1W	GA05221010
					▲ RN45		4822 053 10331	330 Ω ±5% 1W	GA05331010
					▲ RN46		4822 053 10331	330 Ω ±5% 1W	GA05331010

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
▲ RP07 }			1.5k Ω $\pm 5\%$ 1/6W	GG05152160	DP01 }		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
▲ RP10 RP15 RP16		9965 000 01766 9965 000 01766	TRIM.100k Ω TRIM.100k Ω	RA01040760 RA01040760	DP04 DP13 }		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010
▲ RP25 }		4822 052 10561	560 Ω $\pm 5\%$ 1/6W	GG05561160	DP16 DP17 }		4822 130 80317	ZENER DIODE 5.1V	HD30511000
▲ RP32 ▲ RP33 }		4822 052 10569	56 Ω $\pm 5\%$ 1/6W	GG05560160	DP20 DP21 DP22		4822 130 80837 4822 130 80837	DIODE HSS81TD 150V 150MA DIODE HSS81TD 150V 150MA	HD20027010 HD20027010
▲ RP36 RP43 RP44		9965 000 01566 9965 000 01566	TRIM. VARIABLE 2.2k Ω VERT TRIM. VARIABLE 2.2k Ω VERT	RA02220760 RA02220760	D861 D871 D881		4822 130 82421 4822 130 82421 4822 130 82421	DIODE 1D3 1A 200V DIODE 1D3 1A 200V DIODE 1D3 1A 200V	HD20002710 HD20002710 HD20002710
▲ RP49 }		4822 052 10109	10 Ω $\pm 5\%$ 1/4W	GG05100140	D882		4822 130 80132	ZENER DIODE 3.9V	HD30391000
▲ RP52 RP53 }		4822 052 10101	100 Ω $\pm 5\%$ 1/6W	GG05101160	▲ K764 ▲ K765			TRS. KIT 2SA1360 2SC3423 O OR Y TRS. KIT 2SA1360 2SC3423 O OR Y	HK136019C0 HK136019C0
▲ RP56 ▲ RP61 ▲ RP62 ▲ RP63 }		4822 052 10102 4822 052 10102 4822 052 10229	1k Ω $\pm 5\%$ 1/6W 1k Ω $\pm 5\%$ 1/6W 22 Ω $\pm 5\%$ 1/6W	GG05102160 GG05102160 GG05220160	▲ K769 ▲ K770 ▲ K774		4822 130 11394	TRS. KIT A1837 C4793 HFE TRS. KIT A1837 C4793 HFE TRS. KIT 2SA1216 2SC2922 O Y	HK183719C0 HK183719C0 HK121619F0
▲ RP66 ▲ RP67 ▲ RP68 ▲ RP69 }		4822 116 60319 4822 116 60319 4822 052 10228	220 Ω J 1/2W FUSIBLE 220 Ω J 1/2W FUSIBLE 2.2 Ω $\pm 5\%$ 1/6W	NH05221120 NH05221120 GG05022160	▲ K775		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O Y	HK121619F0
▲ RP72 ▲ RP73 ▲ RP74 ▲ RP75 ▲ RP76 ▲ RP77 ▲ RP78 ▲ RP83 ▲ RP84 ▲ RP85 ▲ RP86 ▲ R881		4822 111 91422 4822 111 91422 4822 052 10102 4822 052 10102 4822 050 22202 4822 050 22202 4822 116 83929 4822 116 83929 4822 053 10109 4822 053 10109 4822 050 21021	COMPO. 0.1 Ω K 5WX2RGC-55 COMPO. 0.1 Ω K 5WX2RGC-55 1k Ω $\pm 5\%$ 1/6W 1k Ω $\pm 5\%$ 1/6W 2.2k Ω $\pm 5\%$ 1/6W 2.2k Ω $\pm 5\%$ 1/6W 220 Ω $\pm 5\%$ 1/4W 220 Ω $\pm 5\%$ 1/4W 10 Ω $\pm 5\%$ 1W 10 Ω $\pm 5\%$ 1W 100 Ω $\pm 5\%$ 1/4W	BW10000050 BW10000050 GG05102160 GG05102160 GG05222160 GG05222160 GG05221140 GG05221140 GA05100010 GA05100010 GG05101140	QN01 QN02 QN03 QN04 QN05 QN06 ▲ QN07 QN08 QN09 QN10 QN11 QN12 QN13 QN14 QP01 } QP04 QP05 QP06 QP07 } QP10 ▲ QP11 ▲ QP12 ▲ QP13 ▲ QP14 QP15 QP16 QP17 QP18 QP19 QP20 ▲ QP21 ▲ QP22 ▲ QP23 ▲ QP24 ▲ QP25 ▲ QP26 ▲ QP27		4822 209 83312 4822 130 42594 4822 130 42949 4822 130 60526 4822 130 42594 4822 130 60696 4822 130 41947 4822 130 41947 4822 130 41947 4822 130 43233 4822 130 43233 4822 130 41947 4822 130 42715 4822 130 42949 4822 130 42999 4822 130 42999 4822 130 43283 5322 130 61728 5322 130 61728 5322 130 61737 5322 130 61737 4822 130 60117 4822 130 60117 4822 130 43283 4822 130 43283 4822 130 42999 4822 130 42999 4822 130 63635 4822 130 63635 4822 130 63634 4822 130 63634 9965 000 01762 9965 000 01762 9965 000 01763	IC TA7317P DIG. TRS. DTC144ES UN4213 47k 47k TRS. 2SA970 GR OR BL TRS. 2SD1508 TR.HFE>4000 DIG. TRS. DTC144ES UN4213 47k 47k TRS. 2SC1627 O Y 80V 300MA IC PQ30RV11 TRS. C2458 C1740S C3199 TRS. C2458 C1740S C3199 TRS. C2458 C1740S C3199 TRS. 2SC2240 GR OR BL TRS. 2SC2240 GR OR BL TRS. C2458 C1740S C3199 TRS. A1048 A933S A1267 TRS. 2SA970 GR OR BL TRS. 2SA1145 O OR Y TRS. 2SA1145 O OR Y TRS. 2SC2705 O OR Y TRS. 2SA1360 O OR Y TRS. 2SA1360 O OR Y TRS. 2SC3423 O OR Y TRS. 2SC3423 O OR Y TRS. 2SC3419 Y TRS. 2SC3419 Y TRS. 2SC2705 O OR Y TRS. 2SC2705 O OR Y TRS. 2SA1145 O OR Y TRS. 2SA1145 O OR Y TRS. 2SC4793 O OR Y TRS. 2SC4793 O OR Y TRS. 2SA1837 O OR Y TRS. 2SA1837 O OR Y TRS. 2SC2922 O OR Y TRS. 2SC2922 O OR Y TRS. 2SA1216 O OR Y	HC10042050 BA20002000 HT109702A0 HT415080A0 BA20002000 HT316272B0 HC36930320 HT30001000 HT30001000 HT30001000 HT322402A0 HT322402A0 HT30001000 HT10001000 HT109702A0 HT111452A0 HT111452A0 HT327052A0 HT113602A0 HT113602A0 HT334232A0 HT334232A0 HT334191Y0 HT334191Y0 HT327052A0 HT327052A0 HT111452A0 HT111452A0 HT347932A0 HT347932A0 HT118372A0 HT118372A0 HT329222A0 HT329222A0 HT112162A0
