

# SERVICE MANUAL

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STEREO AV RECEIVER

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# 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 µV/m  
**Antenna** Loop antenna

## Amplifier section

**Power output** **[Stereo Mode]**  
**Front**  
 170 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**  
 120 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)**  
 120 watts per channel, Min. RMS at 8 ohms, 1 kHz, with no more than 0.9% Total Harmonic Distortion  
**Center**  
 120 watts, Min. RMS at 8 ohms, 1 kHz, with no more than 0.9% Total Harmonic Distortion  
**Total harmonic distortion** 0.15 % (85 W, 1 kHz, 8 ohms, Front)

### Total harmonic distortion inputs

**AUDIO IN**  
 PHONO: 2.5 mV, adjustable (47 kohms)  
 CD, VIDEO 1/DVD/MD, VIDEO 2/LD/TV, VIDEO 3: 300 mV, adjustable (47 kohms)  
 TAPE MONITOR: 300 mV, adjustable (47 kohms)  
 AUX: 230 mV, adjustable (47 kohms)  
**DIGITAL IN**  
 COAXIAL (VIDEO 2):  
 OPTICAL (VIDEO 1):  
 OPTICAL (VIDEO 3):  
 OPTICAL (CD):  
 accept linear PCM (32 kHz, 44.1 kHz and 48 kHz) signals and bit stream of Dolby Digital and DTS Surround  
 VIDEO IN: 1 Vp-p (75 ohms)


## Outputs

**AUDIO OUT (REC OUT):** 250 mV (1 kohm)  
**VIDEO OUT (MONITOR):** 1 Vp-p (75 ohms)  
**SUPER WOOFER:** 5.0 V  
**FRONT SPEAKERS IMP:** 8Ω/4Ω selectable (front speakers A and B):  
 with the **SPEAKER IMPEDANCE SELECTOR** set to 4Ω, accepts speakers of 4 ohms.  
 with the **SPEAKER IMPEDANCE SELECTOR** set to 8Ω, accepts speakers of 8 ohms or more.  
**SURROUND SPEAKERS IMP:** 8Ω (surround speakers): accepts speakers of 8 ohms or more  
**CENTER SPEAKER IMP:** 8Ω/4Ω selectable  
 with the **SPEAKER IMPEDANCE SELECTOR** set to 4Ω, accepts speaker of 4 ohms.  
 with the **SPEAKER IMPEDANCE SELECTOR** set to 8Ω, 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** 230 W  
**Dimensions (W × H × D)** 430 × 155 × 385 mm  
 (17 × 6 1/8 × 15 1/4 in.)  
**Weight** 12 kg (26 lb 7 oz.)

- Design and specifications are subject to change without notice.
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## ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-AR1-903-010		IB,U(ESF)M
2	87-006-225-010		AM LOOP ANT NC2
3	87-043-115-010		ANT,FEEDER FM
4	88-AR1-654-010		RC UNIT,RC-8AR01

# ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC					87-A40-002-080		ZENER,MTZJ5.1C
	87-AR4-687-040	C-IC,LC74763M-9670			87-A40-115-060		DIODE,RS603M
	87-017-915-080	IC,BU4094BCF			87-A40-469-080		C-DIODE,HSM2838CTR
	87-A20-870-010	IC,GP1F37R			87-A40-004-080		ZENER,MTZJ16A
	87-017-888-080	IC,NJM4558MD			87-A40-335-080		ZENER,MTZJ11C T-72
	8Z-AR1-633-010	C-IC,UPD780228GF					
	87-070-083-010	IC,GP1U281X			87-A40-224-010		DIODE,GBU8D
	87-001-604-080	IC,TC74HCU04F			87-070-274-080		DIODE,1N4003 SEM
	87-A20-824-010	C-IC,CS4226			87-A40-435-080		ZENER,MTZJ30D
	87-A21-257-040	C-IC,SN74LV574A			87-A40-347-080		ZENER,MTZJ2.2B
	87-A21-227-080	IC,LH28F400BVE-TL85			87-A40-646-010		DIODE,FMB-G16L
	87-A21-230-080	IC,CS4926					
	87-A20-736-010	IC,BA033ST			87-A40-488-080		DIODE,1SS244
	87-020-903-010	IC,NJM7805FA			87-017-931-080		ZENER,MTZJ5.6B
	87-A20-715-010	IC,M62439SP			87-A40-438-080		ZENER,MTZJ4.7A
	87-017-022-080	IC,NJM2068M-D(T1)			87-A40-234-080		ZENER,MTZJ5.6A
					87-A40-291-080		DIODE,1N4148 (CPT)
	87-020-784-080	IC,TC4053BF		MAIN C.B			
	87-A21-018-040	C-IC,M65849BFP631D		C101	87-010-235-080		CAP,E 470-16 SME
	87-017-726-080	IC,BU4052 BCF		C102	87-010-235-080		CAP,E 470-16 SME
	87-A21-202-040	C-IC,M62445AFP		C103	87-010-384-080		CAP, ELECT 100-25V
	87-A20-056-010	IC,BA3880S		C104	87-016-128-080		CAP,E 22-25 105
	87-A20-437-010	C-IC,M62431FP		C105	87-010-247-080		CAP, ELECT 100-50V
	87-070-127-110	IC,LC72131 D		C106	87-010-384-080		CAP, ELECT 100-25V
	87-A20-820-010	IC,BA7625		C107	87-010-263-080		CAP, ELECT 100-10V
	87-017-917-080	IC,BU4066BCF		C108	87-012-140-080		CAP 470P
				C109	87-012-368-080		C-CAP,S 0.1-50 F
				C110	87-012-368-080		C-CAP,S 0.1-50 F
TRANSISTOR							
	87-A30-197-080	TR,KTA1267GR		C111	87-012-368-080		C-CAP,S 0.1-50 F
	87-026-245-080	TR,DTC114ES		C112	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-198-080	TR,KTC3199GR		C113	87-016-658-090		CAP,E 4700-35 SMG
	87-A30-073-080	C-TR,RT1N 141C		C114	87-016-658-090		CAP,E 4700-35 SMG
	87-A30-071-080	C-TR,RT1N 144C		C115	87-012-368-080		C-CAP,S 0.1-50 F
	89-110-372-080	TR,2SA1037(140MHZ 200MW)		C116	87-012-368-080		C-CAP,S 0.1-50 F
	89-213-750-010	TR,2SB1375 (25W)		C117	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-083-080	TR,CSD1489B		C118	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-085-040	C-TR,CSA1362GR		C119	87-A11-316-090		CAP,E 8200-85
	87-A30-075-080	C-TR,2SA1235F		C120	87-A11-316-090		CAP,E 8200-85
	89-112-965-080	TR,2SA1296 (0.75W)		C121	87-010-260-080		CAP, ELECT 47-25V
	87-A30-076-080	C-TR,2SC3052F		C122	87-010-403-080		CAP, ELECT 3.3-50V
	87-026-610-080	TR,KTC3198GR		C123	87-010-384-080		CAP, ELECT 100-25V
	89-213-702-010	TR,2SB1370 (1.8W)		C124	87-010-384-080		CAP, ELECT 100-25V
	87-A30-072-080	C-TR,RT1P 144C		C125	87-A10-417-080		CAP,E 47-63 M SME
	87-A30-087-080	C-FET,2SK2158		C126	87-010-263-080		CAP, ELECT 100-10V
	87-A30-074-080	C-TR,RT1P 141C		C127	87-010-197-080		CAP, CHIP 0.01 DM
	87-026-263-080	C-TR,RN1410		C131	87-010-544-080		CAP, ELECT 0.1-50V
	87-026-609-080	TR,KTA1266GR		C133	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-257-080	C-TR,2SD1306E		C135	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-107-070	C-TR,CMBT5401		C136	87-012-368-080		C-CAP,S 0.1-50 F
	87-026-214-080	TR,DTA114YS (0.3W)		C143	87-A10-712-080		C-CAP,S 0.22-50 Z F
	87-A30-190-080	TR,CC5551		C144	87-A10-712-080		C-CAP,S 0.22-50 Z F
	87-A30-097-010	TR,FP 1016		C149	87-010-154-080		CAP CHIP 10P
	87-A30-098-010	TR,FP 1016		C150	87-010-154-080		CAP CHIP 10P
	87-A30-106-070	C-TR,CMBT5551		C153	87-010-401-080		CAP, ELECT 1-50V
	87-A30-162-010	FET,2SK2937		C154	87-010-401-080		CAP, ELECT 1-50V
	87-026-236-080	TR,DTC124E,K		C155	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-026-232-080	TR,DTA144WK		C156	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A30-196-080	TR,2SC4115SRS		C157	87-010-408-080		CAP, ELECT 47-50V
	89-327-143-080	TR,2SC2714 (0.1W)		C158	87-010-248-080		CAP, ELECT 220-10V
				C159	87-010-154-080		CAP CHIP 10P
				C169	87-010-154-080		CAP CHIP 10P
				C170	87-010-154-080		CAP CHIP 10P
				C171	87-010-196-080		CHIP CAPACITOR,0.1-25
DIODE							
	87-020-465-080	DIODE,1SS133 (110MA)		C172	87-010-154-080		CAP CHIP 10P
	87-A40-345-080	ZENER,MTZJ10C		C173	87-010-405-080		CAP, ELECT 10-50V
	87-A40-344-080	ZENER,MTZJ6.2C		C174	87-010-401-080		CAP, ELECT 1-50V
	87-A40-468-080	C-DIODE,HSM2836CTR		C175	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-070-136-080	ZENER,MTZJ5.1B		C203	87-010-178-080		CHIP CAP 1000P
	87-027-686-080	ZENER,HZ-12A1		C204	87-010-178-080		CHIP CAP 1000P
	87-A40-235-080	ZENER,MTZJ9.1C		C205	87-010-405-080		CAP, ELECT 10-50V

