

SERVICE MANUAL

STEREO AV RECEIVER

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" AV-D67 (U), (S/M Code No. 09-002-429-6T1).

SPECIFICATIONS

FM tuner section

Tuning range 87.5 MHz to 108 MHz
Usable sensitivity (IHF) 13.2 dBf
Antenna terminals 75 ohms (unbalanced)

AM Tuner section

Tuning range 530 kHz to 1710 kHz (10 kHz step)
531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity 350 μ V/m
Antenna Loop antenna

Amplifier section

Power output **[Stereo Mode]**
Front
160 watts per channel, Min. RMS at 8 ohms, from 40 Hz to 20 kHz, with no more than 0.9 % Total Harmonic Distortion
[Dolby Digital Surround or Dolby Pro Logic Mode]
Front
100 watts per channel, Min. RMS at 8 ohms, from 40 Hz to 20 kHz, with no more than 0.9 % Total Harmonic Distortion
Rear (Surround)
100 watts per channel, Min. RMS at 8 ohms, 1 kHz, with no more than 0.9 % Total Harmonic Distortion
Center
100 watts, Min. RMS at 8 ohms, 1 kHz, with no more than 0.9 % Total Harmonic Distortion
Total harmonic distortion inputs 0.15 % (80 W, 1kHz, 8 ohms, Front AUDIO IN
PHONO : 2.5mV, adjustable (47 kohms)
VIDEO 1/DVD/MD, VIDEO 2/LD/TV, VIDEO 3, CD : 300mV, adjustable (47 kohms)
TAPE MONITOR : 350mV, adjustable (47 kohms)
AUX : 250 mV, adjustable (47 kohms)
DIGITAL IN
COAXIAL (VIDEO 2) :
OPTICAL (VIDEO 1) :
OPTICAL (VIDEO 3) :
accept linear PCM (32 kHz, 44.1 kHz and 48 kHz) signals and bit stream of Dolby Digital Surround
VIDEO IN : 1 Vp-p (75 ohms)

Outputs

AUDIO OUT (REC OUT) : 300 mV (1 kohm)
VIDEO OUT (MONITOR) : 1 Vp-p (75 ohms)
SUPER WOOFER : 5.0 V
FRONT SPEAKERS IMP : 8 ohms (front speakers A and B) : accepts speakers of 8 ohms or more
SURROUND SPEAKERS IMP : 8 ohms (surround speakers) : accepts speakers of 8 ohms or more
CENTER SPEAKER IMP : 8 ohms : accepts speaker of 8 ohms or more
PHONES (stereo jack) : accepts headphones of 32 ohms or more
-20 dB


Muting

General

Power requirements 120 V AC, 60 Hz
Power consumption 200 W
Power consumption in standby mode ECO OFF : 39.3 W
ECO ON : 1.35 W
Dimensions (W x H x D) 430 x 155 x 392.5 mm (17 x 6 $\frac{1}{8}$ x 15 $\frac{1}{2}$ in.)
Weight 11.5 kg (25 lb 6 OZ.)

• Design and specifications are subject to change without notice.

• Manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY", the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-AR2-903-010		IB, U(ESF)M
2	87-006-225-010		ANT, LOOP ANT NC2
3	87-043-115-010		FEEDER-ANT, FM
4	8A-AR2-701-010		RC UNIT, RC-AAR02 BLK

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
IC							
	87-A21-419-040		C-IC,NJM14558MD-TE2		87-A40-435-080		ZENER,MTZJ30D
	87-A21-501-010		C-IC,YSS902		87-A40-347-080		ZENER,MTZJ2.2B
	87-A21-503-010		C-IC,AK4527VQ		87-A40-341-080		ZENER,MTZJ36A
	87-020-903-010		IC,NJM7805FA		87-A40-646-010		DIODE,FMB-G16L
	87-017-022-080		C-IC,NJM2068M-D(T1)		87-070-136-080		ZENER,MTZJ5.1B
	87-020-784-080		C-IC,TC4053BF		87-A40-344-080		ZENER,MTZJ6.2C
	87-A20-870-010		IC,GP1F37R		87-A40-488-080		DIODE,1SS244
	87-001-604-080		C-IC,TC74HCU04M		87-A40-348-080		ZENER,MTZJ3.3A
	87-002-298-080		C-IC,TC74HC00AF		87-A40-438-080		ZENER,MTZJ4.7A
	87-A20-736-010		IC,BA033ST		87-017-931-080		ZENER,MTZJ5.6B
	87-A21-499-040		C-IC,SN74HC153A		87-017-148-080		ZENER,HZS6A1L
	87-A21-502-010		C-IC,YSD917	MAIN C.B			
	87-A20-715-010		IC,M62439SP	C101	87-010-235-080		CAP,E 470-16 M SME
	87-017-726-080		C-IC,BU4052BCF	C102	87-010-235-080		CAP,E 470-16 M SME
	87-A21-202-040		C-IC,M62445AFP	C103	87-010-384-080		CAP,E 100-25 M 11L SME
	87-A21-481-040		C-IC,HD74HC4051FP	C104	87-016-128-080		CAP,E 22-25 M 105 KME
	87-017-915-080		C-IC,BU4094BCF	C105	87-010-247-080		CAP,E 100-50 M SME
	8A-AR3-601-110		C-IC,UPD780228GF-071	C106	87-010-384-080		CAP,E 100-25 M 11L SME
	87-070-083-010		IC,GP1U281X	C107	87-010-263-080		CAP,E 100-10 M 11L SME
	87-A20-820-010		IC,BA7625	C108	87-012-140-080		C-CAP,S 470P-50 J CH
	87-017-917-080		C-IC,BU4066BCF	C109	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A20-913-010		IC,LA1837NL	C110	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-070-127-110		IC,LC72131D	C111	87-012-368-080		C-CAP,S 0.1-50 Z F
TRANSISTOR				C112	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-197-080		TR,KTA1267GR	C113	87-016-658-090		CAP,E 4700-35 M SMG
	87-026-245-080		TR,DTC114ES	C114	87-016-658-090		CAP,E 4700-35 M SMG
	87-A30-198-080		TR,KTC3199GR	C115	87-012-368-080		C-CAP,S 0.1-50 Z F
	89-110-372-080		C-TR,2SA1037K(R)	C116	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-071-080		C-TR,RT1N 144C	C117	87-012-368-080		C-CAP,S 0.1-50 Z F
	89-213-702-010		TR,2SB1370E	C118	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-083-080		TR,CSD1489B	C119	87-A10-416-090		CAP,E 6800-80 SMG VB
	87-A30-085-040		C-TR,CSA1362GR	C120	87-A10-416-090		CAP,E 6800-80 SMG VB
	87-A30-075-080		C-TR,2SA1235F	C121	87-010-260-080		CAP,E 47-25 M 11L SME
	87-A30-076-080		C-TR,2SC3052F	C122	87-010-403-080		CAP,E 3.3-50 M 11L SME
	87-A30-074-080		C-TR,RT1P 141C	C123	87-010-385-080		CAP,E 220-25 M SME
	87-026-610-080		TR,KTC3198GR	C124	87-010-385-080		CAP,E 220-25 M SME
	87-A30-073-080		C-TR,RT1N 141C	C125	87-010-247-080		CAP,E 100-50 M SME
	87-A30-086-070		C-TR,CSD1306E	C126	87-010-263-080		CAP,E 100-10 M 11L SME
	87-026-609-080		TR,KTA1266GR	C127	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	87-A30-257-080		C-TR,2SD1306E	C128	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	87-A30-107-070		C-TR,CMBT5401	C131	87-010-544-080		CAP,E 0.1-50 M 11L SME
	87-A30-190-080		TR,CC5551	C133	87-010-404-080		CAP,E 4.7-50 M 11L SME
	87-A30-097-010		TR,FP1016	C135	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-098-010		TR,FP1016	C136	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-106-070		C-TR,CMBT5551	C143	87-A10-712-080		C-CAP,S 0.22-50 Z F
	87-A30-186-010		FET,2SK3053	C144	87-A10-712-080		C-CAP,S 0.22-50 Z F
	87-A30-072-080		C-TR,RT1P 144C	C149	87-010-154-080		C-CAP,S 10P-50 D CH GRM
	87-026-236-080		C-TR,DTC124EK	C150	87-010-154-080		C-CAP,S 10P-50 D CH GRM
	87-026-232-080		C-TR,DTA144WK	C153	87-010-401-080		CAP,E 1-50 M 11L SME
	87-026-608-080		C-TR,DTC123JK	C154	87-010-401-080		CAP,E 1-50 M 11L SME
	89-112-965-080		TR,2SA1296GR	C155	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A30-087-080		C-FET,2SK2158	C156	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	89-327-143-080		TR,2SC2714O	C157	87-010-408-080		CAP,E 47-50 M 11L SME
	87-A30-196-080		TR,2SC4115SRS	C158	87-010-248-080		CAP,E 220-10 M 11L SME
DIODE				C159	87-010-154-080		C-CAP,S 10P-50 D CH GRM
	87-020-465-080		DIODE,1SS133	C169	87-010-154-080		C-CAP,S 10P-50 D CH GRM
	87-A40-291-080		DIODE,1N4148M (CPT)	C170	87-010-154-080		C-CAP,S 10P-50 D CH GRM
	87-A40-345-080		ZENER,MTZJ10C	C171	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-269-080		C-DIODE,MC2836	C172	87-010-154-080		C-CAP,S 10P-50 D CH GRM
	87-A40-115-060		DIODE,RS603M	C173	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A40-270-080		C-DIODE,MC2838	C174	87-010-401-080		CAP,E 1-50 M 11L SME
	87-A40-004-080		ZENER,MTZJ16A	C175	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-335-080		ZENER,MTZJ11C T-72	C203	87-010-178-080		C-CAP,S 1000P-50 K B C2012
	87-A40-224-010		DIODE,GBU8DL	C204	87-010-178-080		C-CAP,S 1000P-50 K B C2012
	87-070-274-080		DIODE,1N4003 SEM	C205	87-010-405-080		CAP,E 10-50 M 11L SME
				C206	87-010-405-080		CAP,E 10-50 M 11L SME
				C209	87-010-406-080		CAP,E 22-50 M 11L SME

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
C210	87-010-406-080		CAP,E 22-50 M 11L SME	C413	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C211	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C414	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C212	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C416	87-016-299-080		CAP,E 10-100 M SME
C215	87-A10-897-080		CAP,E 100-25 BP SME	C420	87-A10-354-080		C-CAP,S 0.047-50 K B
C216	87-A10-897-080		CAP,E 100-25 BP SME	C485	87-010-186-080		C-CAP,S 4700P-50 K B C2012
C217	87-A10-516-080		C-CAP,S 100P-200 J CH	C491	87-012-368-080		C-CAP,S 0.1-50 Z F
C218	87-A10-516-080		C-CAP,S 100P-200 J CH	C492	87-012-368-080		C-CAP,S 0.1-50 Z F
C221	87-016-526-080		C-CAP,S 0.47-16 BK	C493	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
C222	87-016-526-080		C-CAP,S 0.47-16 BK	C501	87-010-404-080		CAP,E 4.7-50 M 11L SME
C223	87-010-402-080		CAP,E 2.2-50 M 11L SME	C502	87-010-404-080		CAP,E 4.7-50 M 11L SME
C224	87-010-402-080		CAP,E 2.2-50 M 11L SME	C503	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C225	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C504	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C226	87-016-251-080		CAP,E 220-16 M SMG	C511	87-010-404-080		CAP,E 4.7-50 M 11L SME
C227	87-010-178-080		C-CAP,S 1000P-50 K B C2012	C512	87-010-404-080		CAP,E 4.7-50 M 11L SME
C228	87-010-178-080		C-CAP,S 1000P-50 K B C2012	C513	87-010-260-080		CAP,E 47-25 M 11L SME
C229	87-016-251-080		CAP,E 220-16 M SMG	C514	87-010-260-080		CAP,E 47-25 M 11L SME
C230	87-A10-354-080		C-CAP,S 0.047-50 K B	C515	87-010-370-080		CAP,E 330-6.3 M SME
C231	87-A10-354-080		C-CAP,S 0.047-50 K B	C516	87-010-370-080		CAP,E 330-6.3 M SME
C285	87-010-186-080		C-CAP,S 4700P-50 K B C2012	C517	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C287	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C518	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C288	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C519	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C289	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C520	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C290	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C531	87-010-213-080		C-CAP,S 0.015-25 K B GRM
C291	87-012-368-080		C-CAP,S 0.1-50 Z F	C532	87-010-992-080		C-CAP,S 0.047-25 K B MK212
C292	87-012-368-080		C-CAP,S 0.1-50 Z F	C533	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C293	87-012-368-080		C-CAP,S 0.1-50 Z F	C535	87-010-404-080		CAP,E 4.7-50 M 11L SME
C294	87-012-368-080		C-CAP,S 0.1-50 Z F	C536	87-010-404-080		CAP,E 4.7-50 M 11L SME
C295	87-012-368-080		C-CAP,S 0.1-50 Z F	C539	87-010-401-080		CAP,E 1-50 M 11L SME
C296	87-012-368-080		C-CAP,S 0.1-50 Z F	C540	87-010-401-080		CAP,E 1-50 M 11L SME
C297	87-012-368-080		C-CAP,S 0.1-50 Z F	C541	87-010-185-080		C-CAP,S 3900P-50 K B
C298	87-012-368-080		C-CAP,S 0.1-50 Z F	C542	87-010-185-080		C-CAP,S 3900P-50 K B
C303	87-010-179-080		C-CAP,S 1200P-50 K B GRM	C547	87-010-404-080		CAP,E 4.7-50 M 11L SME
C304	87-010-179-080		C-CAP,S 1200P-50 K B GRM	C548	87-010-404-080		CAP,E 4.7-50 M 11L SME
C305	87-010-405-080		CAP,E 10-50 M 11L SME	C549	87-016-081-080		C-CAP,S 0.1-16 K R GRM
C306	87-010-405-080		CAP,E 10-50 M 11L SME	C550	87-016-081-080		C-CAP,S 0.1-16 K R GRM
C308	87-016-299-080		CAP,E 10-100 M SME	C554	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C309	87-010-406-080		CAP,E 22-50 M 11L SME	C555	87-010-405-080		CAP,E 10-50 M 11L SME
C310	87-010-406-080		CAP,E 22-50 M 11L SME	C556	87-010-248-080		CAP,E 220-10 M 11L SME
C311	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C557	87-010-405-080		CAP,E 10-50 M 11L SME
C312	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C559	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C315	87-A10-897-080		CAP,E 100-25 BP SME	C560	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C316	87-A10-897-080		CAP,E 100-25 BP SME	C561	87-012-140-080		C-CAP,S 470P-50 J CH
C317	87-A10-516-080		C-CAP,S 100P-200 J CH	C562	87-012-140-080		C-CAP,S 470P-50 J CH
C318	87-A10-516-080		C-CAP,S 100P-200 J CH	C565	87-010-404-080		CAP,E 4.7-50 M 11L SME
C321	87-016-526-080		C-CAP,S 0.47-16 BK	C566	87-010-404-080		CAP,E 4.7-50 M 11L SME
C322	87-016-526-080		C-CAP,S 0.47-16 BK	C605	87-010-405-080		CAP,E 10-50 M 11L SME
C323	87-010-402-080		CAP,E 2.2-50 M 11L SME	C606	87-010-405-080		CAP,E 10-50 M 11L SME
C324	87-010-402-080		CAP,E 2.2-50 M 11L SME	C701	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C325	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C702	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C327	87-010-178-080		C-CAP,S 1000P-50 K B C2012	C723	87-010-401-080		CAP,E 1-50 M 11L SME
C328	87-010-178-080		C-CAP,S 1000P-50 K B C2012	C726	87-010-405-080		CAP,E 10-50 M 11L SME
C330	87-A10-354-080		C-CAP,S 0.047-50 K B	C745	87-012-368-080		C-CAP,S 0.1-50 Z F
C331	87-A10-354-080		C-CAP,S 0.047-50 K B	C746	87-012-368-080		C-CAP,S 0.1-50 Z F
C334	87-A10-918-080		CAP,E 100-16 SMG	C901	87-010-406-080		CAP,E 22-50 M 11L SME
C335	87-A10-918-080		CAP,E 100-16 SMG	C902	87-010-406-080		CAP,E 22-50 M 11L SME
C385	87-010-186-080		C-CAP,S 4700P-50 K B C2012	C903	87-010-406-080		CAP,E 22-50 M 11L SME
C391	87-012-368-080		C-CAP,S 0.1-50 Z F	C904	87-010-406-080		CAP,E 22-50 M 11L SME
C392	87-012-368-080		C-CAP,S 0.1-50 Z F	C905	87-010-406-080		CAP,E 22-50 M 11L SME
C393	87-012-368-080		C-CAP,S 0.1-50 Z F	C906	87-010-260-080		CAP,E 47-25 M 11L SME
C394	87-012-368-080		C-CAP,S 0.1-50 Z F	C907	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C395	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C908	87-010-387-080		CAP,E 470-25 M SME
C396	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C909	87-010-371-080		CAP,E 470-6.3 M SME
C402	87-010-181-080		C-CAP,S 1800P-50 K B GRM	C910	87-010-371-080		CAP,E 470-6.3 M SME
C403	87-010-405-080		CAP,E 10-50 M 11L SME	C911	87-010-371-080		CAP,E 470-6.3 M SME
C405	87-010-406-080		CAP,E 22-50 M 11L SME	C912	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C406	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C913	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C408	87-A10-897-080		CAP,E 100-25 BP SME	C914	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C409	87-A10-516-080		C-CAP,S 100P-200 J CH	C915	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C411	87-016-526-080		C-CAP,S 0.47-16 BK	CN110	87-A60-621-010		CONN,4P V 2MM JMT
C412	87-010-402-080		CAP,E 2.2-50 M 11L SME	CN501	87-A60-039-010		CONN,32P V 9604S-32C