R***			P754-RESISTORS(COMMON) CARBON FILM FIXED RES. $\pm 5\%$ 1/6W : RN01-RN03 RN05-RN07 RN09-RN15 RN17-RN38 RN40-RN43 RN48 RN49 RP01-RP06 RP11-RP14 RP17-RP24 RP37-RP42 RP45-RP48 RP79-RP82 RP89 RP90						
			P754-SEMICONDUCTORS						
DN01		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000					
DN02		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000					
DN03		4822 130 82421	DIODE 1D3 1A 200V	HD20002710					
DN04		4822 130 82421	DIODE 1D3 1A 200V	HD20002710					
DN05		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000					
DN06		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000					
DN07		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000					
DN09		4822 130 43564	VARISTOR PTH9M04BE222TS2F333	HP00004230					
DN10		4822 130 80837	DIODE HSS81TD 150V 150MA	HD20027010					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
▲ QP28 QP29 QP30 ▲ Q861 ▲ Q871 ▲ Q881		9965 000 01763 4822 130 43233 4822 130 43233 4822 209 31631 4822 209 31631 4822 130 63635	TRS. 2SA1216 O OR Y TRS. 2SC2240 GR OR BL TRS. 2SC2240 GR OR BL IC NJM7805FA +5V IC NJM7805FA +5V TRS. 2SC4793 O OR Y	HT112162A0 HT322402A0 HT322402A0 HC38905090 HC38905090 HT347932A0	C857		4822 124 90357	ELECT 2.2μF M 50V RA-2	OA22505020
▲ MN51		9965 000 01770	P754-MISCELLANEOUS D.C MOTOR FBA08A12H0 DC FAN 12V	MM01200320	▲ D851 D853 D854		9965 000 01578 4822 130 82421 4822 130 82421	P854-SEMICONDUCTORS DIODE D25XB60 BRIDGE DIODE 1D3 1A 200V DIODE 1D3 1A 200V	HE20029290 HD20002710 HD20002710
LP01 LP02 LN01		4822 157 70022 4822 157 70022 9965 000 01343	AIR COIL SPK CHOCK AIR COIL SPK CHOCK RELAY RELAY MR62-12SR	ML08010030 ML08010030 LY20120510	▲ CB01 RB01	/U /U		PB14-PRIMARY [I/U] CIRCUIT BOARD PB14-CAPACITOR CER. DE1607-1F PB14-RESISTOR RES. 2.2M Ω ±10% 1/2W	DK17103910 RC10225820
ZN51		9965 000 01772	UNIT KIT DC FAN MOTOR W 3P WIRE	ZK300J0020	DB01	/U	4822 130 82421	PB14-SEMICONDUCTOR DIODE 1D3 1A 200V	HD20002710
D799		4822 130 43564	P774-PO-AMP. TR-BLOCK 3CH CIRCUIT BOARD P774-SEMICONDUCTORS VARISTOR PTH9M04BE222TS2F333	HP00004230	▲ FB01 ▲ FB02	/U /U		PB14-MISCELLANEOUS FUSE 12A 250V UL CSA MITI FUSE 630MA 250V UL CSA	FS11200440 FS10063360
QT15 ▲ QT25 ▲ QT27 Q715 Q716 ▲ Q725 ▲ Q726 ▲ Q727 ▲ Q728		4822 130 60117 9965 000 01762 9965 000 01763 4822 130 60117 4822 130 60117 9965 000 01762 9965 000 01762 9965 000 01763 9965 000 01763	TRS. 2SC3419 Y TRS. 2SC2922 O Y TRS. 2SA1216 O Y TRS. 2SC3419 Y TRS. 2SC3419 Y TRS. 2SC2922 O Y TRS. 2SC2922 O Y TRS. 2SA1216 O Y TRS. 2SA1216 O Y	HT334191Y0 HT329222A0 HT112162A0 HT334191Y0 HT334191Y0 HT329222A0 HT329222A0 HT112162A0 HT112162A0	LB02	/U	4822 280 80773	JACK MAINS OUTLET 2P CCT1304-0212 RELAY VS24MB-NR TV-8 LISTED	YJ04002040 LY10240240
C801 C802 C803 C804 C805 C806 C807 C808 C817 C818		4822 122 30043 4822 122 30043 4822 124 81133 4822 122 30043 4822 124 22571 4822 122 30043 4822 124 81133 4822 122 30043 4822 124 22571 4822 122 30043	TRS. 2SC3419 Y CER. 0.01μF Z 50V ELECT 4700μF 25V RA-2 CER. 0.01μF Z 50V ELECT 10μF M 50V RA-2 CER. 0.01μF Z 50V ELECT 4700μF 25V RA-2 CER. 0.01μF Z 50V ELECT 10μF M 50V RA-2 CER. 0.01μF Z 50V	DK18103310 DK18103310 OA47802520 DK18103310 OA10605020 DK18103310 OA47802520 DK18103310 OA10605020 DK18103310	▲ CB51 DB51	/C,/K,/S /C,/K,/S	4822 130 82421	PB64-PRIMARY [I/C, /K, /S] CIRCUIT BOARD PB64-CAPACITOR CER. DE1607-1F 103M-KH PB64-SEMICONDUCTOR DIODE 1D3 1A 200V	DK17103910 HD20002710