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C206	87-010-405-080		CAP, ELECT 10-50V	C409	87-A10-516-080		C-CAP,S 100P-200 J CH
C208	87-016-299-080		CAP,E 10-100 SME	C411	87-010-805-080		CAP, S 1-16
C209	87-010-406-080		CAP, ELECT 22-50	C412	87-010-402-080		CAP, ELECT 2.2-50V
C210	87-010-406-080		CAP, ELECT 22-50	C413	87-010-196-080		CHIP CAPACITOR,0.1-25
C211	87-010-322-080		C-CAP,S 100P-50 CH	C414	87-010-178-080		CHIP CAP 1000P
C212	87-010-322-080		C-CAP,S 100P-50 CH	C416	87-016-299-080		CAP,E 10-100 SME
C215	87-A10-897-080		CAP,E 100-25 BP SME	C417	87-A10-946-080		C-CAP,S 220P-100 J CH
C216	87-A10-897-080		CAP,E 100-25 BP SME	C430	87-A10-354-080		C-CAP,S 0.047-50 K B
C217	87-A10-516-080		C-CAP,S 100P-200 J CH	C485	87-010-186-080		CAP,CHIP 4700P
C218	87-A10-516-080		C-CAP,S 100P-200 J CH	C491	87-012-368-080		C-CAP,S 0.1-50 F
C221	87-010-805-080		CAP, S 1-16	C492	87-012-368-080		C-CAP,S 0.1-50 F
C222	87-010-805-080		CAP, S 1-16	C493	87-010-190-080		S CHIP F 0.01
C223	87-010-402-080		CAP, ELECT 2.2-50V	C501	87-010-404-080		CAP, ELECT 4.7-50V
C224	87-010-402-080		CAP, ELECT 2.2-50V	C502	87-010-404-080		CAP, ELECT 4.7-50V
C225	87-010-196-080		CHIP CAPACITOR,0.1-25	C503	87-012-157-080		C-CAP,S 330P-50 CH
C227	87-010-178-080		CHIP CAP 1000P	C504	87-012-157-080		C-CAP,S 330P-50 CH
C228	87-010-178-080		CHIP CAP 1000P	C511	87-010-404-080		CAP, ELECT 4.7-50V
C230	87-A10-354-080		C-CAP,S 0.047-50 K B	C512	87-010-404-080		CAP, ELECT 4.7-50V
C231	87-A10-354-080		C-CAP,S 0.047-50 K B	C513	87-010-260-080		CAP, ELECT 47-25V
C232	87-A10-946-080		C-CAP,S 220P-100 J CH	C514	87-010-260-080		CAP, ELECT 47-25V
C285	87-010-186-080		CAP,CHIP 4700P	C515	87-010-370-080		CAP,E 330-6.3 SME
C287	87-010-190-080		S CHIP F 0.01	C516	87-010-370-080		CAP,E 330-6.3 SME
C288	87-010-190-080		S CHIP F 0.01	C517	87-010-196-080		CHIP CAPACITOR,0.1-25
C289	87-010-190-080		S CHIP F 0.01	C518	87-010-196-080		CHIP CAPACITOR,0.1-25
C290	87-010-190-080		S CHIP F 0.01	C519	87-010-196-080		CHIP CAPACITOR,0.1-25
C291	87-012-368-080		C-CAP,S 0.1-50 F	C520	87-010-196-080		CHIP CAPACITOR,0.1-25
C292	87-012-368-080		C-CAP,S 0.1-50 F	C531	87-010-213-080		C-CAP,S 0.015-50 B
C293	87-012-368-080		C-CAP,S 0.1-50 F	C532	87-010-992-080		C-CAP,S 0.047-25 B
C294	87-012-368-080		C-CAP,S 0.1-50 F	C533	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C295	87-012-368-080		C-CAP,S 0.1-50 F	C535	87-010-404-080		CAP, ELECT 4.7-50V
C296	87-012-368-080		C-CAP,S 0.1-50 F	C536	87-010-404-080		CAP, ELECT 4.7-50V
C297	87-012-368-080		C-CAP,S 0.1-50 F	C539	87-010-401-080		CAP, ELECT 1-50V
C298	87-012-368-080		C-CAP,S 0.1-50 F	C540	87-010-401-080		CAP, ELECT 1-50V
C303	87-010-179-080		CAP,CHIP S B1200P	C541	87-010-185-080		C-CAP,S 3900P-50 B
C304	87-010-179-080		CAP,CHIP S B1200P	C542	87-010-185-080		C-CAP,S 3900P-50 B