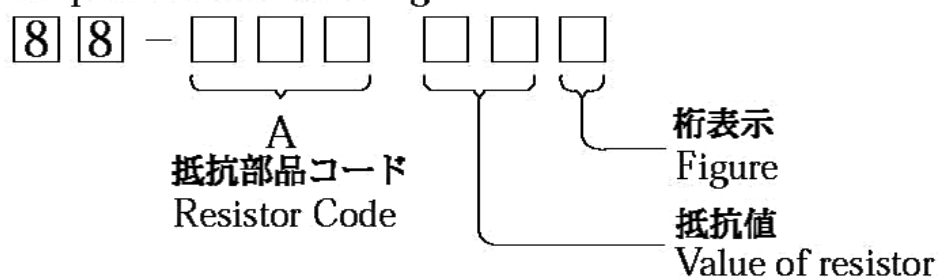
REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
CN502	87-A60-054-010		CONN,14P V 9604S-14C	WH101	87-A90-510-010		HLDR,WIRE 2.5-9P
CN503	87-A60-056-010		CONN,12P V 9604S-12C				
CN504	87-099-574-010		CONN,20P TUC-P20P-B1				
CN505	87-A60-189-010		CONN,16P V TUC-P16P-B1	FRONT	C.B		
CN901	87-A60-619-010		CONN,2P V 2MM JMT				
FB501	87-008-372-080		FLTR,EMI BL01 RN1	C707	87-010-382-040		CAP,E 22-25 M 11L SME
FB602	87-008-372-080		FLTR,EMI BL01 RN1	C708	87-010-382-040		CAP,E 22-25 M 11L SME
J201	87-A60-199-010		TERMINAL,SP 8P CJ-9034-07 V0	C709	87-010-382-040		CAP,E 22-25 M 11L SME
J301	87-A60-200-110		TERMINAL,SP 6P CJ-9033-21-3 V0	C710	87-010-382-040		CAP,E 22-25 M 11L SME
J501	87-099-609-010		JACK,PIN 4P BLK W/O SW	C711	87-010-263-040		CAP,E 100-10 M 11L SME
J502	87-099-609-010		JACK,PIN 4P BLK W/O SW	C712	87-010-382-040		CAP,E 22-25 M 11L SME
J715	87-A60-244-010		JACK,PIN 1P BLK W/O SW	C714	87-010-560-040		CAP,E 10-50 M 5L MA
J901	87-099-911-010		JACK,PIN 3P YEL W/O SW	C715	87-010-318-080		C-CAP,S 47P-50 J CH GRM
J902	87-099-912-010		JACK,PIN 3P YEL W/O SW W/E	C716	87-010-318-080		C-CAP,S 47P-50 J CH GRM
J903	87-099-911-010		JACK,PIN 3P YEL W/O SW	C717	87-010-318-080		C-CAP,S 47P-50 J CH GRM
J904	87-099-911-010		JACK,PIN 3P YEL W/O SW	C718	87-015-699-040		CAP,E 10-50 M 7L SRA
J905	87-099-911-010		JACK,PIN 3P YEL W/O SW	C719	87-015-699-040		CAP,E 10-50 M 7L SRA
L291	87-003-383-010		COIL,1UH K	C720	87-010-322-080		C-CAP,S 100P-50 J CH GRM
L292	87-003-383-010		COIL,1UH K	C721	87-010-318-080		C-CAP,S 47P-50 J CH GRM
L293	87-003-383-010		COIL,1UH K	C722	87-010-318-080		C-CAP,S 47P-50 J CH GRM
L294	87-003-383-010		COIL,1UH K	C723	87-010-405-040		CAP,E 10-50 M 11L SME
L391	87-003-383-010		COIL,1UH K	C801	87-010-322-080		C-CAP,S 100P-50 J CH GRM
L392	87-003-383-010		COIL,1UH K	C802	87-010-322-080		C-CAP,S 100P-50 J CH GRM
L491	87-003-383-010		COIL,1UH K	C803	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L901	87-005-239-080		COIL,100UH K LAL03	C805	87-010-198-080		C-CAP,S 0.022-25 K B C2012
JW177	87-008-372-080		FLTR,EMI BL01 RN1	C806	87-010-400-040		CAP,E 0.47-50 M 11L SME
△ PR101	87-026-691-080		FUSE,10A 125V 251	C807	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
△ PR104	87-026-691-080		FUSE,10A 125V 251	C808	87-010-498-040		CAP,E 10-16 M 5L SRE
△ PR201	87-026-691-080		FUSE,10A 125V 251	C809	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
△ PR202	87-026-691-080		FUSE,10A 125V 251	C810	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
△ PR301	87-026-691-080		FUSE,10A 125V 251	C811	87-A10-189-040		CAP,E 220-10 M 5L
△ PR302	87-026-691-080		FUSE,10A 125V 251	C812	87-A10-189-040		CAP,E 220-10 M 5L
△ PR401	87-026-691-080		FUSE,10A 125V 251	C814	87-010-178-080		C-CAP,S 1000P-50 K B C2012
△ PR402	87-026-691-080		FUSE,10A 125V 251	C816	87-010-312-080		C-CAP,S 15P-50 J CH GRM
R109	87-029-060-080		RES,FUSE 33-1/4W J	C817	87-012-155-080		C-CAP,S 180P-50 J CH GRM
R143	87-A00-261-080		RES,M/F 0.56-1W J	C818	87-010-178-080		C-CAP,S 1000P-50 K B C2012
R176	87-A00-401-050		RES,M/F 390-1W J VTP	C819	87-012-156-080		C-CAP,S 220P-50 J CH GRM
R179	87-A00-402-050		RES,M/F 560-1W J VTP	C820	87-012-156-080		C-CAP,S 220P-50 J CH GRM
R211	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C821	87-010-178-080		C-CAP,S 1000P-50 K B C2012
R212	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C822	87-010-182-080		C-CAP,S 2200P-50 K B C2012
R231	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C823	87-010-182-080		C-CAP,S 2200P-50 K B C2012
R232	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C824	87-010-182-080		C-CAP,S 2200P-50 K B C2012
R233	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C825	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
R234	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C826	87-010-405-040		CAP,E 10-50 M 11L SME
R281	87-A00-126-080		RES,M/F 220-1W J VTP	C827	87-010-198-080		C-CAP,S 0.022-25 K B C2012
R282	87-A00-126-080		RES,M/F 220-1W J VTP	C828	87-010-197-080		C-CAP,S 0.01-25 K B C2012
R283	87-A00-126-080		RES,M/F 220-1W J VTP	C829	87-012-156-080		C-CAP,S 220P-50 J CH GRM
R284	87-A00-126-080		RES,M/F 220-1W J VTP	C830	87-010-197-080		C-CAP,S 0.01-25 K B C2012
R331	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C831	87-A10-189-040		CAP,E 220-10 M 5L
R332	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C832	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
R333	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C833	87-012-368-080		C-CAP,S 0.1-50 Z F
R334	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C834	87-012-368-080		C-CAP,S 0.1-50 Z F
R416	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C835	87-012-368-080		C-CAP,S 0.1-50 Z F
R417	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C836	87-012-157-080		C-CAP,S 330P-50 J CH GRM
R424	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C837	87-012-157-080		C-CAP,S 330P-50 J CH GRM
R587	87-A00-126-080		RES,M/F 220-1W J VTP	C838	87-012-157-080		C-CAP,S 330P-50 J CH GRM
R590	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C839	87-012-157-080		C-CAP,S 330P-50 J CH GRM
R611	87-A00-598-010		RES,M/F 0.15-3W J-8.5MM	C840	87-012-157-080		C-CAP,S 330P-50 J CH GRM
R902	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C841	87-012-157-080		C-CAP,S 330P-50 J CH GRM
R905	87-010-317-080		C-CAP,S 39P-50 J CH	C842	87-012-157-080		C-CAP,S 330P-50 J CH GRM
RY281	87-A91-686-010		RELAY, G5PA-28(OMRON)	C843	87-012-157-080		C-CAP,S 330P-50 J CH GRM
RY481	87-A91-686-010		RELAY, G5PA-28(OMRON)	C844	87-012-157-080		C-CAP,S 330P-50 J CH GRM
RY801	87-A91-686-010		RELAY, G5PA-28(OMRON)	C845	87-012-157-080		C-CAP,S 330P-50 J CH GRM
S291	87-A90-174-010		SW,PUSH 2-2-2 R2121382ES	C846	87-012-157-080		C-CAP,S 330P-50 J CH GRM
S292	87-A90-174-010		SW,PUSH 2-2-2 R2121382ES	C849	87-012-368-080		C-CAP,S 0.1-50 Z F
TH201	87-A91-081-080		C-THMS,100K-K 20P	C850	87-010-408-040		CAP,E 47-50 M 11L SME
TH202	87-A91-081-080		C-THMS,100K-K 20P	C852	87-010-322-080		C-CAP,S 100P-50 J CH GRM
TH301	87-A91-081-080		C-THMS,100K-K 20P	C853	87-010-154-080		C-CAP,S 10P-50 D CH GRM
TH302	87-A91-081-080		C-THMS,100K-K 20P	C854	87-010-154-080		C-CAP,S 10P-50 D CH GRM
TH401	87-A91-081-080		C-THMS,100K-K 20P	C855	87-010-154-080		C-CAP,S 10P-50 D CH GRM

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
C856	87-010-154-080		C-CAP,S 10P-50 D CH GRM	C135	87-010-101-080		CAP,E 220-16 M SME
C857	87-010-154-080		C-CAP,S 10P-50 D CH GRM	C136	87-010-263-080		CAP,E 100-10 M 11L SME
C858	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C137	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C859	87-010-154-080		C-CAP,S 10P-50 D CH GRM	C138	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C860	87-010-154-080		C-CAP,S 10P-50 D CH GRM	C139	87-010-314-080		C-CAP,S 22P-50 J CH GRM
C861	87-010-154-080		C-CAP,S 10P-50 D CH GRM	C140	87-010-552-040		CAP,E 22-16 M 5L SRE
C862	87-010-154-080		C-CAP,S 10P-50 D CH GRM	C141	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C864	87-012-157-080		C-CAP,S 330P-50 J CH GRM	C142	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C866	87-012-140-080		C-CAP,S 470P-50 J CH	C143	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
CN801	87-A60-079-010		CONN,08P H 9604S-08F	C144	87-010-312-080		C-CAP,S 15P-50 J CH GRM
CN802	87-A60-064-010		CONN,32P H 9604S-32F	C145	87-012-154-080		C-CAP,S 150P-50 J CH GRM
CN803	87-099-755-010		CONN,14P H 9604	C146	87-012-154-080		C-CAP,S 150P-50 J CH GRM
CN805	87-A60-076-010		CONN,12P H 9604S-12F	C147	87-010-405-080		CAP,E 10-50 M 11L SME
FL801	8A-AR1-602-010		FL,BJ759GK	C148	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L801	87-A50-434-010		COIL,CLK 4.19M(TOKO)	C149	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
LED703	87-A40-317-010		LED,SLR-342VCT31 RED	C150	87-010-405-080		CAP,E 10-50 M 11L SME
LED704	87-A40-317-080		LED,SLR-342VCT31 RED	C151	87-010-405-080		CAP,E 10-50 M 11L SME
LED705	87-A40-317-080		LED,SLR-342VCT31 RED	C152	87-010-405-080		CAP,E 10-50 M 11L SME
LED706	87-A40-317-080		LED,SLR-342VCT31 RED	C153	87-010-178-080		C-CAP,S 1000P-50 K B C2012
LED707	87-A40-317-080		LED,SLR-342VCT31 RED	C154	87-010-178-080		C-CAP,S 1000P-50 K B C2012
LED708	87-A40-317-080		LED,SLR-342VCT31 RED	C155	87-A10-369-080		C-CAP,S 0.47-16 K B
LED709	87-A40-317-080		LED,SLR-342VCT31 RED	C156	87-010-154-080		C-CAP,S 10P-50 D CH GRM
LED710	87-A40-317-080		LED,SLR-342VCT31 RED	C157	87-012-154-080		C-CAP,S 150P-50 J CH GRM
LED711	87-A40-317-080		LED,SLR-342VCT31 RED	C158	87-012-154-080		C-CAP,S 150P-50 J CH GRM
LED712	87-A40-317-080		LED,SLR-342VCT31 RED	C159	87-010-178-080		C-CAP,S 1000P-50 K B C2012
S801	87-A90-095-080		SW,TACT EVQ11G04M	C160	87-010-178-080		C-CAP,S 1000P-50 K B C2012
S802	87-A90-095-080		SW,TACT EVQ11G04M	C161	87-010-405-080		CAP,E 10-50 M 11L SME
S806	87-A90-095-080		SW,TACT EVQ11G04M	C162	87-010-405-080		CAP,E 10-50 M 11L SME
S807	87-A90-095-080		SW,TACT EVQ11G04M	C163	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
S808	87-A90-095-080		SW,TACT EVQ11G04M	C164	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
S809	87-A90-095-080		SW,TACT EVQ11G04M	C165	87-A10-369-080		C-CAP,S 0.47-16 K B
S812	87-A90-095-080		SW,TACT EVQ11G04M	C166	87-010-405-080		CAP,E 10-50 M 11L SME
S813	87-A90-095-080		SW,TACT EVQ11G04M	C167	87-010-405-080		CAP,E 10-50 M 11L SME
S814	87-A90-095-080		SW,TACT EVQ11G04M	C168	87-010-401-080		CAP,E 1-50 M 11L SME
S816	87-A90-095-080		SW,TACT EVQ11G04M	C169	87-012-154-080		C-CAP,S 150P-50 J CH GRM
S817	87-A90-095-080		SW,TACT EVQ11G04M	C170	87-012-154-080		C-CAP,S 150P-50 J CH GRM
SW801	87-A91-646-010		SW,RTRY EC12E12204	C171	87-010-178-080		C-CAP,S 1000P-50 K B C2012
SW802	87-A91-647-010		SW,RTRY EC12E12504	C172	87-010-178-080		C-CAP,S 1000P-50 K B C2012
				C173	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C174	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C175	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C176	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C177	87-A10-369-080		C-CAP,S 0.47-16 K B
				C178	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C179	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C180	87-010-405-080		CAP,E 10-50 M 11L SME
				C181	87-010-405-080		CAP,E 10-50 M 11L SME
				C182	87-010-405-080		CAP,E 10-50 M 11L SME
				C183	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C184	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C185	87-010-405-080		CAP,E 10-50 M 11L SME
				C186	87-010-405-080		CAP,E 10-50 M 11L SME
				C187	87-016-083-080		C-CAP,S 0.15-16 K R
				C188	87-016-083-080		C-CAP,S 0.15-16 K R
				C189	87-016-083-080		C-CAP,S 0.15-16 K R
				C190	87-010-405-080		CAP,E 10-50 M 11L SME
				C191	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C192	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C193	87-010-154-080		C-CAP,S 10P-50 D CH GRM
				C194	87-010-154-080		C-CAP,S 10P-50 D CH GRM
				C195	87-010-405-080		CAP,E 10-50 M 11L SME
				C196	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C197	87-010-405-080		CAP,E 10-50 M 11L SME
				C198	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C199	87-A10-369-080		C-CAP,S 0.47-16 K B
				C201	87-010-154-080		C-CAP,S 10P-50 D CH GRM
				C202	87-010-154-080		C-CAP,S 10P-50 D CH GRM
				C203	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C204	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C205	87-A10-369-080		C-CAP,S 0.47-16 K B