▲ D801 D802 D807		4822 130 83067 4822 130 82421 4822 130 82421	P804-POWER SUPPLY +-15V CIRCUIT BOARD P804-CAPACITORS CER. 0.01μF Z 50V CER. 0.01μF Z 50V ELECT 4700μF 25V RA-2 CER. 0.01μF Z 50V ELECT 10μF M 50V RA-2 CER. 0.01μF Z 50V ELECT 4700μF 25V RA-2 CER. 0.01μF Z 50V ELECT 10μF M 50V RA-2 CER. 0.01μF Z 50V	DK18103310 DK18103310 OA47802520 DK18103310 OA10605020 DK18103310 OA47802520 DK18103310 OA10605020 DK18103310 OA10605020 DK18103310	FB51 FB52	/C,/K,/S /C,/K,/S	4822 070 36302 4822 070 32001	PB64-MISCELLANEOUS FUSE T6.3A 250V BS LISTED FUSE T200MA 250V BS LISTED	FS10630850 FS10020850
▲ Q801 ▲ Q806		4822 209 60826	IC NJM7812FA +12V 1A TRS. 2SD1415	HC38912090 HT41415100	LB52	/C,/K,/S	4822 280 80773	RELAY VS24MB-NR TV-8 LISTED	LY10240240
▲ F801 ▲ F801 ▲ F802 ▲ F802	/C,/K,/S /U /C,/K,/S /U		P804-MISCELLANEOUS FUSE T2.0A 250V TR5 FUSE T2A 250V TR5 NO.19374 FUSE T2.0A 250V TR5 FUSE T2A 250V TR5 NO.19374	FS20200200 FS20200210 FS20200200 FS20200210	▲ CB71 ▲ SB71		9965 000 01777	PB74-POWER SW CIRCUIT BOARD CER. CAP. DE1610F 103M-KH PUSH SWITCH SDDL B1 POWER TV-5	DK17103900 SP01012460
C851 C852 C853 C854		4822 126 12453 4822 126 12453 4822 126 12453 4822 126 12453	P804-SEMICONDUCTORS DIODE D3SB 20 V=200V IO=3.0A DIODE 1D3 1A 200V DIODE 1D3 1A 200V P854-MAIN+ B CIRCUIT BOARD P854-CAPACITORS CER. 0.01μF Z E 500V CER. 0.01μF Z E 500V ELECT. 56000μF 71V x2 CER. 0.01μF Z E 500V	HE20020290 HD20002710 HD20002710 HC38912090 HT41415100 FS20200200 FS20200210 FS20200200 FS20200210 DK18103560 DK18103560 OB56907120 DK18103560	CC53 CC54 CC55 CC56 CC59 CC60 CC61 CC62 CC64 CC65 CC67 CC70 CC73 CC74 CC75 CC76	/S /S	4822 124 22571 4822 124 22571 4822 122 30043 4822 122 30043 4822 124 22571 4822 124 22571 4822 122 30043 4822 122 30043 4822 124 41535 4822 124 41535 4822 122 31205 4822 122 30043 4822 122 30043	ELECT 10μF M 50V RA-2 ELECT 10μF M 50V RA-2 CER. 0.01μF Z 50V CER. 0.01μF Z 50V ELECT 10μF M 50V RA-2 ELECT 10μF M 50V RA-2 CER. 0.01μF Z 50V CER. 0.01μF Z 50V ELECT 100μF M 25V RA-2 ELECT 100μF M 25V RA-2 CER. 47pF J CH 50V BLK ELECT 22μF 25V ELECT 22μF 25V CER. 0.01μF Z 50V CER. 0.01μF Z 50V	OA10605020 OA10605020 DK18103310 DK18103310 OA10605020 OA10605020 DK18103310 DK18103310 OA10702520 OA10702520 DD15470300 EA22602520 EA22602520 DK18103310 DK18103310

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CC81		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	CL82		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CC82		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	CL83		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CC85		4822 126 10362	CER. 22pF ±5%	DA15220110	CL86		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CC86			ELECT 22μF 25V	EA22602520	CL98		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CC87		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	CL99		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CC88		4822 122 30043	CER. 0.01μF Z 50V	DK18103310					
CC95		4822 122 30043	CER. 0.01μF Z 50V	DK18103310					
CL01		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				PL04-CAPACITORS(COMMON)	
CL02		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				HIGH DIELECTRIC CONSTANT	
CL03		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				CER. CAPACITOR ±10% 50V :	
CL05		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				CC51 CC52 CC57 CC58 CL51	
CL07		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				CL76 CL77	
CL08		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020					
CL09		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				ELECTROLYTIC CAPACITOR	
CL11								±20% : CC71 CC72	
CL22		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				PLASTIC FILM CAPACITOR	
CL23		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				±5% 50V : CC79 CC80 CC83	
CL24		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620				CC84 CL78	
CL25								PL04-RESISTORS(COMMON)	
CL31		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				CARBON FILM FIXED RES.	
CL32		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620				±5% 1/6W : RC51-RC54	
CL33		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620				RC57-RC64 RC66-RC79	
CL34		4822 122 30043	CER. 0.01μF Z 50V	DK18103310				RC83 RC86 RC87 RC89 RC91	
CL35		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620				RC93-RC97 RL02 RL04 RL06	
CL36		4822 122 30043	CER. 0.01μF Z 50V	DK18103310				RL08 RL10-RL15 RL18-RL26	
CL37		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020				RL28-RL32 RL39-RL43 RL51	
CL38		4822 122 30043	CER. 0.01μF Z 50V	DK18103310				RL52 RL54	
CL39		4822 122 30043	CER. 0.01μF Z 50V	DK18103310				PL04-RESISTORS	
CL40		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	RL01		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CL41		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	RL03		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CL42		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	RL05		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CL43		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620	RL07		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CL44		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010	RL09		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CL45		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020					
CL46	/C,/K,/S	4822 126 10362	CER. 22pF ±5%	DA15220110				PL04-SEMICONDUCTORS	
CL47	/C,/K,/S	4822 126 11553	CER. 15pF ±5%	DA15150120	DL07		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000
CL48	/C,/K,/S	4822 126 10362	CER. 22pF ±5%	DA15220110				30V 0.1A	
CL48	/U	4822 122 33638	CER. 27pF ±5%	DA15270110	DL21		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000
CL49		4822 126 11591	CER. 24pF J CH 50V BLK	DD15240300				30V 0.1A	
CL50		4822 126 10362	CER. 22pF ±5%	DA15220110	DL22		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000
								30V 0.1A	
CL52		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020					
CL53		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010	QC51			IC OP-AMP NJM4580DD DUAL	HC10112090
CL54		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620	QC52			IC OP-AMP NJM4580DD DUAL	HC10112090
CL55		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020	QC71			IC NJM4580DD	HC10112090
CL56		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QC72			IC NJM4580DD	HC10112090
CL57		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QC73			IC NJM4580DD	HC10112090
CL58		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QC95		4822 209 63471	IC 74HC08	HC700800B0
CL59		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620	QL01		9965 000 01371	IC MM1140XF	HC10083550
CL60		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QL02			IC BA7612N	HC10201210
CL61		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	QL03		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210
CL62		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QL04			IC BA7613N	HC10202210
CL63		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QL05		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210
CL64		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620	QL06			IC BA7613N	HC10202210
CL65		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010	QL07		4822 209 16846	IC NJU3718L	HC10171090
CL67	/U	4822 126 10362	CER. 22pF ±5%	DA15220110	QL08		4822 209 32246	IC NJM2244	HC10119090
CL68		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020				3IN SW 75 W DRIVER	
CL69		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QL09			IC OSD IC LC74781	HC10377030
CL70		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QL10	/C,/K,/S	4822 130 61227	DIG. TRS.	BA10001000
CL71								DTA114ES UN4111 10k 10k	
CL74		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110	QL11	/C,/K,/S	4822 130 61189	DIG. TRS.	BA20004000
CL75								DTC114TS UN4215 10k	
CL79		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020	QL12	/C,/K,/S	4822 130 61189	DIG. TRS.	BA20004000
CL80		4822 122 30043	CER. 0.01μF Z 50V	DK18103310				DTC114TS UN4215 10k	
CL81		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QL14		4822 209 32246	IC NJM2244	HC10119090
								3IN SW 75 W DRIVER	

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
QL15			DIG. TRS. DTC144VSA 47k 10k	BA20068210	CQ08		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
QL16		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000	CQ09	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
QL17		4822 130 60588	DIG. TRS. DTC114ES UN4211 10k 10k	BA20001000	CQ10	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
QL18			IC TC74HC132AP	HC713205D0	CS01				
QL19		4822 130 60588	DIG. TRS. DTC114ES UN4211 10k 10k	BA20001000	}		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
QL21		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000	CS14				
JC51			PL04-MISCELLANEOUS		CS15		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
JL01		4822 265 41264	TERMINAL RCA 4P BLACK	YT02041300	CS16		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
JL02		4822 265 41264	TERMINAL RCA J3P YELLOW	YT02030370	CS17		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
JL03			TERMINAL RCA 3P YELLOW	YT02030640	CS18		4822 124 90358	ELECT 22μF M 16V RA-2	OA22601620
LL01		4822 157 62922	CHOKE COIL 33UH J	LC13333800	CS19				
LL02		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	}		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
XL01	/C,/K,/S	4822 242 73903	CRYSTAL AT49 17.7MHz	JX17001260	CS22				
XL02		4822 242 80288	CRYSTAL AT49 14.31818MHz	JX14001260	CS23		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
			PL74-AUX INPUT		CS24		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
			CIRCUIT BOARD		CS25				
			PL74-CAPACITORS		}		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
CL75	/S	4822 126 11568	CER. 470pF ±10% GR39	DK96471300	CS28				
CL76	/S	4822 126 11568	CER. 470pF ±10% GR39	DK96471300	CS29		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020
CL77	/S	4822 122 33777	CER. 22pF ±5% CG 50V GR39	DD95470300	CS30		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020