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
C711	87-010-263-080		CAP, ELECT 100-10V	C789	87-012-275-080		C-CAP,U 1200P-50 B
C712	87-010-196-080		CHIP CAPACITOR,0.1-25	C790	87-012-275-080		C-CAP,U 1200P-50 B
C713	87-012-286-080		CAP, U 0.01-25	C791	87-010-405-080		CAP, ELECT 10-50V
C714	87-012-286-080		CAP, U 0.01-25	C793	87-012-273-080		C-CAP,U 820P-50 B
C717	87-012-286-080		CAP, U 0.01-25	C794	87-010-406-080		CAP, ELECT 22-50
C719	87-012-286-080		CAP, U 0.01-25	C795	87-010-194-080		C-CAP,S 0.047-25 ZF
C721	87-012-176-080		CAP 15P	C796	87-010-403-080		CAP, ELECT 3.3-50V
C722	87-012-176-080		CAP 15P	C797	87-012-278-080		CAP, U 2200P-50
C723	87-012-274-080		CHIP CAP,U 1000P-50B	C798	87-012-278-080		CAP, U 2200P-50
C725	87-012-274-080		CHIP CAP,U 1000P-50B	C799	87-010-829-080		CAP, U 0.047-16
C727	87-010-196-080		CHIP CAPACITOR,0.1-25	C812	87-012-286-080		CAP, U 0.01-25
C728	87-010-248-080		CAP, ELECT 220-10V	C813	87-010-196-080		CHIP CAPACITOR,0.1-25
C755	87-012-286-080		CAP, U 0.01-25	C814	87-012-286-080		CAP, U 0.01-25
C756	87-012-286-080		CAP, U 0.01-25	C819	87-010-197-080		CAP, CHIP 0.01 DM
C757	87-012-188-080		C-CAP,U 47P-50 CH	C820	87-010-260-080		CAP, ELECT 47-25V
C758	87-012-167-080		C-CAP,U 5P-50 CH	C821	87-012-286-080		CAP, U 0.01-25
C761	87-010-196-080		CHIP CAPACITOR,0.1-25	C822	87-012-286-080		CAP, U 0.01-25
C763	87-010-829-080		CAP, U 0.047-16	C823	87-012-286-080		CAP, U 0.01-25
C764	87-012-337-080		C-CAP,U 56P-50 CH	C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C765	87-012-286-080		CAP, U 0.01-25	C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C769	87-010-408-080		CAP, ELECT 47-50 M 11L	C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C770	87-010-829-080		CAP, U 0.047-16	C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C771	87-010-383-080		CAP, ELECT 33-25 M 11L	C961	87-012-170-080		C-CAP,U 8P-50 CH
C772	87-010-829-080		CAP, U 0.047-16	CF801	87-008-261-010		FILTER, SFE10.7MA5-A
C773	87-010-196-080		CHIP CAPACITOR,0.1-25	CF802	87-008-261-010		FILTER, SFE10.7MA5-A
C774	87-010-263-080		CAP, ELECT 100-10V	CN601	87-099-028-010		CONN,11P 6216 H
C775	87-010-404-080		CAP, ELECT 4.7-50V	FFE801	A8-8ZA-190-030		8ZA-1 FEUNM
C776	87-012-286-080		CAP, U 0.01-25	J801	87-A60-657-010		TERMINAL,4P HSP-154V5-02
C777	87-010-400-080		CAP, ELECT 0.47-50V	L771	87-A50-266-010		COIL,FM DET-2N(TOK)
C778	87-010-401-080		CAP, ELECT 1-50V	L772	87-A90-733-010		FLTR,PCFAZH-450
C779	87-010-401-080		CAP, ELECT 1-50V	L781	87-005-847-080		COIL,2.2UH(CECS)
C780	87-010-196-080		CHIP CAPACITOR,0.1-25	L791	87-A50-209-010		COIL,1 POLE MPX(MIT)
C781	87-010-405-080		CAP, ELECT 10-50V	L792	87-A50-209-010		COIL,1 POLE MPX(MIT)
C782	87-010-405-080		CAP, ELECT 10-50V	L832	87-005-847-080		COIL,2.2UH(CECS)
C783	87-012-286-080		CAP, U 0.01-25	L981	87-NF4-650-010		COIL,AM PACK4N(TOK)
C784	87-012-286-080		CAP, U 0.01-25	X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
C785	87-010-805-080		CAP, S 1-16				
C786	87-010-805-080		CAP, S 1-16				
C787	87-012-280-080		CAP, U 3300P-50				
C788	87-012-280-080		CAP, U 3300P-50				

チップ抵抗部品コード/CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



E C B

CC5551
2SA1296
KTA1266
KTC3198



B C E

2SB1370
FN1016
FP1016



E C B

DTC114ES
2SC4115
KTC3199
KTA1267



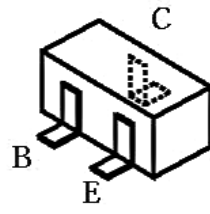
E C B

CSD1489



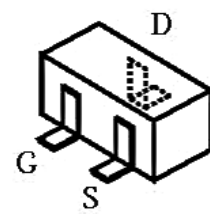
G D S

2SK3053



B C E

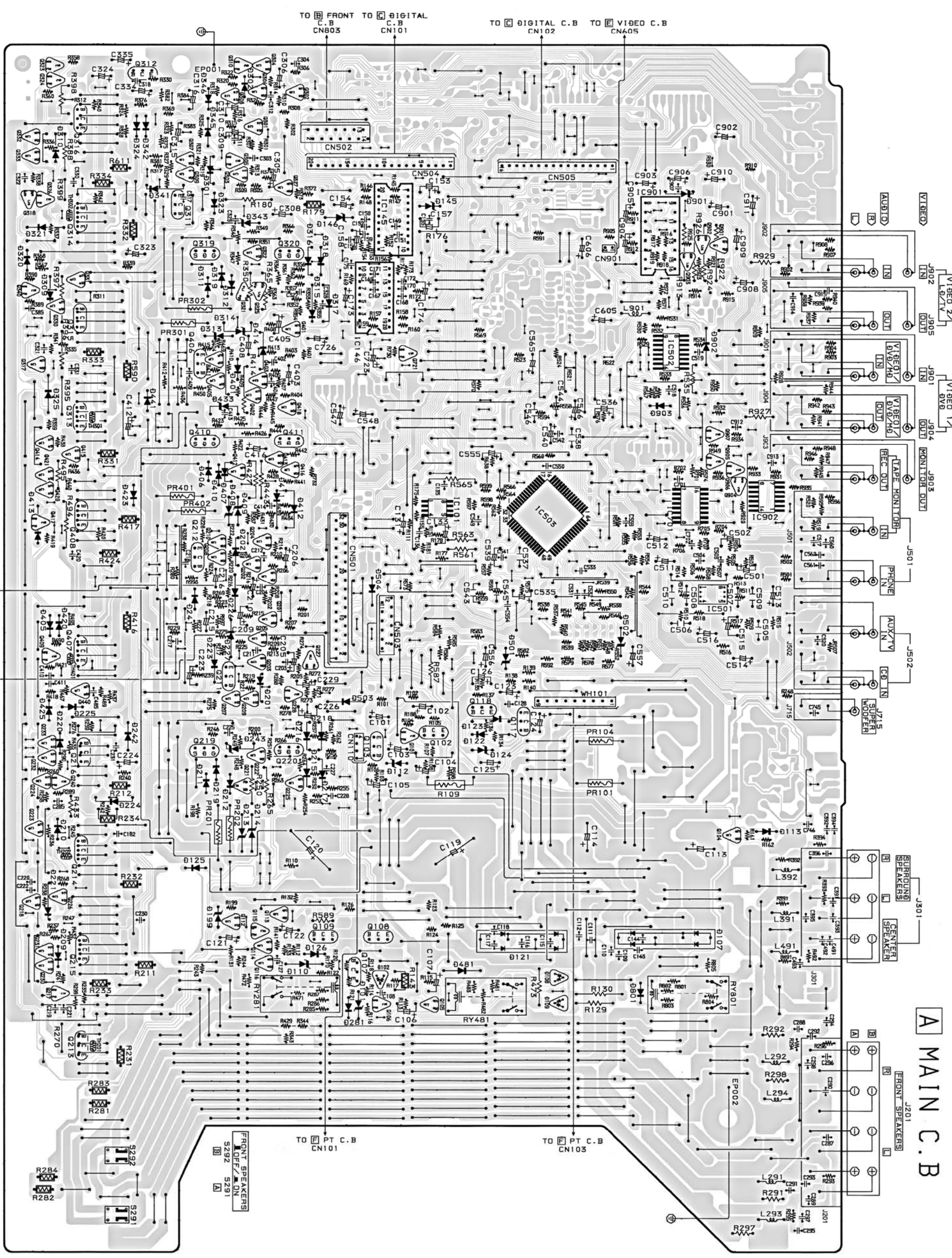
2SA1037
2SA1235
2SC3052
2SC2714
2SD1306
CMBT5401
CMBT5551
CSA1362
CSD1306



G D S

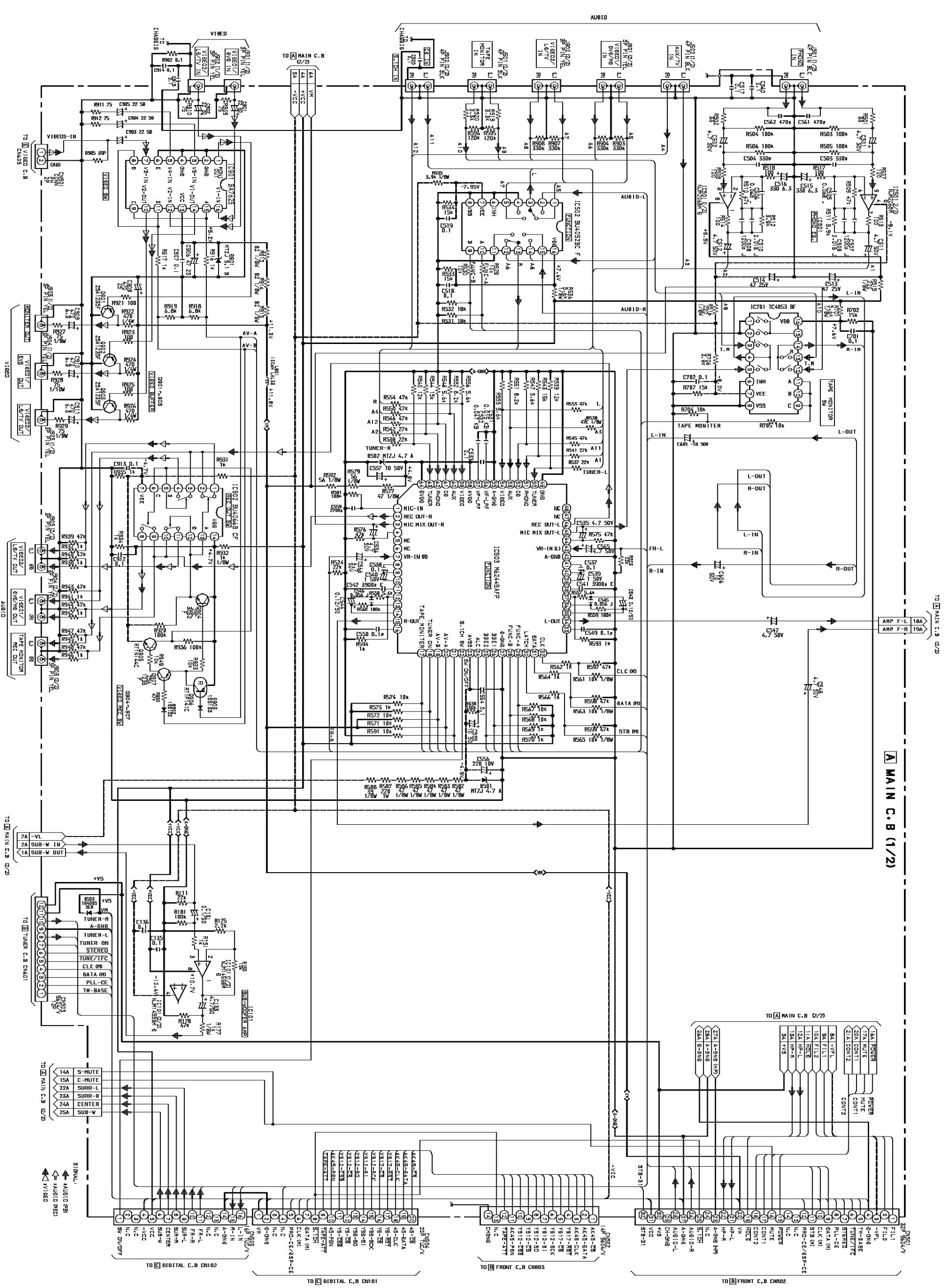
DTA144WK
DTC123JK
DTC124EK
RT1N144C
RT1N141C
RT1P141C
RT1P144C