CL78	/S	4822 122 33777	CER. 22pF ±5% CG 50V GR39	DD95470300	CS31		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
CL79					CS32		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
}		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CS33		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020
CL82					CS34		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020
CL83		4822 124 23112	ELECT 10μF 16V	EQ10601630	CS35		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
CL84		4822 111 41305	RES. 0 Ω ±5% 1/4W	GD05000140	CS36		4822 124 41539	ELECT 47μF M 16V RA-2	OA47601620
CL88		4822 111 41305	RES. 0 Ω ±5% 1/4W	GD05000140	CS55	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CL89		4822 126 11687	CER. 0.1μF +80%-20%	DK98104200	CS56	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CL90		4822 126 11687	CER. 0.1μF	DK98104200	CS57		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
CL91					CS58		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
}		4822 111 41305	RES. 0 Ω ±5% 1/4W	GD05000140	CS59	/S			
CL98					}		4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
			PL74-RESISTORS CHIP		CS62	/S			
RL75		4822 051 30102	1k Ω ±5% 1/16W	NN05102610	CS63		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
RL76		4822 051 30102	1k Ω ±5% 1/16W	NN05102610	CS64		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
RL77		4822 051 30473	47k Ω ±5% 1/16W	NN05473610	CS65	/S			
RL78		4822 051 30473	47k Ω ±5% 1/16W	NN05473610	}		4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
RL79					CS70	/S			
}		4822 116 82487	0 Ω ±5% 1/16W	NN05000610	CS73	/S			
RL82					}		4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
RL83		4822 051 30473	47k Ω ±5% 1/16W	NN05473610	CS76	/S			
RL84		4822 051 30473	47k Ω ±5% 1/16W	NN05473610	CS79	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
RL85		4822 051 30759	75 Ω ±5% 1/16W	NN05750610	CS80	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
RL86		4822 051 30759	75 Ω ±5% 1/16W	NN05750610	CS84		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
RL88		4822 051 30759	75 Ω ±5% 1/16W	NN05750610	CS85		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
					CS86		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
QL75		4822 209 71451	PL74-SEMICONDUCTOR		CS87		4822 124 90354	ELECT 100μF M 16V RA-2	OA10701620
			IC NJM4558M	HC10011090	CS88		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
JL75		9965 000 01347	PL74-MISCELLANEOUS		CS89		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020
			TERMINAL RCA 3P S-VIDEO	BY04040030	CS90		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020
			PS04-A-FUNC/PRE SUPPLY		CS93	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
			CIRCUIT BOARD KIT		CS94	/S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
			PS04-CAPACITORS		CS97		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CG01					CS98		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
}		4822 124 22274	ELECT 4.7μF M 50V RA-2	OA47505020	CS99		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
CG06					C809		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CG09		4822 124 22277	ELECT 470μF 16V M RA-2	OA47701620	C810		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					C811		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
					C812		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					C813		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
					C814		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					C815		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
					C816		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					C819		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					C820		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					C821		9965 000 01351	ELECT 13000μF M 16V RE3	EA13901670
					C824		4822 122 30043	CER. 0.01μF Z 50V	DK18103310

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
C825		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	D828		4822 130 82421	DIODE 1D3 1A 200V	HD20002710
C826		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	D829		4822 130 82421	DIODE 1D3 1A 200V	HD20002710
C827		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	D830		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
C828		4822 122 30043	CER. 0.01μF Z 50V	DK18103310					
C830		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QG01		9965 000 01359	IC ELE.VOL.TC9459N	HC10443050
C832		9965 000 01352	ELECT 470μF 63V	EA47706310	QG02		4822 209 83631	IC NJM4558D-D	HC10008090
C833		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QG03		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
C834			ELECT 47μF M 35V RA-2	OA47603520	QG04		4822 130 61227	DIG. TRS.	BA10001000
C835		4822 122 30043	CER. 0.01μF Z 50V	DK18103310					
C836		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QG05		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
C840		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	QG06		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
C841		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QG07		4822 130 61227	DIG. TRS.	BA10001000
C843		4822 124 90355	ELECT 100μF M 50V RA-2	OA10705020					
C844		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QS01			DTA114ES UN4111 10k 10k	
C845		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	}		4822 209 83631	IC NJM4558D-D	HC10008090
C847		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QS11				
C848		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	QS12		4822 209 32552	IC LC78211	HC10308030
C851		4822 124 41538	ELECT 220μF 35V M RA-2	OA22703520	QS13		4822 209 32553	IC LC78212	HC10309030
C852		4822 124 90357	ELECT 2.2μF M 50V RA-2	OA22505020	QS14		4822 209 32553	IC LC78212	HC10309030
					QS15		4822 209 32552	IC LC78211	HC10308030
C***			PS04-CAPACITORS(COMMON) HIGH DIELECTRIC CONSTANT CER. CAPACITOR ±10% 50V : (CG07 CG08 [J/S]) CQ06 CQ07 (CS37-CS54 CS71 CS72 CS91 CS92 CS95 CS96 [J/S])		QS16		4822 130 61227	DIG. TRS.	BA10001000
					QS17			DTA114ES UN4111 10k 10k	
C***			ELECTROLYTIC CAPACITOR ±20% : C823 C842 C849		}		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
					QS20				
					QS21		4822 130 61227	DIG. TRS.	BA10001000
								DTA114ES UN4111 10k 10k	
			PS04-RESISTORS		QS22		4822 130 61227	DIG. TRS.	BA10001000
▲ RG15		4822 115 90166	FUSE 10 Ω G 1/4W	NF02100140				DTA114ES UN4111 10k 10k	
▲ R804		4822 117 10158	1 Ω ±5% 1/4W	GG05010140	QS23		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
R807		4822 053 10222	2.2k Ω ±5% 1W	GA05222010	QS24		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
▲ R811		4822 111 90731	FUSE 47 Ω G 1/4W	NF02470140	QS25		4822 209 83631	IC NJM4558D-D	HC10008090
▲ R817		4822 115 90167	FUSE 100 Ω G 1/4W	NF02101140	QS26		4822 130 90347	PHOTO UNIT PC-817 COUPLER 1PAIR	HW10006320
					QS27		4822 130 61227	DIG. TRS.	BA10001000
								DTA114ES UN4111 10k 10k	
			PS04-RESISTORS(COMMON) CARBON FILM FIXED RES. ±5% 1/6W : R806 R808-R810 R812 R814-R816 R819 RG01-RG06 RG09-RG14 RG16-RG20 RQ25-RQ30 RS01-RS10 RS13-RS42 RS47-RS95 RS98 RS99		▲ Q802		9965 000 01354	IC L780S15 +15V 1A	HC38915030
					▲ Q803		4822 209 31864	IC NJM7915FA -15V 1A	HC39915090
					▲ Q804			TRS. 2SD1415	HT41415100
					▲ Q805		4822 209 31864	IC NJM7915FA -15V 1A	HC39915090
					▲ Q807		4822 209 63179	IC NJM7905FA -5V 1A	HC39905090
					▲ Q808		4822 209 61533	IC NJM7806FA +6V	HC38906090
					Q809		4822 130 61666	TRS. 2SA3419 Y	HT334192A0
					Q810		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000
DG01		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	Q811		4822 209 14883	IC V-SENSOR IC S-806C 4.55V	HC10075530
DG02		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	Q812		4822 130 61227	DIG. TRS.	BA10001000
DG03		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	Q813		4822 130 60588	DIG. TRS.	BA20001000
DS01		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000				DTC114ES UN4211 10k 10k	
DS02		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000					
D803					JS01		4822 267 31451	PS04-MISCELLANEOUS TERMINAL RCA JACK 8P WHITE RED	YT02080110
}		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	JS03		4822 265 10748	TERMINAL RCA JACK 6P WHITE RED	YT02060460
D806					JS04		4822 265 10748	TERMINAL RCA JACK 6P WHITE RED	YT02060460
!D808		4822 130 83438	DIODE D5SB-20 5A 200V	HE20016290	JS06		4822 265 10748	TERMINAL RCA JACK 6P WHITE RED	YT02060460
D810		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	JS07		9965 000 01355	TERMINAL RCA 4P ORANGE GREEN	YT02041260
D811		4822 130 82421	DIODE 1D3 1A 200V	HD20002710					
D812		4822 130 82421	DIODE 1D3 1A 200V	HD20002710					
D813			ZENER DIODE MTZJ36D	HD33601000					
D814		4822 130 80318	ZENER DIODE ZENER 6.8V	HD30681000					
D815					LG01		9965 000 01576	RELAY MR82-24USR	LY20240480
}		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	▲ L801		9965 000 01353	RELAY FTR-F1AA024T	LY20240460
D825									
▲ D826			DIODE 1GWJ43	HD20031050					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CN51 }	/S	4822 122 30043	PT14-SPK TERMINAL CIRCUIT BOARD	DK18103310	DU07		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
CN58 /S	/S		PT14-CAPACITORS		DU08		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
					DU20		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
DN51		4822 130 82421	PT14-SEMICONDUCTRS	HD20002710	DU21		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
DN52		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	QU01		9965 000 03868	IC ML9205-01GA FL DRIVER	HC10039260
DN53		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	QU02		4822 209 32695	IC NJU3711D	HC10128090
					QU03 }		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000
JN54	/C,/K,/S	9965 000 01774	PT14-MISCELLANEOUS	YT01040830	QU06		4822 130 63211	DIG. TRS.	BA10004000
JN54	/U		TERMINAL SPK 2P RR BB IEC	YT01040860	QU07			DTA114TS UN4115 10k	
JN55	/C,/K,/S	9965 000 01775	TERMINAL SPK 2P BB RR IEC	YT01040840			4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000
JN55	/U		TERMINAL SPK 4P BB RR	YT01040850	QU08		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000
LN51		4822 280 10305	RELAY VB-18MBU-565-UL3	LY20180020	QU09		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199	HT30001000
LN52		4822 280 10305	RELAY VB-18MBU-565-UL3	LY20180020					
LN53		4822 280 10305	RELAY VB-18MBU-565-UL3	LY20180020					
								PU04-MISCELLANEOUS	
			PT84-CENTER SPK CIRCUIT BOARD		SU01 }		9965 000 00373	PUSH SWITCH EVQ11L05R H 5MM 160GF	SP01013370
CN71	/S	4822 122 30043	CER. CAP. 0.01μF Z 50V	DK18103310	SU26				
					SU32		9965 000 01348	ROTARY SWITCH	SR02010070
JN71	/C,/K,/S	9965 000 01776	TERMINAL SPK 2P B-R IEC	YT01020390			9965 000 01349	ENCODER 36PULSE EC16B	SR02010080
JN71	/U		TERMINAL SPK 2P B R	YT01020410	SU33			ROTARY SWITCH	
								ENCODER 16PULSE EC16B	
			PU04-FRONT/FL DISPLAY/SW. CIRCUIT BOARD		VU01			DISPLAY UNIT FL 24-BT-12GN	HQ32401410
			PU04-CAPACITORS						
CU01		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110				PU74-STANDBY LED CIRCUIT BOARD	
CU02		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110				PU74-CAPACITOR	
CU03		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110	CU71		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
CU04		4822 126 10935	ELECT 100μF 6.3V	EJ10700610				PU74-RESISTOR(COMMON)	
CU05								CARBON FILM FIXED RES. ±5% 1/6W : RU71	
CU08		4822 126 10364	CER. 100pF ±10%	DA16101110	R***				
CU09								PU74-SEMICONDUCTOR	
CU12		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110				L.E.D. HLMF-K200 RED	HI10005340
CU13		4822 122 33639	CER. 1000pF ±10%	DA16102110	DU71				
CU14		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110				PU84-IR SENSOR CIRCUIT BOARD	
CU15		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110				PU84-CAPACITORS	
CU16		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110	CU81		4822 122 40588	CER. 0.022μF ±20%	DA17223110
CU17		4822 122 33639	CER. 1000pF ±10%	DA16102110	CU82		4822 124 80087	ELECT 220μF 6.3V	EJ22700610
CU18		4822 126 10364	CER. 100pF ±10%	DA16101110				PU84-SEMICONDUCTOR	
CU19		4822 126 10364	CER. 100pF ±10%	DA16101110				PHOTO UNIT PNA4655M00XB	HW10005020
CU20		4822 126 10513	CER. 47pF ±20%	DA15470110				IR SENSOR	
CU21					QU81		4822 209 16157		