2SK2158

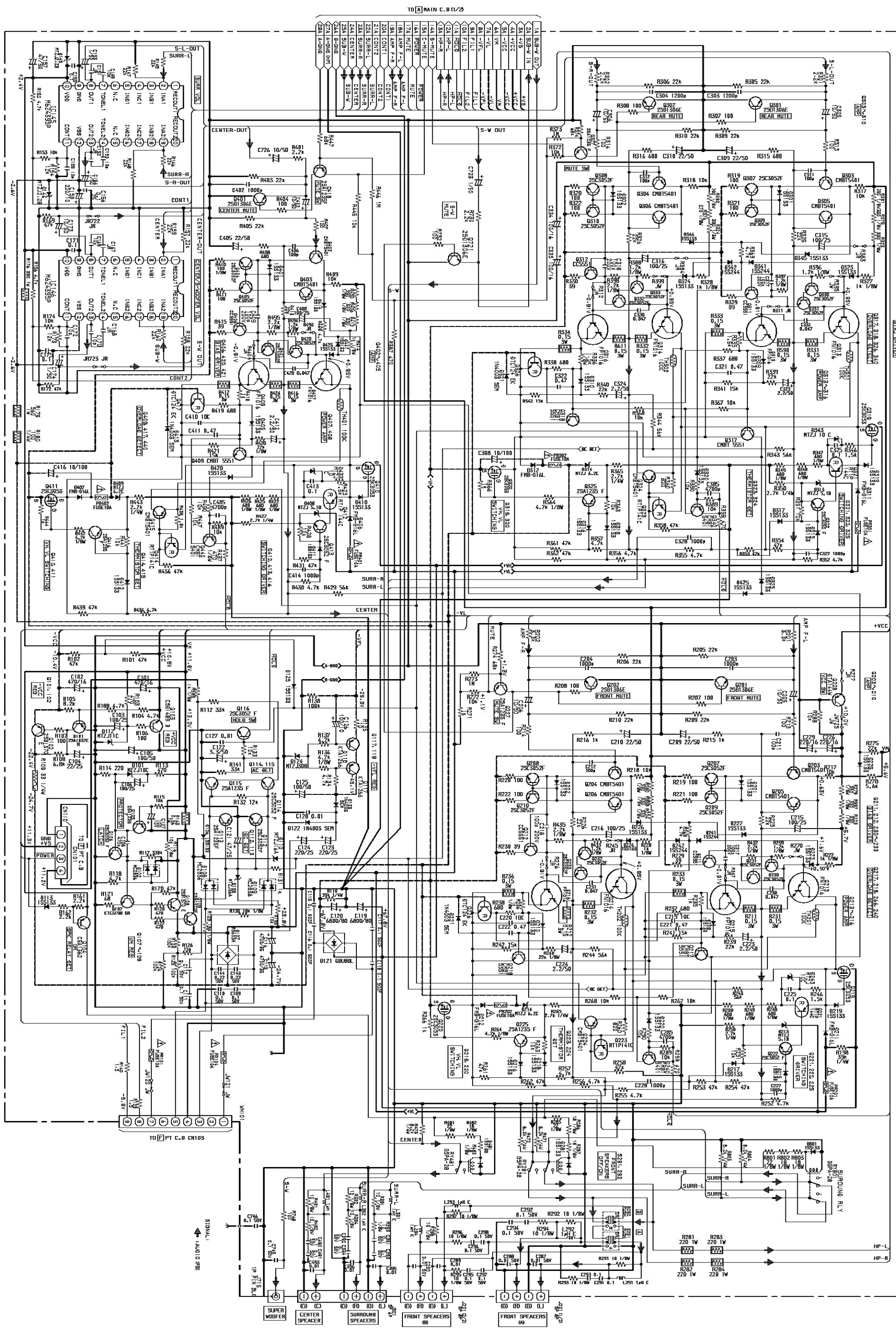


MAIN C.B.

TO FRONT C.B. TO TUNER C.B.



A MAIN C-B (2/2)



32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

(REMOTE CONTROLLER)

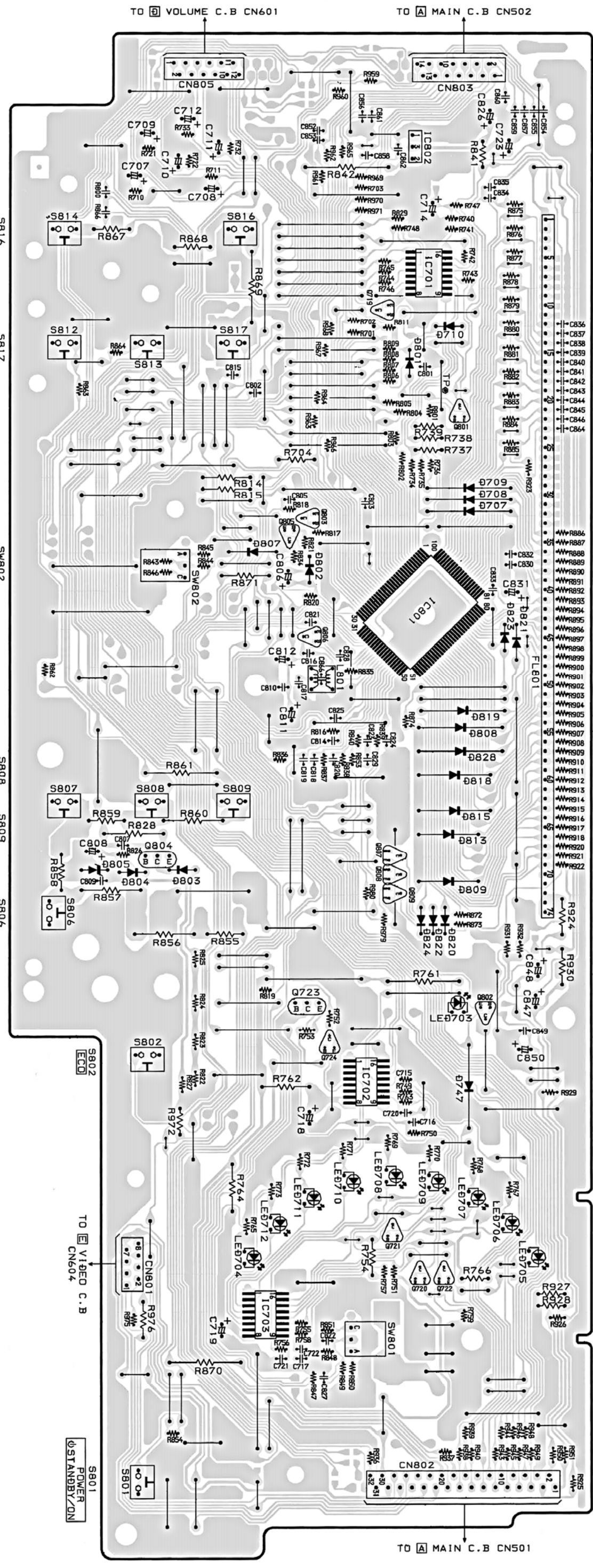
B FRONT C.B

DISPLAY

POWER

LEB708 [AUX] LEB709 [CD] LEB707 [PHONE] LEB706 [TUNER] LEB705 [TAPE MONITOR]

LEB710 [VIDEO 1] LEB711 [VIDEO 2] LEB712 [VIDEO 3] LEB704 [DIGITAL] SWB01 [FUNCTION]



TO [D] VOLUME C.B CN601

TO [A] MAIN C.B CN502

TO [E] VIDEO C.B CN604

TO [A] MAIN C.B CN501

S816 [T-BASS] S814 [BAND]

S817 [ENTER] S813 [A]

S812 [TUNING] V

SWB02 [MULTI JOG]

S808 [DSP] S809 [DOLBY SURROUND]

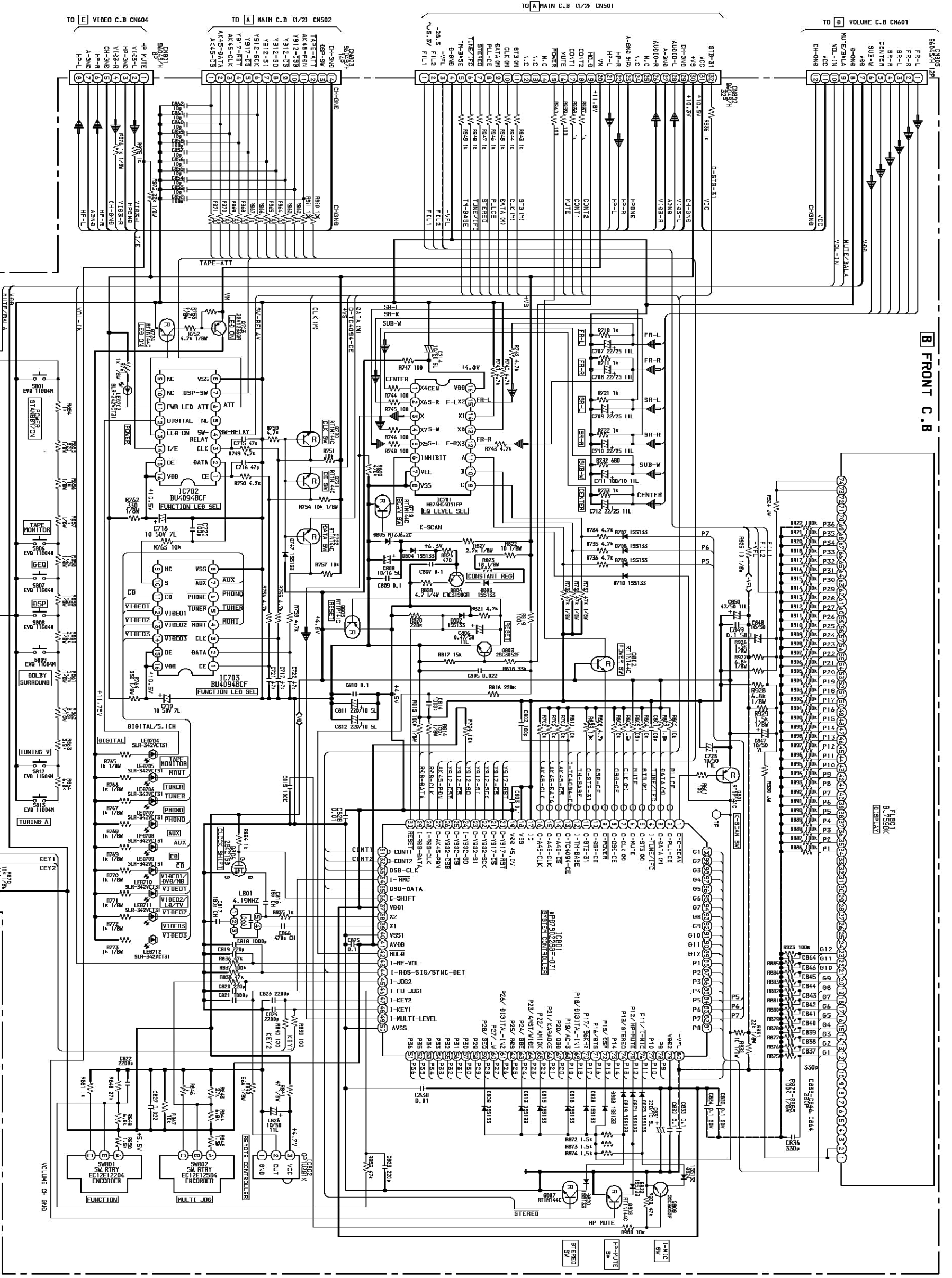
S807 [GEO] S806 [TAPE MONITOR]

S802 [ECHO]

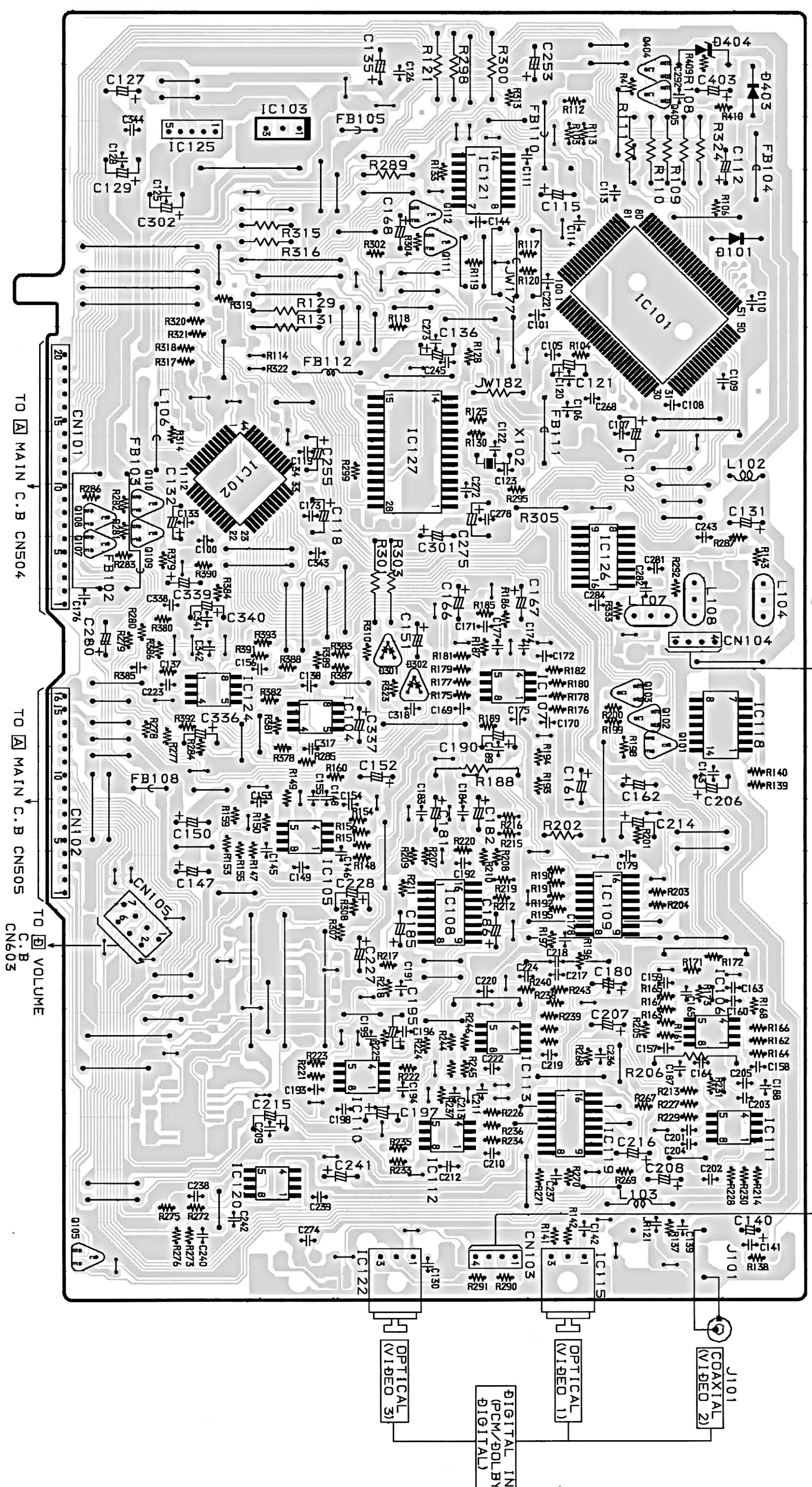
S801 [POWER STANDBY/ON]