CU26		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110				PU94-GYRO ENCODER CIRCUIT BOARD	
CU27		4822 122 40586	CER. 10000pF +20%	DA17103110				PU84-CAPACITOR	
CU30		4822 126 10935	ELECT 100μF 6.3V	EJ10700610	CU91		4822 122 40617	CER. 0.1μF +80% 20% 50V	DD38104010
CU31		4822 124 80665	ELECT 10μF 50V	EJ10605010				PU94-RESISTOR(COMMON)	
CU32		4822 122 40586	CER. 10000pF ±20%	DA17103110				CARBON FILM FIXED RES. ±5% 1/6W : RU91	
			PU04-RESISTORS(COMMON)		R***				
			CARBON FILM FIXED RES. ±5% 1/6W : RU01-RU09					PU94-SEMICONDUCTOR	
			RU11-RU19 RU21-RU29					PHOTO UNIT GP1A06	HW10033320
			RU31-RU44 RU48 RU51 RU52		QU91		4822 130 11143	2PHASE INTERRUPTER	
			RU55-RU58 RU61-RU63						
			PU04-SEMICONDUCTORS						
DU01									
DU06		4822 130 11363	L.E.D. LT3K44B 30MA GREEN	HI10095320					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CW01		4822 122 40586	PW04-HEADPHONE CIRCUIT BOARD		RY59		4822 051 30683	68k Ω $\pm 5\%$ 1/16W	NN05683610
CW02		4822 122 40586	PW04-CAPACITORS		RY60		4822 051 30103	10k Ω $\pm 5\%$ 1/16W	NN05103610
CW03		4822 122 40617	CER. 10000pF $\pm 20\%$	DA17103110	RY64		4822 051 30273	27k Ω $\pm 5\%$ 1/16W	NN05273610
CW04		4822 122 40617	CER. 0.1 μ F +80% -20% 50V	DD38104010	RY65		4822 051 30221	220 Ω $\pm 5\%$ 1/16W	NN05221610
			CER. 0.1 μ F +80% -20% 50V	DD38104010	RY66		4822 051 30221	220 Ω $\pm 5\%$ 1/16W	NN05221610
					RY67		4822 051 30103	10k Ω $\pm 5\%$ 1/16W	NN05103610
					RY68		4822 051 30273	27k Ω $\pm 5\%$ 1/16W	NN05273610
					RY69		4822 122 40617	CER. 0.1 μ F +80% -20% 50V	DD38104010
JW01	/C,/K,/S		PW04-MISCELLANEOUS					PY04-SEMICONDUCTORS	
JW01	BLACK	4822 265 10685	JACK HLJ2307-01-3163	YJ01004330	DY01		4822 130 80522	CHIP DIODE 1SS301 DAN202U	HZ21006000
JW01	GOLD		JACK HLJ2307-01-3160	YJ01004240	DY02		4822 130 80522	CHIP DIODE 1SS301 DAN202U	HZ21006000
			JACK HLJ2307-01-3163	YJ01004330	DY03		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000
					DY04		4822 130 80522	CHIP DIODE 1SS301 DAN202U	HZ21006000
			PY04-U-COM CIRCUIT BOARD						
			PY04-CAPACITORS						
CY01		4822 126 11687	CER. 0.1 μ F +80% -20%	DK98104200	QY01			MICROPROCESSOR	HU326JT00F
CY02		4822 124 23056	ELECT 47 μ F 10V	EJ47601010				TMP93PW40DF	
CY04				DK96103200	QY02		4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000
CY07		4822 126 13303	CER. 1 μ F 10V F	DK98105200				2SC3199	
CY08		5322 126 11583	CER. 0.01 μ F $\pm 10\%$ B 25V	DK96103200	QY03		4822 130 61227	DIG. TRS.	BA10001000
CY09		5322 126 11583	CER. 0.01 μ F $\pm 10\%$ B 25V	DK96103200				DTA114ES UN4111 10k 10k	
CY10		5322 126 11583	CER. 0.01 μ F $\pm 10\%$ B 25V	DK96103200	QY04		4822 130 42594	DIG. TRS.	BA20002000
CY11		4822 126 11687	CER. 0.1 μ F +80% -20%	DK98104200				DTC144ES UN4213 47k 47k	
CY12		4822 126 11687	CER. 0.1 μ F +80% -20%	DK98104200	QY05		4822 130 61227	DIG. TRS.	BA10001000
CY13		4822 126 11687	CER. 0.1 μ F +80% -20%	DK98104200				DTA114ES UN4111 10k 10k	
CY19		4822 126 11687	CER. 0.1 μ F +80% -20%	DK98104200	QY06		4822 130 61227	DIG. TRS.	BA10001000
CY25		5322 126 11578	CER. 1000pF $\pm 10\%$ B 50V	DK96102300				DTA114ES UN4111 10k 10k	
CY26		4822 126 11687	CER. 0.1 μ F +80% -20%	DK98104200	QY07		4822 130 60588	DIG. TRS.	BA20001000
CY30			BIG ELECT 1F 5.5V	EX10500530				DTC114ES UN4211 10k 10k	
			DB-5R5D105		QY08		4822 130 61227	DIG. TRS.	BA10001000
								DTA114ES UN4111 10k 10k	
			PY04-RESISTORS CHIP		QY09		4822 130 60588	DIG. TRS.	BA20001000
RY01		4822 051 30479	47 Ω $\pm 5\%$ 1/16W	NN05470610				DTC114ES UN4211 10k 10k	
RY02		4822 116 83819	18k Ω $\pm 5\%$ 1/16W	NN05183610	QY10		4822 130 61227	DIG. TRS.	BA10001000
RY03		4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610				DTA114ES UN4111 10k 10k	
RY04		4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610	QY11		4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000
RY05		4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610				2SC3199	
RY06					QY12		4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000
}		4822 051 30103	10k Ω $\pm 5\%$ 1/16W	NN05103610				2SC3199	
RY11					QY13		4822 130 60588	DIG. TRS.	BA20001000
RY12		4822 051 30105	1M Ω $\pm 5\%$ 1/16W	NN05105610				DTC114ES UN4211 10k 10k	
RY13		4822 051 30103	10k Ω $\pm 5\%$ 1/16W	NN05103610	QY14		4822 130 61227	DIG. TRS.	BA10001000
RY14	/C,/K,/S	4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610				DTA114ES UN4111 10k 10k	
RY15	/U	4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610	QY15		4822 209 12845	IC S-80730SN-DT-X RESET IC	HC10054530
RY16	/C,/K,/S	4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610				PY04-MISCELLANEOUS	
RY17	/U	4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610	JY01			JACK 33PIN ANGLE	YJ07020290
RY19		4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				FFC33FE-ST-VK-N	
RY20		4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610					
RY22	/S	4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610	XY01		9965 000 01346	SERAMIC VIB.	FQ02005030
RY23	/C,/K,/U	4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				CST20.00MXW0H1 20MHz+C	
RY24		4822 051 30472	4.7k Ω $\pm 5\%$ 1/16W	NN05472610					
RY25		4822 051 30472	4.7k Ω $\pm 5\%$ 1/16W	NN05472610				PY54-CONNECT CIRCUIT BOARD	
RY27	}	4822 051 30472	4.7k Ω $\pm 5\%$ 1/16W	NN05472610	JY51			JACK 33FE-BT-VK-N 33PIN	YJ07020660
RY31					JY53			JACK 33FE-BT-VK-N 33PIN	YJ07020660
RY32		4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				PY64-CONNECT-0 CIRCUIT BOARD	
RY33		4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				PY64-CAPACITORS	
RY34		4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				CER. 0.01 μ F Z 50V	DK18103310
RY35		4822 051 30221	220 Ω $\pm 5\%$ 1/16W	NN05221610	CY61		4822 122 30043	ELECT 10 μ F M 50V RA-2	OA10605020
RY36		4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610	CY62		4822 124 22571		
RY37		4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				PY64-RESISTOR	
RY38	}	4822 051 30221	220 Ω $\pm 5\%$ 1/16W	NN05221610				FUSE 100 Ω G 1/4W	NF02101140
RY45								PY64-RESISTORS(COMMON)	
RY46	}	4822 116 82487	0 Ω $\pm 5\%$ 1/16W	NN05000610				CARBON FILM FIXED RES.	