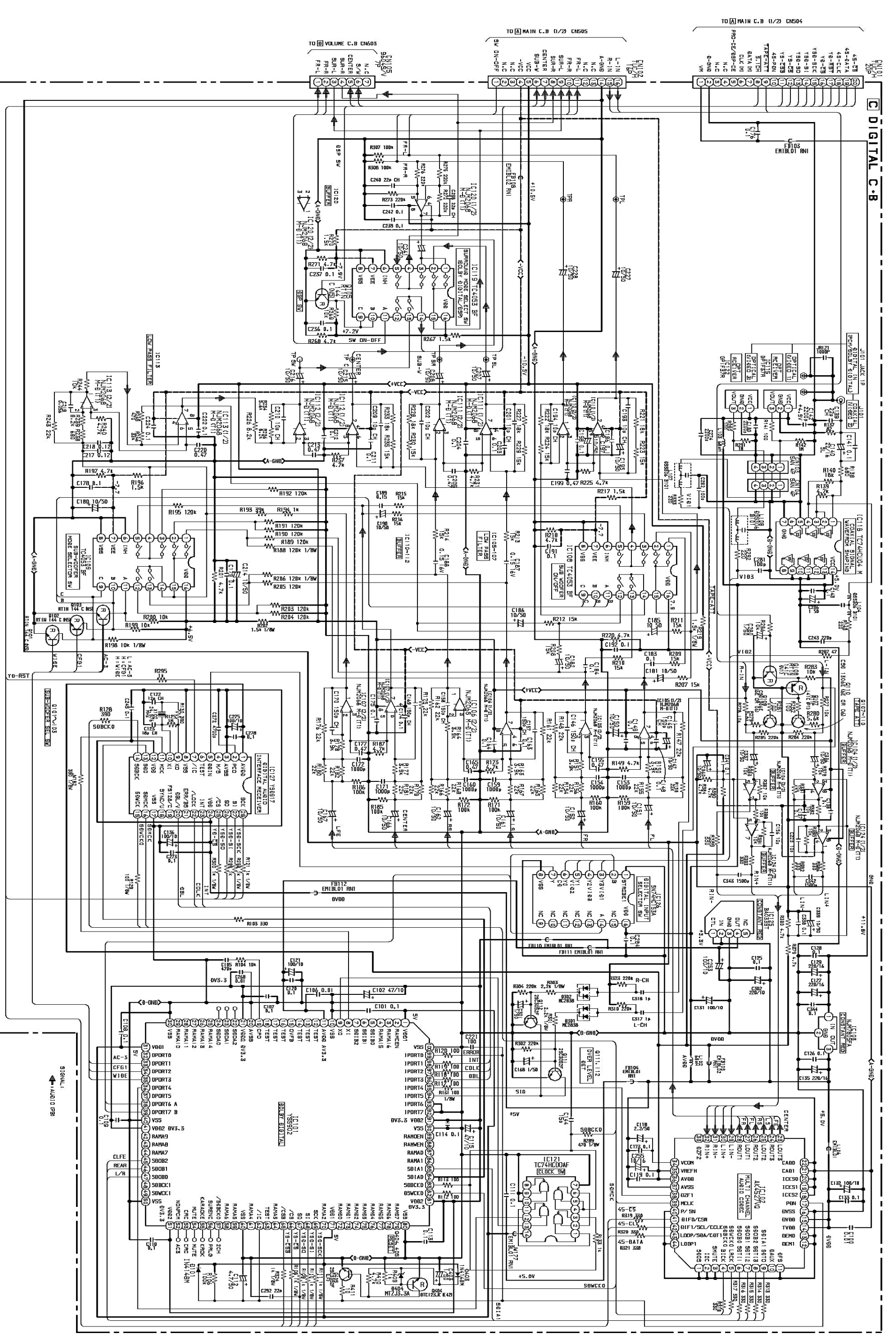
A B C D E F G H I J K L M N O P Q R S T U

SCHEMATIC DIAGRAM - 3 (FRONT)

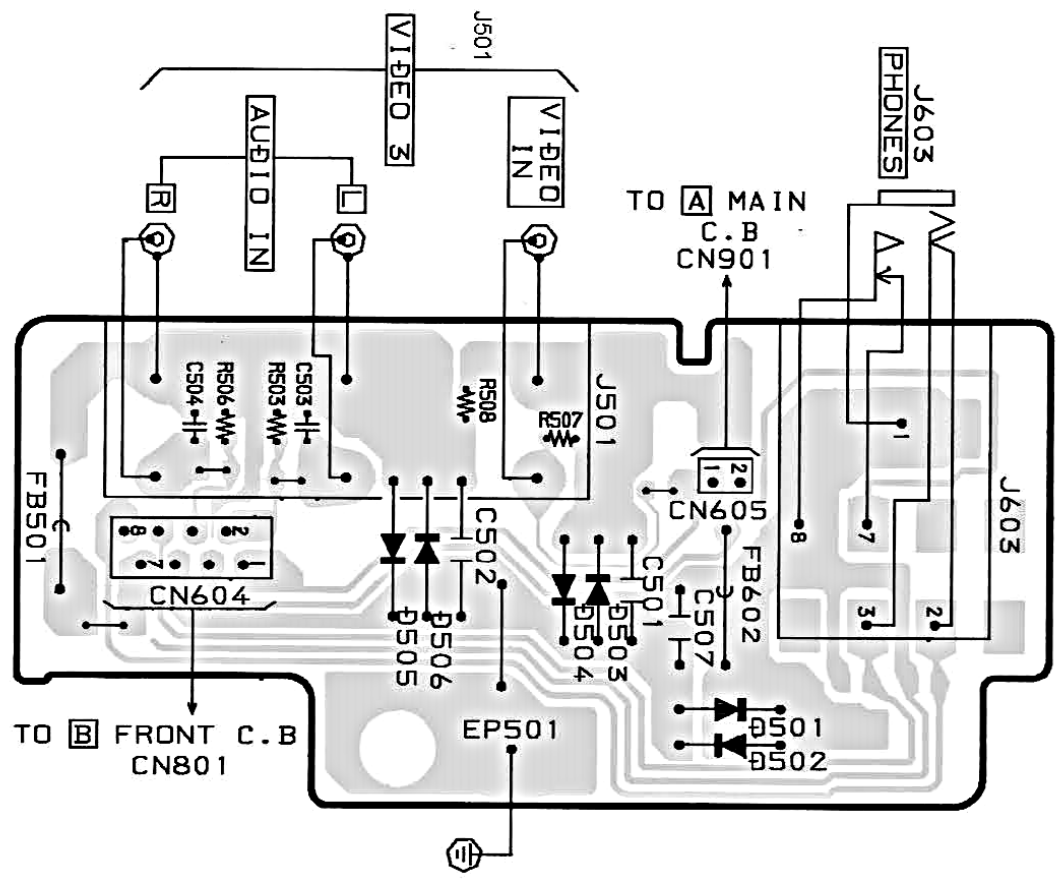


C DIGITAL C.B

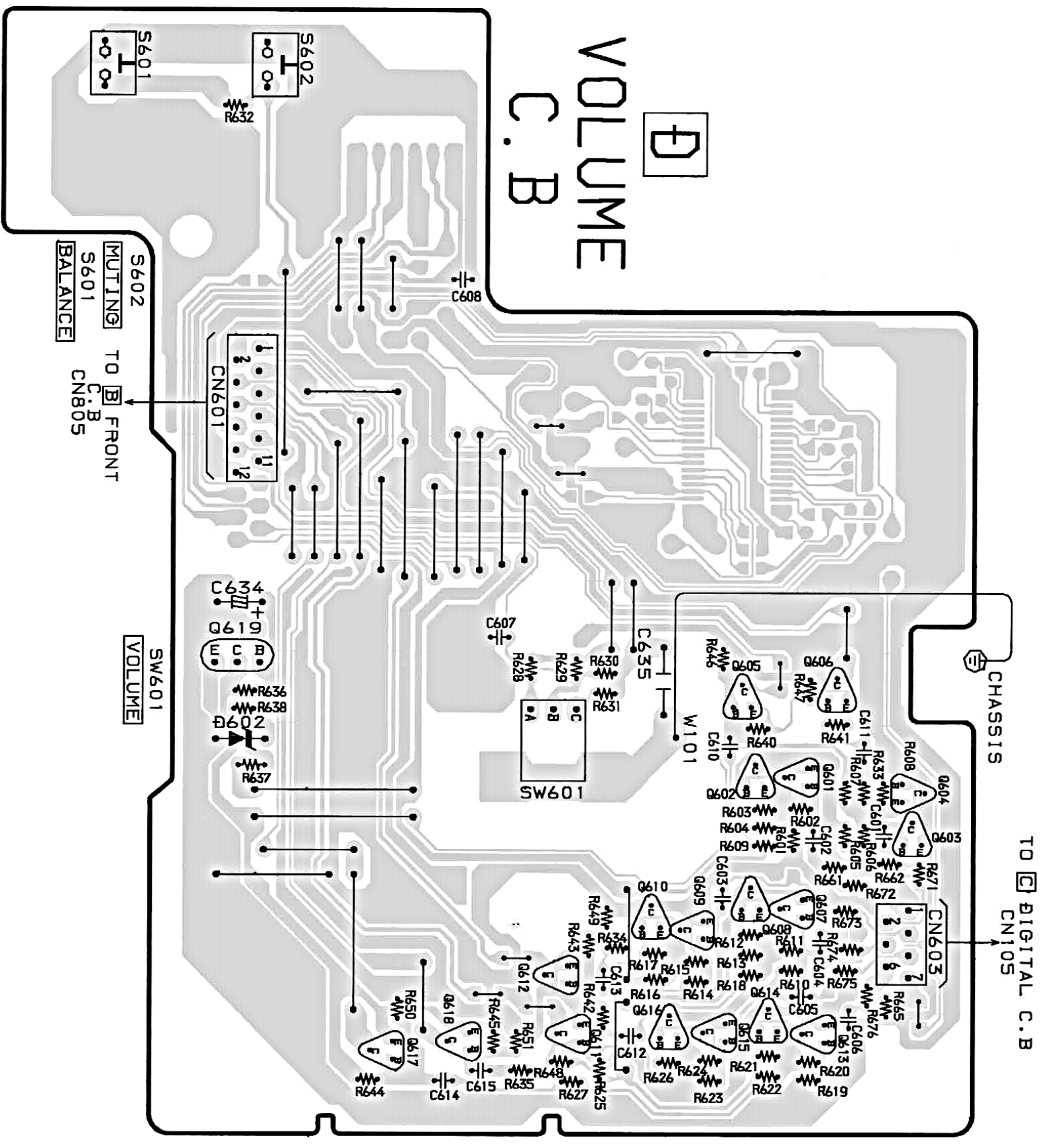


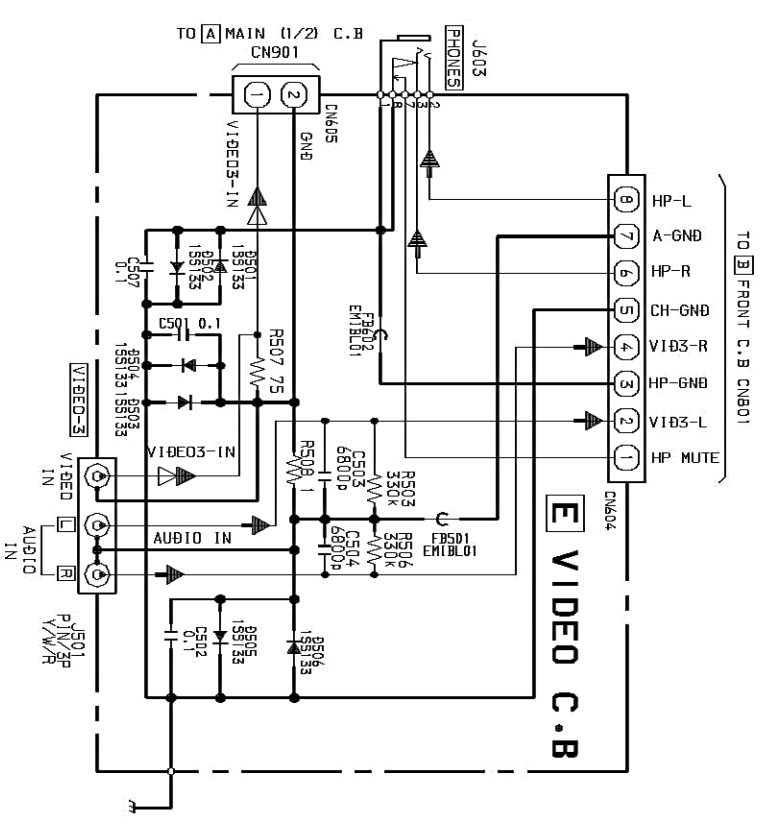
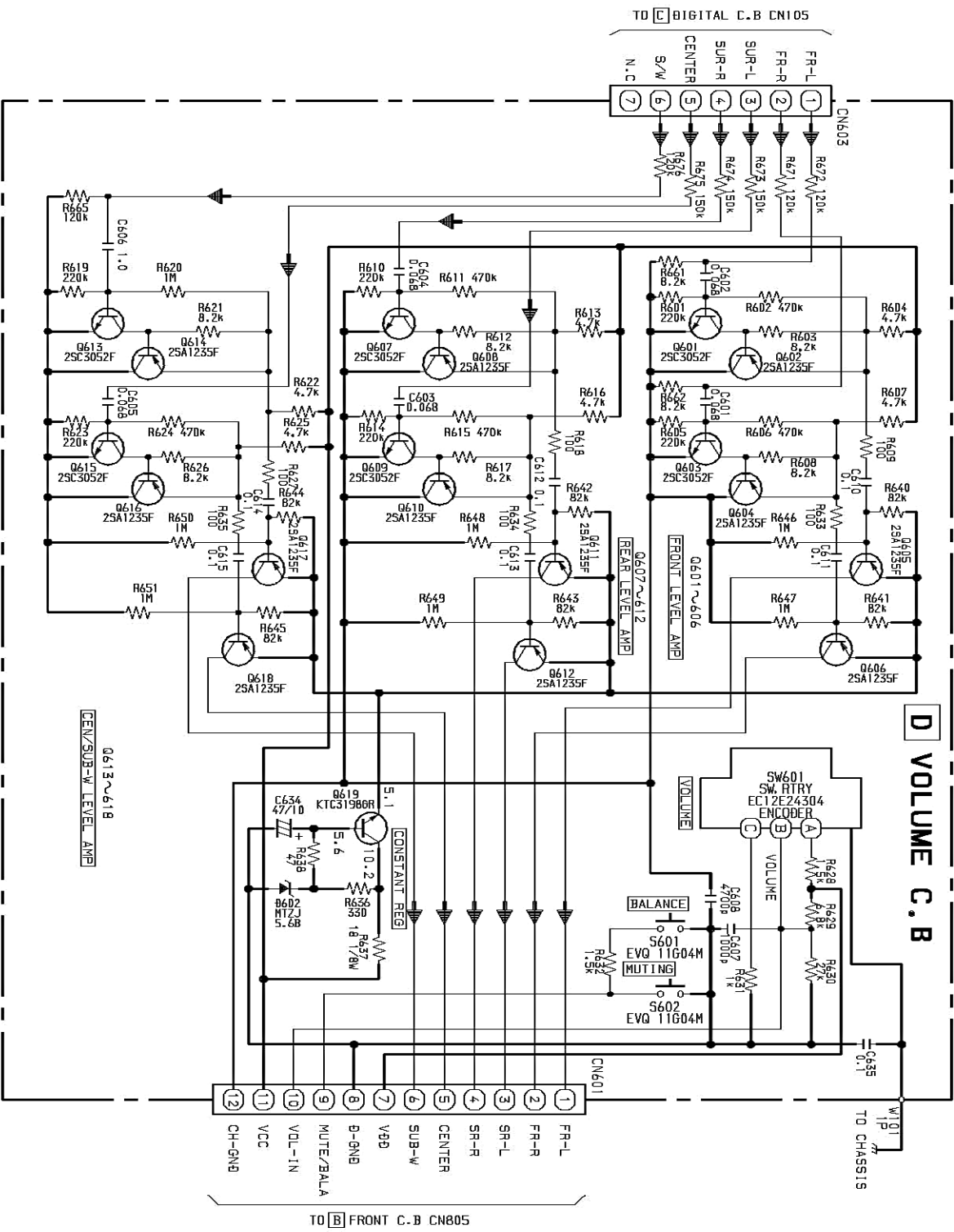


E VIDEO C.B.



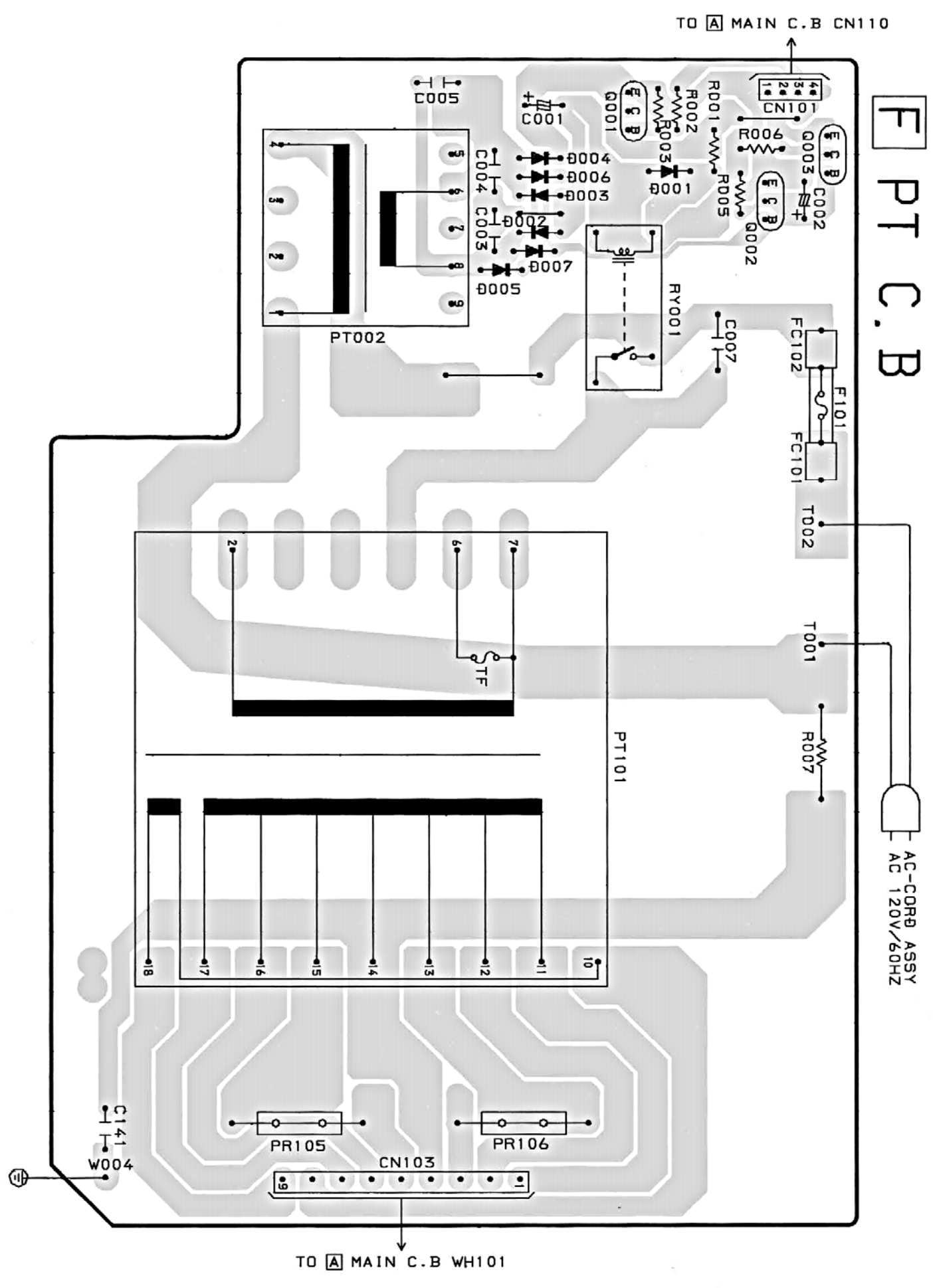
D VOLUME C.B.

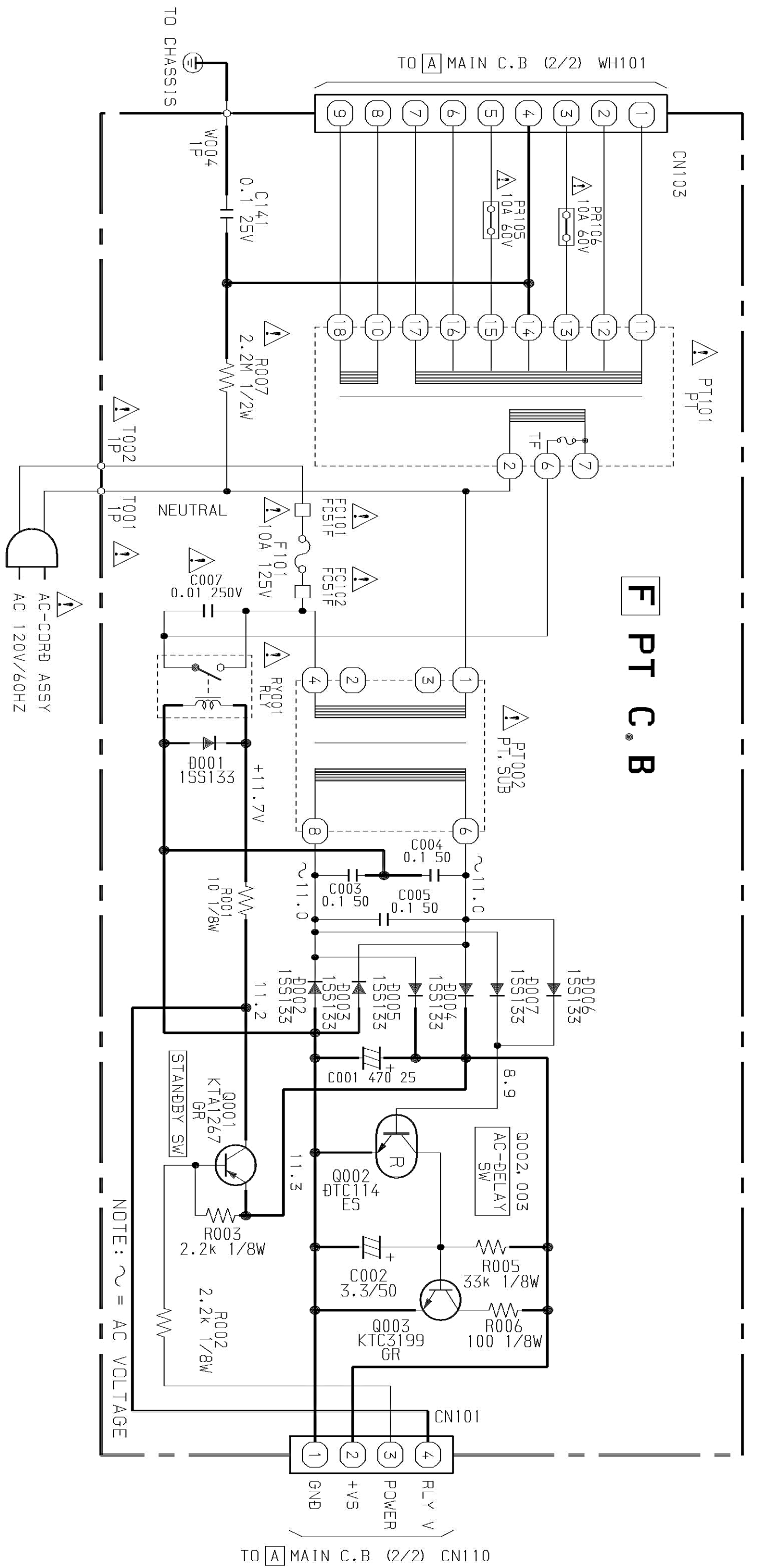




SIGNAL:
 ▲ : AUDIO
 ▴ : VIDEO

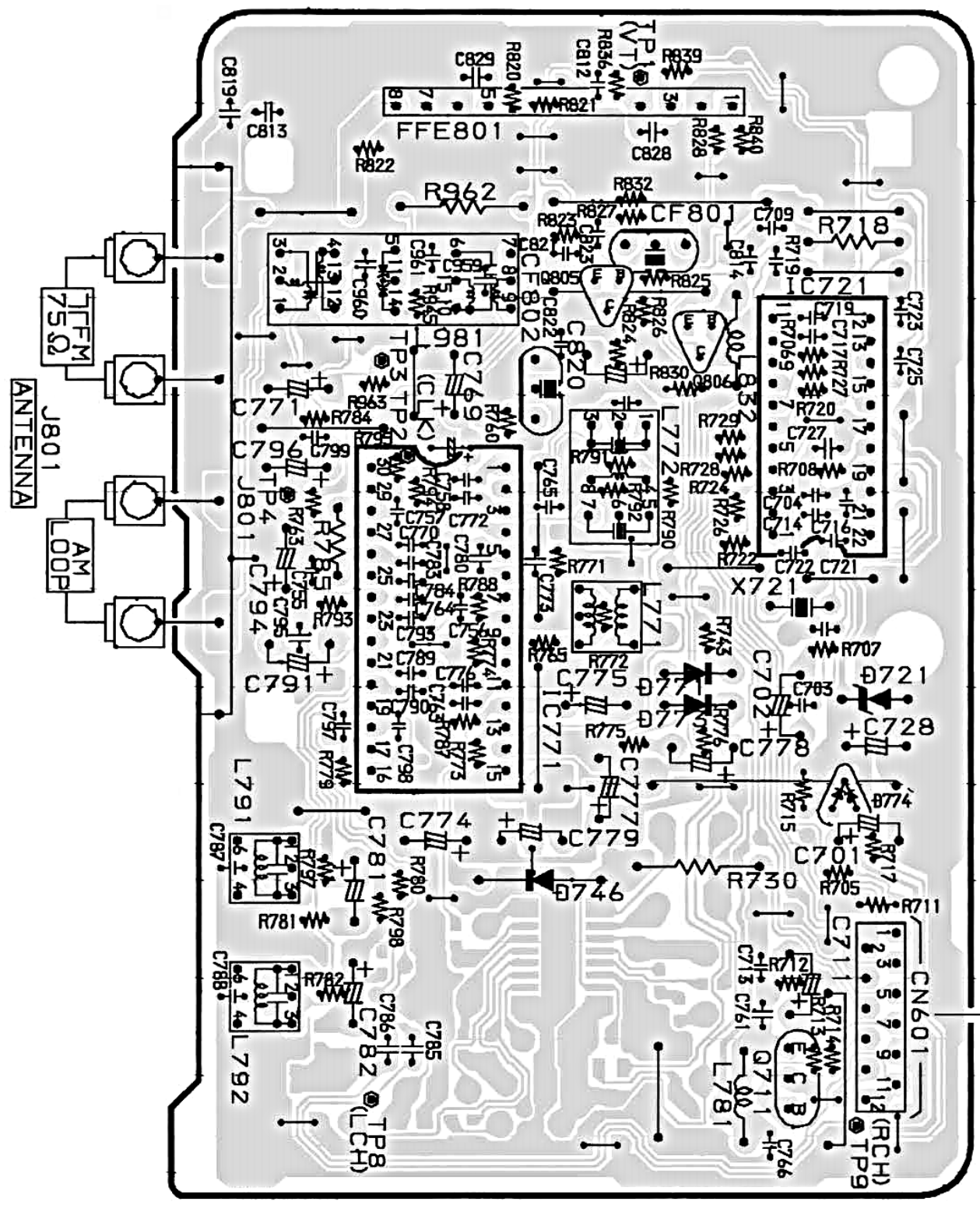
F PT C.B

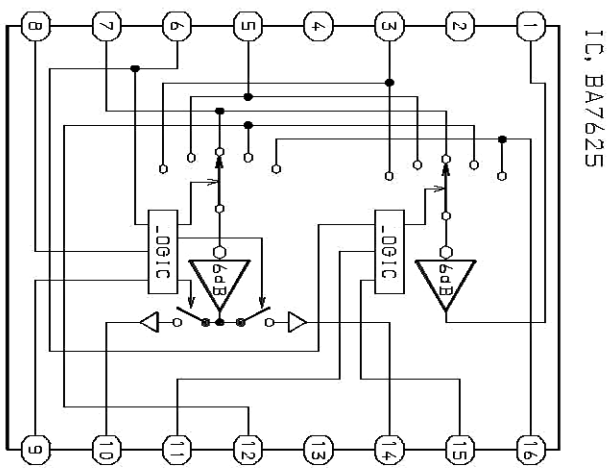




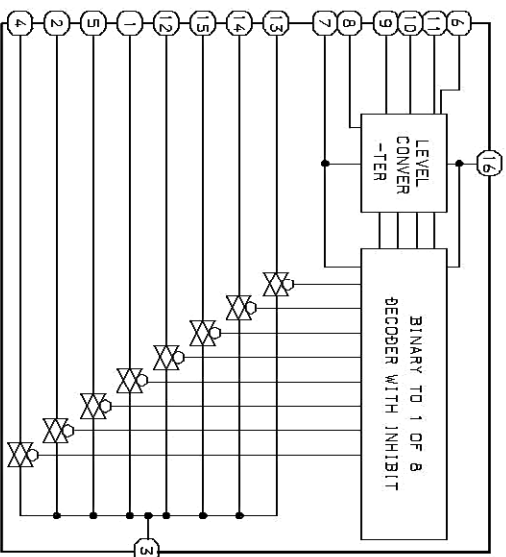
G TUNER C. B

FROM A MAIN C. B CNS03





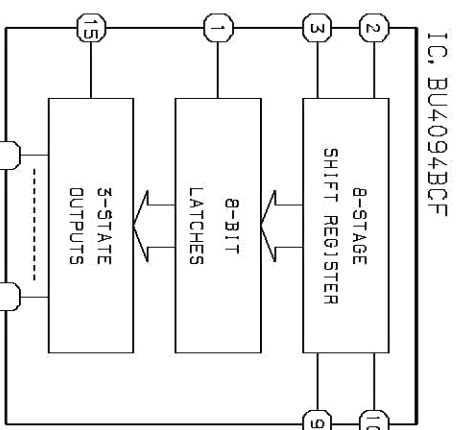
IC, HB74HC4051FP



FUNCTION TABLE

CONTROL INPUTS		SELECT		ON SWITCH		
INHIBIT		C	B	A		
L	L	L	L	L	X0	
L	L	L	L	H	X1	
L	L	L	H	L	X2	
L	L	L	H	H	X3	
L	H	L	L	L	X4	
L	H	L	L	H	X5	
L	H	H	L	L	X6	
L	H	H	L	H	X7	
H	X	X	X	X		