RY56								$\pm 5\%$ 1/6W : RY62 RY63	
RY57		4822 051 30473	47k Ω $\pm 5\%$ 1/16W	NN05473610					
RY58		4822 051 30103	10k Ω $\pm 5\%$ 1/16W	NN05103610					

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
DY61		4822 130 82421	PY64-SEMICONDUCTORS DIODE 1D3 1A 200V	HD20002710	CZ47		4822 126 10362	CER. 22pF ±5%	DA15220110
QY61		4822 130 61666	TRS. 2SA3419 Y	HT334192A0	CZ49		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020
JY61			PY64-MISCELLANEOUS JACK 33PIN ANGLE FFC33FE-ST-VK-N	YJ07020290	CZ50		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
▲ LY61		9965 000 01353	RELAY FTR-F1AA024T FOR FIL.SWITCH	LY20240460	CZ51		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620
			PZ04-S-VIDEO SELECTOR CIRCUIT BOARD		CZ52		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020
			PZ04-CAPACITORS		CZ55				
CX01		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	}		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX02		4822 122 31349	CER. 68pF J 50V	DD15680300	CZ60				
CX03	/C,/K,/S	5322 122 32143	CER. 22pF J 50V	DD15220300	CZ61		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
CX04		4822 124 22275	ELECT 47μF M 10V RA-2	OA47601020	CZ62		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
CX05		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	CZ63		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
CX06		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020	CZ65		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CX07		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ66		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620
CX08	/U	4822 126 10362	CER. 22pF ±5%	DA15220110	CZ67		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CX09		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ68		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620
CX10		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ69				
CX11		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	}		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CX12		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620	CZ77				
CX13		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ78		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620
CX14		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ80		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX15		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ81		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX16					CZ82		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
}		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	CZ83		4822 124 23112	ELECT 10μF 16V	EQ10601630
CX19					CZ84		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX20		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020	CZ85		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620
CX22		4822 122 30043	CER. 0.01μF Z 50V	DK18103310	CZ86		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX24		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020	CZ87		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX25		4822 124 41537	ELECT 220μF M 6.3V RA-2	OA22700620	CZ88		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020
CX31		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ89				
CX32		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	}		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CX33		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ92				
CX41					CZ93		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
}		4822 126 11558	CER. CER.0.1μF Z 50V	DA17104110	CZ94		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CX49					CZ95		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
CX97		4822 124 41543	ELECT 1μF M 50V RA-2	OA10505020	CZ97		4822 124 90353	ELECT 100μF M 10V RA-2	OA10701020
CX98		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	CZ98		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CX99	/U	4822 126 10362	CER. 22pF ±5%	DA15220110				PZ04-CAPACITORS(COMMON) HIGH DIELECTRIC CONSTANT CER. CAPACITOR ±10% 50V : CX92 CZ48	
CZ01								PLASTIC FILM CAPACITOR ±5% 50V : CX21	
}		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020				PZ04-RESISTORS	
CZ05					▲ RX11		4822 050 21801	180 Ω ±5% 1/4W	GG05181140
CZ06					RX31		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
}		4822 124 23112	ELECT 10μF 16V	EQ10601630	RX32		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CZ10					RX33		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CZ11									
}		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	RZ06				
CZ25					}		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
CZ26		4822 124 23112	ELECT 10μF 16V	EQ10601630	RZ15				
CZ27					RZ24		4822 111 41355	75 Ω ±5% 1/6W	GD05750160
}		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020	}				
CZ33					RZ29				
CZ34		9965 000 01040	ELECT 470μF M 6.3V RA-2	OA47700620				PZ04-RESISTORS(COMMON) CARBON FILM FIXED RES. ±5% 1/6W : RX01-RX10 RX12-RX22 RX24-RX29 RZ01-RZ05 RZ16-RZ20 RZ30-RZ32 RZ34 RZ35 RZ42-RZ48 RZ50 RZ51 RZ53 RZ54 RZ56-RZ60 RZ67	
CZ35									
}		4822 124 22571	ELECT 10μF M 50V RA-2	OA10605020					
CZ42									
CZ43	/C,/K,/S	4822 126 10362	CER. 22pF ±5%	DA15220110					
CZ44	/C,/K,/S	4822 126 10362	CER. 22pF ±5%	DA15220110					
CZ44	/U	4822 122 33638	CER. 27pF ±5%	DA15270110					
CZ45	/C,/K,/S	4822 126 11553	CER. 15pF ±5%	DA15150120					
CZ46		4822 126 11591	CER. 24pF J CH 50V BLK	DD15240300					

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DX01	/C,/K,/S	4822 130 80321	PZ04-SEMICONDUCTORS	HD31001000	JZ05	/C,/K,/S		TERMINAL RCA J6P	YT02060710
DZ01		4822 130 32362	ZENER DIODE ZENER 10V	HD20002000				GREEN BLUE RED	
DZ02		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000	LX01		4822 157 62909	CHOKE COIL 22μH	LC12233800
DZ03		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000	LZ01		4822 157 62922	CHOKE COIL L 33μH	LC13333800
DZ05		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000	LZ02		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010
DZ19		9965 000 01374	ZENER DIODE MTZJ2.7B	HD30271000	LZ03		4822 242 73843	EMI FILTER DSS306-91-F-233Z	FM12223010
DZ21		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000	XZ01		4822 242 73903	CRYSTAL AT49 17.7MHz	JX17001260
DZ22		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000	XZ02		4822 242 80288	CRYSTAL AT49 14.31818MHz	JX14001260
QX01		4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000					
QX04									
QX05									
QX07		4822 130 60588	DIG. TRS.	BA10004000					
QZ01		9965 000 01371	IC MM1140XF	HC10083550					
QZ02		9965 000 01371	IC BA7612N	HC10201210					
QZ03			IC MM1140XF	HC10083550					
QZ04			IC BA7612N	HC10201210					
QZ05		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210					
QZ06		9965 000 01372	IC BA7613N	HC10202210					
QZ07			IC BA7649A G-1 VIDEO SW	HC10179210					
QZ08			IC BA7612N	HC10201210					
QZ09		4822 209 32246	IC NJM2244	HC10119090					
QZ10		9965 000 01379	3IN SW 75 W DRIVER	HC10198090					
QZ11		4822 130 61227	IC NJM2263D	HC10377030					
QZ12			IC OSD IC LC74781	BA10001000					
QZ13			DIG. TRS.	BA20004000					
QZ14		4822 130 61189	DTA114ES UN4111 10k 10k	BA20004000					
QZ16		4822 209 32246	DIG. TRS.	BA20004000					
QZ17			DTC114TS UN4215 10k	BA20004000					
QZ18			DIG. TRS.	BA20004000					
QZ19		9965 000 01379	DTA114ES UN4111 10k 10k	BA10001000					
QZ20		9965 000 01380	DIG. TRS.	BA10001000					
QZ21		4822 209 83088	IC NJM2263D	HC10198090					
QZ22		4822 130 61227	IC 74HC4051	BA20068210					
QZ23		4822 130 61227	IC NJM2903D	HC705100B0					
QZ24			DIG. TRS.	HC10022090					
QZ25			DIG. TRS.	BA10001000					
QZ26		4822 130 41947	DTA114ES UN4111 10k 10k	BA10001000					
QZ27		4822 130 60588	DIG. TRS.	HT30001000					
QZ28		9965 000 01381	DTA114ES UN4211 10k 10k	BA20001000					
QZ29			DIG. TRS.	BA20001000					
JZ01			DTC114ES UN4211 10k 10k	BA20001000					
JZ02		4822 265 31302	IC 74HC32	HC703200B0					
JZ03		4822 265 20725	IC TC74HC132AP	HC713205D0					
JZ04		4822 265 31302	PZ04-MISCELLANEOUS						
			TERMINAL S-VIDEO JACK 3P	YT02030350					
			TERMINAL S-VIDEO JACK 2P	YT02021320					
			TERMINAL S-VIDEO JACK 3P	YT02030350					
			TERMINAL 6P	YT02060710					
			GREEN BLUE RED						