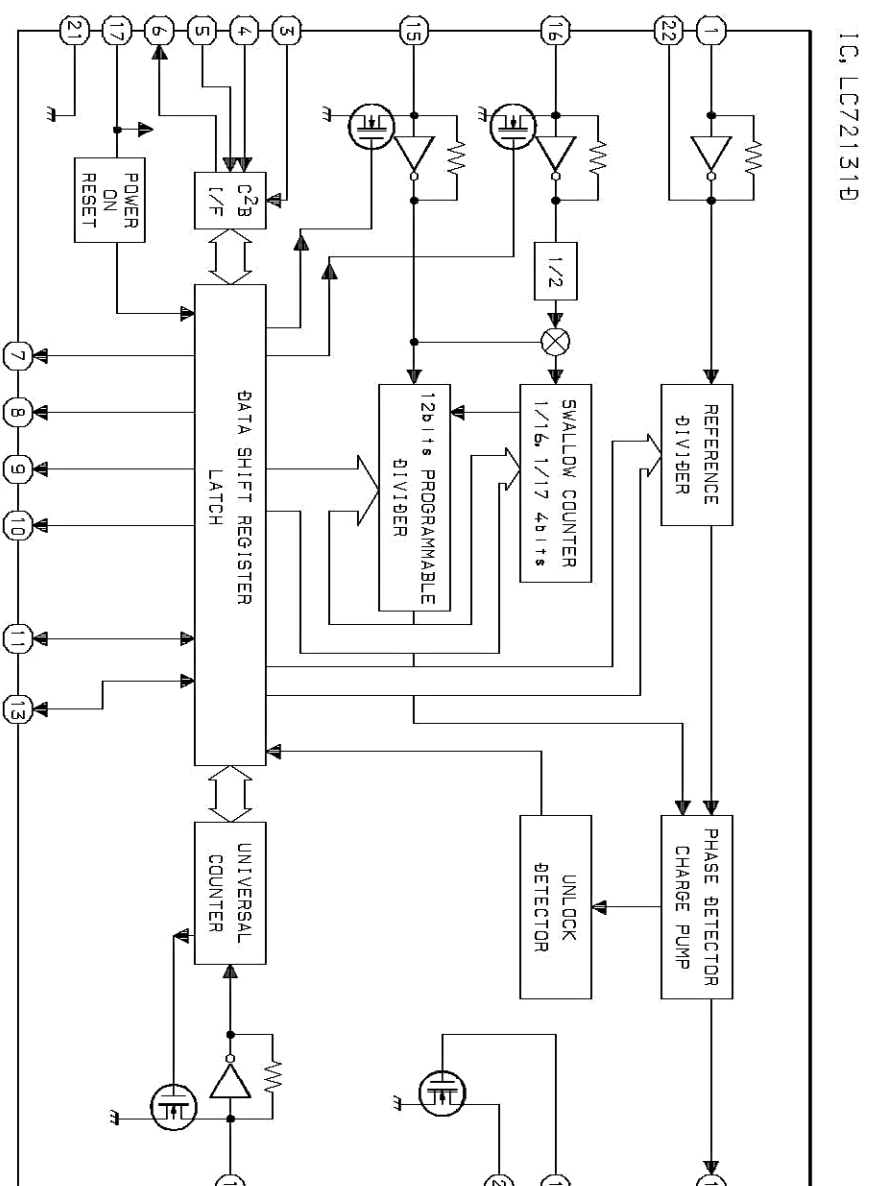
H: HIGH VOLTAGE LEVEL
L: LOW VOLTAGE LEVEL
X: IMMATERIAL



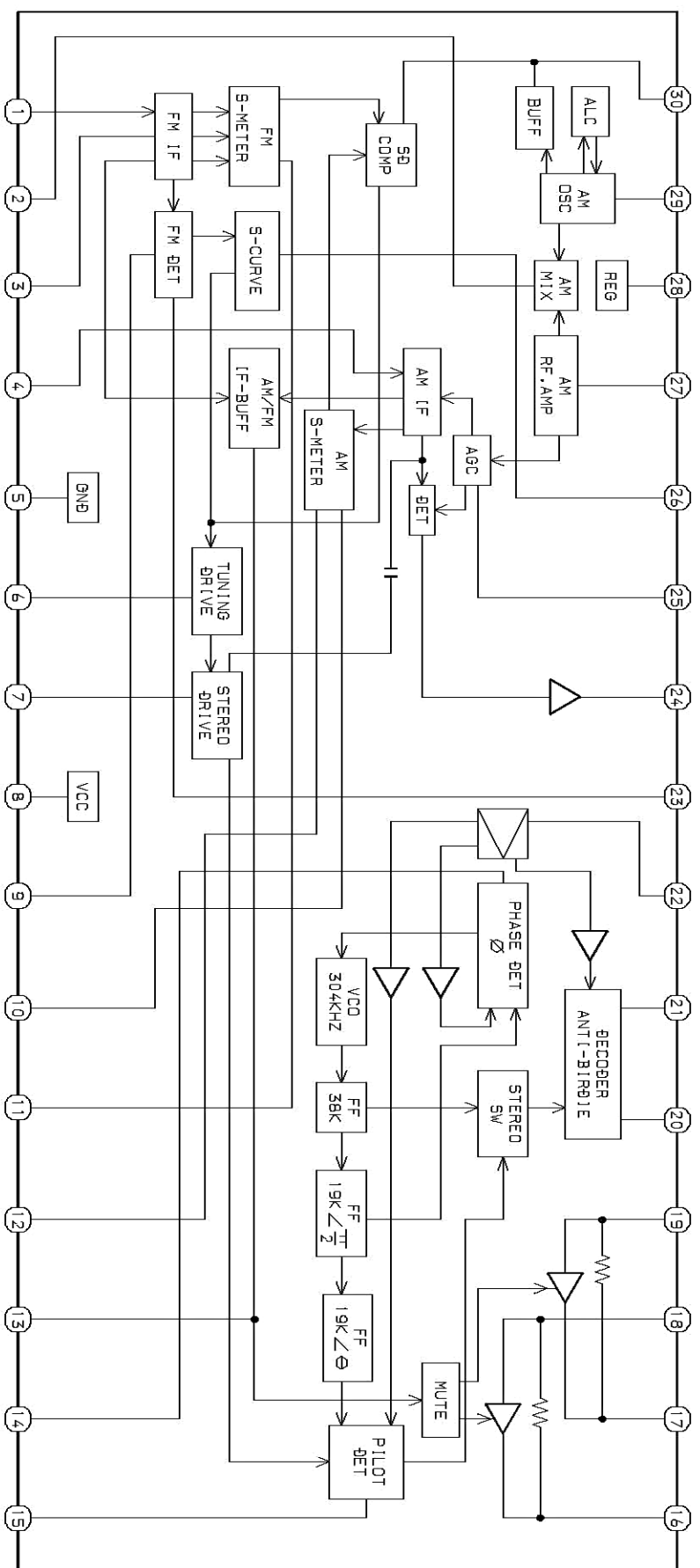
TRUTH TABLE

CLOCK	ENABLE	STROBE	DATA	PARALLEL OUTPUTS/SERIAL OUTPUTS				
				Q1	Qn	Q5	Q7	Q5
L	L	x	x	Z	Z	Z	NO CHG.	NO CHG.
L	L	x	x	Z	Z	Z	NO CHG.	NO CHG.
L	L	x	x	NO CHG.	NO CHG.	Qn-1	NO CHG.	NO CHG.
L	L	x	x	NO CHG.	NO CHG.	Qn-1	NO CHG.	NO CHG.
L	L	x	x	NO CHG.	NO CHG.	Qn-1	NO CHG.	NO CHG.
L	L	x	x	NO CHG.	NO CHG.	Qn-1	NO CHG.	NO CHG.
L	L	x	x	NO CHG.	NO CHG.	Qn-1	NO CHG.	NO CHG.
L	L	x	x	NO CHG.	NO CHG.	Qn-1	NO CHG.	NO CHG.


Z = HIGH IMPEDANCE
x = DON'T CARE



IC, LA1837NL



ANODE CONNECTION

	12G	11G	10G~2G	1G
P1	GEQ	-	1-1	-
P2	cts	-	2-1	B1
P3	DOLBY DIGITAL	-	3-1	B2
P4	S11	-	4-1	B3
P5	S12	-	5-1	B4
P6	S13	-	1-2	B5
P7	S14	-	2-2	B6
P8	S15	-	3-2	B7
P9	DOLBY PRO LOGIC	-	4-2	B8
P10	2CH DOWNMIX	-	5-2	B9
P11	S16	-	1-3	B10
P12	S17	-	2-3	VOLUME
P13	S18	-	3-3	B11
P14	S19	-	4-3	B12
P15	S20	-	5-3	B13
P16	DSP	MONO	1-4	T-BASS
P17	-	AG	2-4	B14
P18	-	(0)	3-4	B15
P19	-	RDS	4-4	B16
P20	-	SLEEP	5-4	BBE
P21	-	EON	1-5	DIGITAL
P22	-	96kHz	2-5	ANALOG
P23	-	AUTO	3-5	OVER LEVEL
P24	-	VF 	4-5	kHz
P25	-	(#)	5-5	MHz
P26	-	(b)	1-6	-
P27	-	S25	2-6	S5
P28	-	S24	3-6	S4
P29	-	S23	4-6	S3
P30	-	S22	5-6	S2
P31	-	S21	1-7	S1
P32	-	S30	2-7	S10
P33	-	S29	3-7	S9
P34	-	S28	4-7	S8
P35	-	S27	5-7	S7
P36	-	S26	X	S6

IC DESCRIPTION

IC, UPD780228GF-071

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{O-K-SCAN}}$	O	Switch scan timing output.
2	O-PLL-CE	O	PLL IC chip enable output.
3	O-DATA(M)	O	Data output for sound.
4	$\overline{\text{I-TUNE/IFC}}$	I	TUNE-IF count serial data input.
5	O-STB(M)	O	Latch strobe output for sound CTRL.
6	O-MUTE	O	System mute ON/OFF output.
7	O-CLK(M)	O	Clock output.
8	O-OSD-CE	-	Not used.
9	$\overline{\text{O-POWER}}$	O	System power supply ON/OFF output.
10	O-DSP-CE	-	Not used.
11	O-STB-31	O	GEQ IC chip enable output.
12	I-TM-BASE	I	Reference clock input for timer watch.
13	O-TC4094-CE	O	Shift register chip enable output.
14	$\overline{\text{O-A45-CS}}$	O	AK4527 chip select.
15	O-A45-DATA	O	AK4527 control data.
16	O-A45-CLK	O	AK4527 control data clock.
17	IC	-	Connected to GND.
18	VSS	-	GND.
19	VDD	-	Power supply input.
20	$\overline{\text{O-Y917-RST}}$	O	YSD917 initial clear output.
21	$\overline{\text{O-Y917-CS}}$	O	YSD917 chip select output.
22	O-Y902-SCK	O	YSS902 & YSD917 bit clock output.
23	O-Y902-SI	O	YSS902 data output.
24	I-Y902-SO	I	YSS902 data input.
25	$\overline{\text{O-Y902-CS}}$	O	YSS902 chip select output.
26	$\overline{\text{O-Y902-CSB}}$	O	YSS902 sub DSP chip select output.
27	O-A45-PDN	-	Not used.
28	I-RDS-CLK	-	Not used.
29	I-RDS-DATA	-	Not used.
30	$\overline{\text{RESET}}$	I	Reset input.
31	O-CONT1	O	Master VOL CTRL output for surround left & right.
32	O-CONT2	O	Master VOL CTRL output for center & sub woofer.
33	OSD-CLK	-	Not used.
34	$\overline{\text{I-RMC}}$	I	System remote control signal input.
35	OSD-DATA	-	Not used.
36	C-SHIFT	O	Micon clock shift output.
37	VDD1	-	Power supply input.
38, 39	X2, X1	-	4.19 MHz oscillator circuit.
40	VSS1	-	GND.
41	AVDD	-	Power supply input.
42	$\overline{\text{HOLD}}$	I	Power failure detected input "L" to stop and hold memory.
43	I-RE-VOL	I	Rotary encoder signal input (Main vol L & R).

Pin No.	Pin Name	I/O	Description
44	I-RDS-SIG/ SYNC-DET	-	Not used.
45	I-JOG2	I	Rotary encoder signal input (Multi jog).
46	I-FU-JOG1	I	Rotary encoder signal input (Func jog).
47	I-KEY2	I	Key input (A/D).
48	I-KEY1	I	Key input (A/D).
49	I-MULTI-LEVEL	I	Multi Level meter input.
50	AVSS	-	GND.
51~58	P36~P29	O	FL segment P36~P29 output.
59	P28/ $\overline{\text{GEQ}}$	O/I	FL segment P28 output / $\overline{\text{GEQ}}$ data input to diode.
60	P27/LW	O/I	FL segment P27 output / LW mode data input to diode (Not used).
61	P26/DIGITAL-IN2	O/I	FL segment P26 output / Digital input data input to diode (VIDEO1, VIDEO2 only) (Not used).
62	P25/RDS	O/I	FL segment P25 output / RDS data input to diode (Not used).
63	P24/ $\overline{\text{BBE}}$	O/I	FL segment P24 output / $\overline{\text{BBE}}$ data input to diode.
64	P23/AMST/WIDE	O/I	FL segment P23 output / AM stereo, wide band data input to diode (Not used).
65	P22/AM10K	O/I	FL segment P22 output / AM10kHz step data input to diode.
66	P21/KARAOKE	O/I	FL segment P21 output / KEY CON data input to diode (Not used).
67	P20/OSD	O/I	FL segment P20 output / OSD data input to diode (Not used).
68	P19/AC-3	O/I	FL segment P19 output / DOLBY DIGITAL data input to diode.
69	P18DIGITAL-IN1	O/I	FL segment P18 output / Digital input data input to diode (VIDEO1, VIDEO2, VIDEO3, CD) (Not used).
70	P17/ $\overline{96\text{kHz}}$	O/I	FL segment P17 output / $\overline{96\text{kHz}}$ data input to diode.
71	P16/DTS	O/I	FL segment P16 output / DTS data input to diode (Not used).
72	P15/ $\overline{\text{DSP}}$	O/I	FL segment P15 output / $\overline{\text{DSP}}$ data input to diode.
73	P14	O	FL segment P14 output.
74	P13/STEREO	O/I	FL segment P13 output / Tuner stereo detected input.
75	P12/ $\overline{\text{HP-MUTE}}$	O/I	FL segment P12 output / $\overline{\text{Headphone}}$ mute detected.
76	P11/ $\overline{\text{I-MIC}}$	O/I	FL segment P11 output / $\overline{\text{Mic}}$ input detected input.
77,78	P10,P9	O	FL segment P10, P9 output.
79	VDD2	-	Power supply input.
80	-VFL	-	Power supply input for FL display.
81	P8	O	FL segment P8 output.
82	P7	O	FL segment P7 output.
83	P6	O	FL segment P6 output.
84	P5	O	FL segment P5 output.
85~88	P4~P1	O	FL segment P4 ~ P1 output.
89~100	G12~G1	O	FL grid output G12 ~ G1.

IC, YSS902

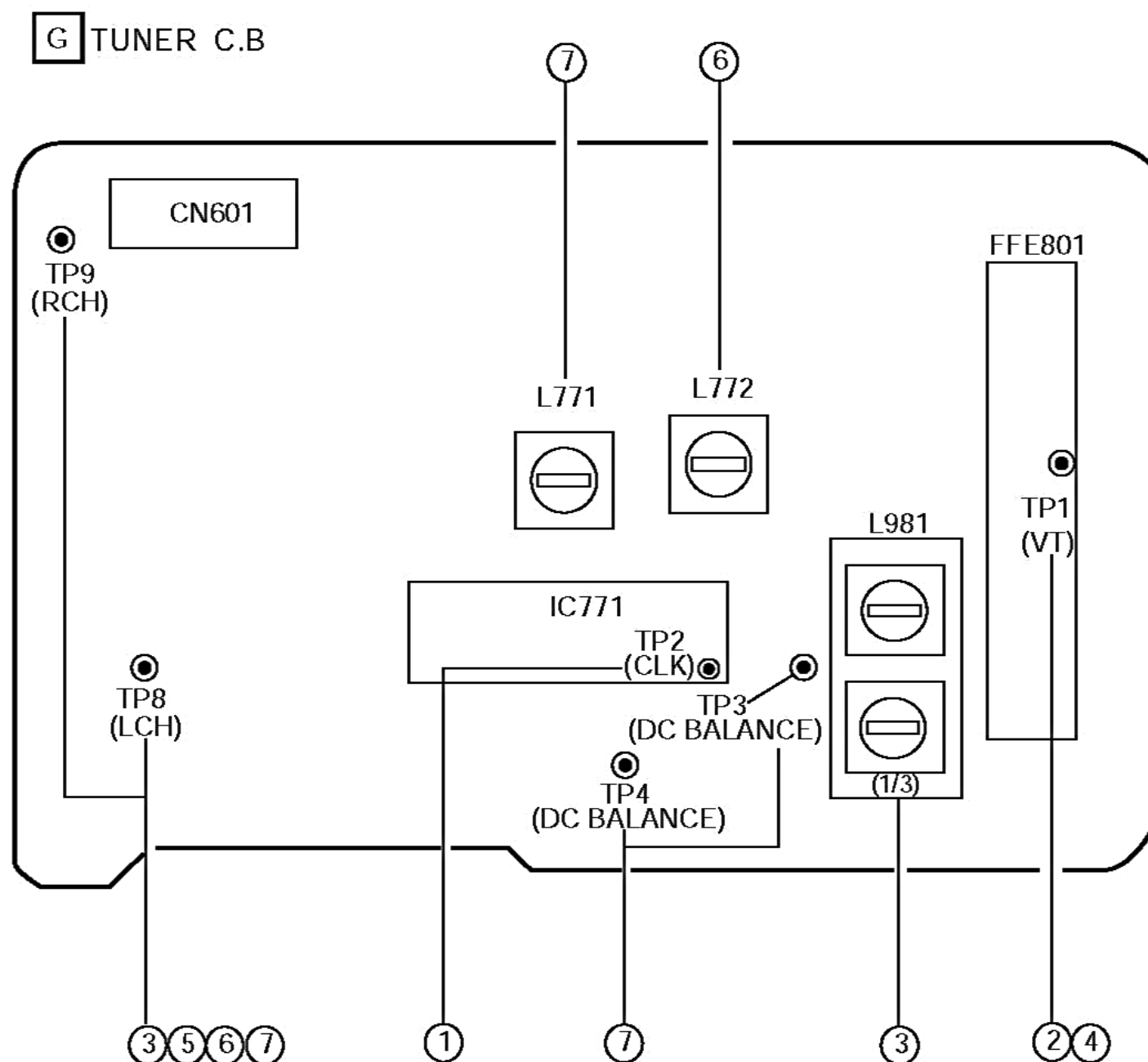
Pin No.	Pin Name	I/O	Description
1	VDD1	-	+5V power supply for (I/Os).
2	RAMCEN	O	External SRAM Interface / CE. (Not used)
3	RAMA16	O	External SRAM Interface address 16. (Not used)
4	RAMA15	O	External SRAM Interface address 15. (Not used)
5~7	SDIB0~2	I	PCM input 0~2 to Sub DSP. (Not used)
8	XI	I	Crystal oscillator connection or input external clock (6.125MHz - 50.0MHz).
9	XO	O	Crystal oscillator connection.
10	VSS	-	Ground.
11	AVDD	-	+3.3V power supply (for PLL circuit).
12~14	TEST	-	Test terminal. (Not used)
15	OVFB	O	Detection of overflow at Sub DSP. (Not used)
16~18	TEST	-	Test terminal. (Not used)
19	CPO	O	Output terminal for PLL, to be connected to ground through the external analog filter circuit.
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). (Not used)
23	SDOA1	O	PCM output from Main DSP (LS, RS). (Not used)
24	SDOA0	O	PCM output from Main DSP (L, R). (Not used)
25~29	RAMA14~10	O	External SRAM Interface address 14 ~ 10. (Not used)
30	VSS	-	Ground.
31	VDD1	-	+5V power supply (for I/Os).
32	OPORT0	O	Output port for general purpose. (Not used)
33~35	OPORT1~3	O	Output port for general purpose.
36	OPORT4	O	Output port for general purpose.
37	OPORT5	O	Output port for general purpose. (Not used)
38	OPORT6 A	O	Output port for general purpose.
39	OPORT7 B	O	Output port for general purpose.
40	VSS	-	Ground.
41	VDD2	-	+3.3V power supply (for core logic).
42~44	RAMA9~7	O	External SRAM interface address 9~7. (Not used)
45~47	SDOB2~0	O	PCM output from Sub DSP.
48	SDBCK1	I	Bit clock input for SDOA, SDIB, SDOB. (Not used)
49	SDWCK1	I	Word clock input for SDOA,SDIB,SDOB. (Not used)
50	VSS	-	Ground.
51	VDD2	-	+3.3V power supply (for core logic).
52	NONPCM	O	Detection of non-PCM data. (Not used)
53	CRC	O	Detection of CRC error. (Not used)
54	MUTE	O	Detection of auto mute. (Not used)
55	KARAOKE	O	Detection of AC-3 karaoke data. (Not used)
56	SURENC	O	Detection of AC-3 2/0 mode Dolby surround encoded input. (Not used)
57	/SDBCK0	O	Inverted SDBCK0 clock output . (Not used)
58,59	RAMA6,5	O	External SRAM Interface address 6, 5. (Not used)

Pin No.	Pin Name	I/O	Description
60	VSS	-	Ground.
61	RAMA4	O	External SRAM Interface address 4. (Not used)
62	/IC	I	Initial clear.
63	TEST	-	Test terminal (Not used).
64	RAMA3	O	External SRAM Interface address 3. (Not used)
65	/CSB	I	Sub DSP Chip select.
66	/CS	I	Microprocessor interface Chip select.
67	SO	O	Microprocessor interface Serial data output.
68	SI	I	Microprocessor interface / Sub DSP Serial data input.
69	SCK	I	Microprocessor interface / Sub DSP clock input.
70	RAMA2	O	External SRAM Interface address 2. (Not used)
71	VDD1	-	+5V power supply (for I/Os).
72~79	RAMD0~7	I/O	External SRAM Interface data (STREAM0~7 output when External SRAM is not in use). (Not used)
80	VSS	-	Ground.
81	VDD2	-	+3.3V power supply (for core logic).
82	SDWCK0	I	Word clock input for SDIA, SDOA, SDIB, SDOB.
83	SDBCK0	I	Bit clock input for SDIA, SDOA, SDIB, SDOB.
84	SDIA0	I	AC-3 bitstream (or PCM) data input for Main DSP.
85	SDIA1	I	AC-3 bitstream (or PCM) data input for Main DSP.
86,87	RAMA1,0	O	External SRAM Interface address 1, 0. (Not used)
88	RAMWEN	O	External SRAM Interface / WE. (Not used)
89	RAMOEN	O	External SRAM Interface / OE. (Not used)
90	VSS	-	Ground.
91	VDD2	-	+3.3V power supply (for core logic).
92~99	IPORT7~0	I	Input port for general purpose.
100	VSS	-	Ground.

IC, YSD917

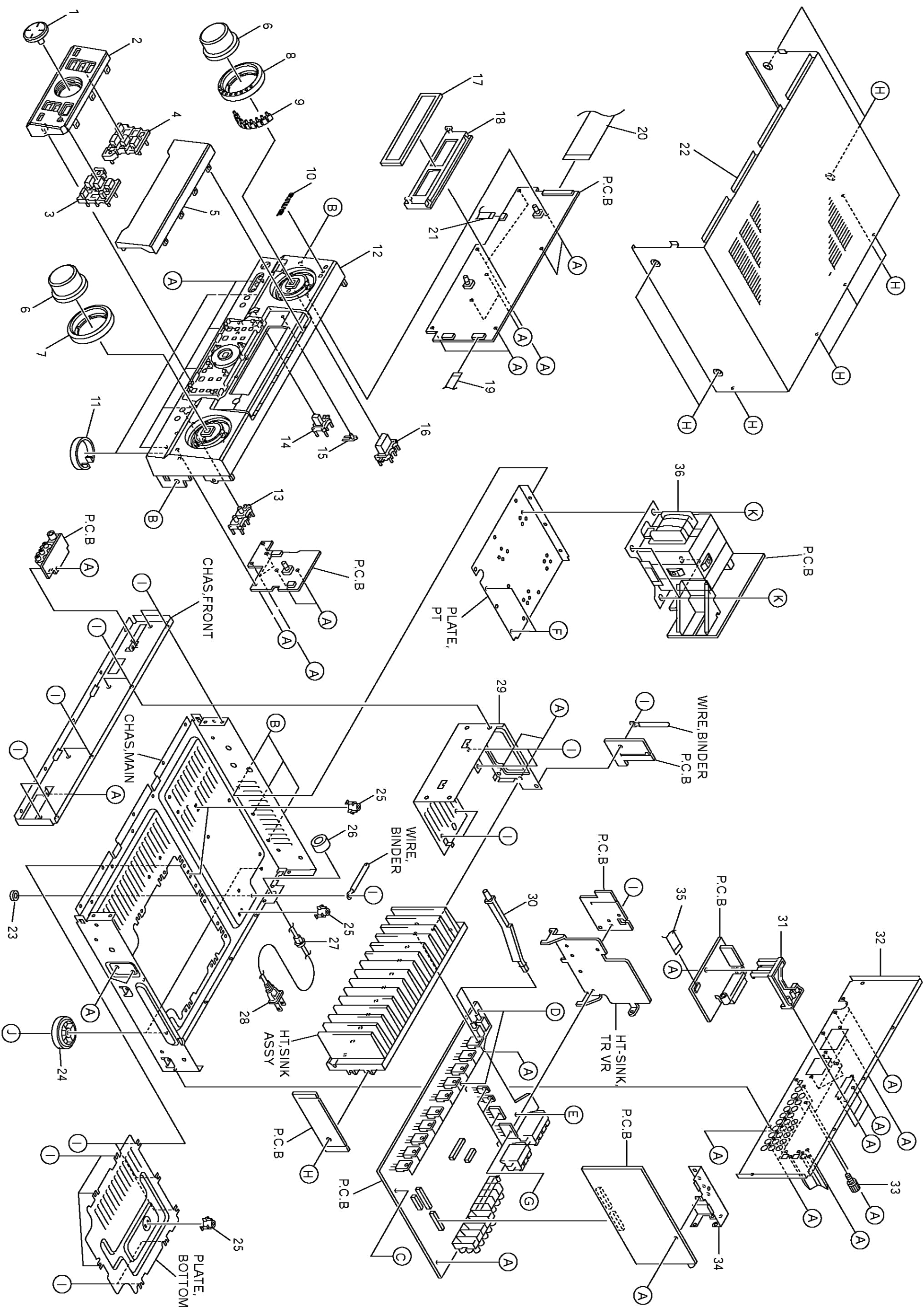
Pin No.	Pin Name	I/O	Description
1	AVDD	-	Analog power supply for PLL (+5V).
2	PCO	-	PLL filter connection terminal.
3	AVSS	-	Analog ground.
4	M/S	I	Master / slave mode selection. (Not used)
5	DDIN	I	Digital audio interface data input.
6	TEST	I	Test terminal (To be open). (Not used)
7	/IC	I	Initial clear input.
8	VSS	-	Ground.
9	XO	O	24.576MHz crystal oscillator connection output terminal.
10	XI	I	24.576MHz crystal oscillator connection input terminal.
11	MCK	O	12.288MHz clock output.
12	VDD	-	+5V power supply.
13	SDO	O	Serial data output.
14	SDBCK	I/O	Serial data bit clock input / output (64 fs).
15	SDWCK	I/O	Serial data word clock input / output (fs).
16	SDMCK	O	Serial data master clock output (256 fs or 128 fs).
17	VSS	-	Ground.
18	SYNC/U	O	Serial data synchronization timing output / User data output. (Not used)
19	FS128/C	O	Serial data master clock 128 fs output / Channel status output. (Not used)
20	DBL/V	O	Double rate output / Validity flag output.
21	ERR/BS	O	Data error detection output / Block start output. (Not used)
22	/LOCK	O	PLL lock detection output.
23	INT	O	Interrupt output.
24	VDD	-	+5V power supply.
25	/CS	I	Microcomputer interface chip select input.
26	SO	O	Microcomputer interface data output.
27	SI	I	Microcomputer interface data input.
28	SCK	I	Microcomputer interface bit clock input.

ADJUSTMENT <TUNER>



< TUNER SECTION >

1. Clock Check
Settings : • Test point : TP2(CLK)
Method : Set to AM 1710kHz and check that the test point is $2160\text{kHz} \pm 45\text{Hz}$.
2. AM VT Check
Settings : • Test point : TP1(VT),
Method : Set to AM 1710kHz, AM 530kHz and check that the test point is less than 8.5V(1710kHz) and more than 0.6V(530kHz).
3. AM Tracking Adjustment
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L981(1/3) 1000kHz
Method : Set to MW 1000kHz and adjust L981(1/3) so that the test point is max.
4. FM VT Check
Settings : • Test point : TP1(VT)
Method : Set to FM 108.0MHz and check that the test point is less than 8.0V.
Then set to FM 87.5MHz and check that the test point is more than 0.5V.
5. FM Tracking Check
Settings : • Test point : TP9(Lch), TP9(Rch)
Method : • Set to FM 98.0MHz and check that the test point is less than 9.0dB.
6. AM IF Adjustment
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L772 450kHz
7. DC Balance / Mono Distortion Adjustment
Settings : • Test point : TP3, TP4 (DC Balance)
TP8(Lch), TP9(Rch) (Distortion)
• Adjustment location : L771
• Input level : 60dB μ V
Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes $0\text{V} \pm 0.04\text{V}$.
Next, check that the distortion is less than 1.3%.



MECHANICAL PARTS LIST 1 / 1

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-AR3-006-010		KNOB,RTRY JOG	26	87-003-317-010		F-BEAD,F0H2515-LG7
2	8A-AR3-003-010		PANEL,FR U	27	87-085-189-010		BUSHING, CORD (U)
3	8A-AR3-013-010		KEY,ASSY,ENTER	28	87-A80-110-010	△	AC CORD ASSY,U SPT-2W
4	8A-AR3-012-010		KEY,ASSY,DOLBY	29	8Z-AR1-205-010		HLDR,HT-SINK
5	8A-AR2-005-010		WINDOW,DISP DIGI	30	8A-AR3-011-010		BTN,SP
6	8A-AR3-045-010		KNOB,RTRY VOL	31	88-AR1-203-010		HLDR,TU
7	8A-AR3-007-010		RING,VOL	32	8A-AR2-011-010		PANEL,REAR UBM 67
8	8A-AR3-047-010		RING,FUN	33	87-033-209-010		TERMINAL, EARTH
9	8A-AR3-009-010		REFLECTOR,FUN	34	8Z-AR1-219-010		HLDR,PWB PRO
10	87-CE3-023-010		BADGE,AIWA 30N SILV	35	88-912-161-110		FF-CABLE,12P 1.25 160MM
11	8Z-AR1-020-110		RING,FOOT SIL	36	8Z-AR3-601-010	△	PT,ZAR-3 (U)
12	8A-AR2-003-010		CABI,FR U 67	A	87-067-703-010		TAPPING SCREW, BVT2+3-10
13	8A-AR3-024-010		KEY,BAL	B	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
14	8A-AR3-020-010		KEY,ECO	C	87-067-633-010		TAPPING SCREW, BVT2+3-8
15	8A-AR3-010-010		REFLECTOR,ECO	D	87-067-581-010		TAPPING SCREW, BVT2+3-15
16	8A-AR3-021-010		KEY,POWER	E	87-067-632-010		TAPPING SCREW, BVT2+3-15
17	8A-AR1-602-010		FL,BJ759GK	F	87-067-585-010		TAPPING SCREW, BVTT+4-6
18	8A-AR3-201-010		GUIDE,FL	G	87-067-579-010		TAPPING SCREW, BVT2+3-8
19	88-912-101-110		FF-CABLE, 12P 1.25 100MM	H	87-067-641-010		UTT2+3-8 (W/O SLOT)BL
20	8A-AR3-643-010		FF-CABLE,32P 1.25 430MM	I	87-067-584-010		TAPPING SCREW, BVT2+3-6
21	88-908-101-110		FF-CABLE, 8P 1.25 10MM	J	87-067-689-010		TAPPING SCREW, BVTT+3-8
22	8A-AR3-025-010		CABI,STEEL	K	87-078-191-010		S-SCREW, IT+4-10
23	8Z-NB8-240-010		COVER, PL				
24	8Z-AR1-021-010		FOOT,REAR				
25	88-AR1-218-010		HLDR,PWB H8.9				

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

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