C305	87-010-405-080		CAP, ELECT 10-50V	C547	87-010-404-080		CAP, ELECT 4.7-50V
C306	87-010-405-080		CAP, ELECT 10-50V	C548	87-010-404-080		CAP, ELECT 4.7-50V
C308	87-016-299-080		CAP,E 10-100 SME	C549	87-016-081-080		C-CAP,S 0.1-16 RK
C309	87-010-382-080		CAP, ELECT 22-25V	C550	87-016-081-080		C-CAP,S 0.1-16 RK
C310	87-010-382-080		CAP, ELECT 22-25V	C554	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-322-080		C-CAP,S 100P-50 CH	C555	87-010-405-080		CAP, ELECT 10-50V
C312	87-010-322-080		C-CAP,S 100P-50 CH	C556	87-010-248-080		CAP, ELECT 220-10V
C315	87-A10-897-080		CAP,E 100-25 BP SME	C557	87-010-405-080		CAP, ELECT 10-50V
C316	87-A10-897-080		CAP,E 100-25 BP SME	C559	87-010-183-080		C-CAP,S 2700P-50 B
C317	87-A10-516-080		C-CAP,S 100P-200 J CH	C561	87-012-140-080		CAP 470P
C318	87-A10-516-080		C-CAP,S 100P-200 J CH	C562	87-012-140-080		CAP 470P
C320	87-A10-946-080		C-CAP,S 220P-100 J CH	C565	87-010-404-080		CAP, ELECT 4.7-50V
C321	87-010-805-080		CAP, S 1-16	C566	87-010-404-080		CAP, ELECT 4.7-50V
C322	87-010-805-080		CAP, S 1-16	C601	87-010-378-080		CAP, ELECT 10-16V
C323	87-010-402-080		CAP, ELECT 2.2-50V	C602	87-010-378-080		CAP, ELECT 10-16V
C324	87-010-402-080		CAP, ELECT 2.2-50V	C603	87-012-156-080		C-CAP,S 220P-50 CH
C325	87-010-196-080		CHIP CAPACITOR,0.1-25	C604	87-012-156-080		C-CAP,S 220P-50 CH
C327	87-010-178-080		CHIP CAP 1000P	C605	87-010-405-080		CAP, ELECT 10-50V
C328	87-010-178-080		CHIP CAP 1000P	C606	87-010-405-080		CAP, ELECT 10-50V
C330	87-A10-354-080		C-CAP,S 0.047-50 K B	C607	87-012-140-080		CAP 470P
C331	87-A10-354-080		C-CAP,S 0.047-50 K B	C608	87-012-140-080		CAP 470P
C334	87-A10-918-080		CAP,E 100-16 SMG	C609	87-010-188-080		CAP,CHIP 6800P
C335	87-A10-918-080		CAP,E 100-16 SMG	C610	87-010-188-080		CAP,CHIP 6800P
C385	87-010-186-080		CAP,CHIP 4700P	C611	87-010-197-080		CAP, CHIP 0.01 DM
C391	87-012-368-080		C-CAP,S 0.1-50 F	C612	87-010-195-080		C-CAP,S 0.068-25 F
C392	87-012-368-080		C-CAP,S 0.1-50 F	C613	87-010-195-080		C-CAP,S 0.068-25 F
C393	87-012-368-080		C-CAP,S 0.1-50 F	C614	87-010-197-080		CAP, CHIP 0.01 DM
C394	87-012-368-080		C-CAP,S 0.1-50 F	C615	87-010-404-080		CAP, ELECT 4.7-50V
C395	87-010-190-080		S CHIP F 0.01	C616	87-010-404-080		CAP, ELECT 4.7-50V
C396	87-010-190-080		S CHIP F 0.01	C617	87-010-404-080		CAP, ELECT 4.7-50V
C402	87-010-181-080		CAP,CHIP S 1800P	C618	87-010-404-080		CAP, ELECT 4.7-50V
C403	87-010-405-080		CAP, ELECT 10-50V	C619	87-010-404-080		CAP, ELECT 4.7-50V
C405	87-010-408-080		CAP, ELECT 47-50V	C620	87-010-101-080		CAP, ELECT 220-16
C406	87-010-322-080		C-CAP,S 100P-50 CH	C621	87-010-260-080		CAP, ELECT 47-25V
C408	87-A10-897-080		CAP,E 100-25 BP SME	C745	87-012-368-080		C-CAP,S 0.1-50 F





REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C160	87-012-157-080	C-CAP,S	330P-50 CH	C717	87-012-286-080		CAP, U 0.01-25
C162	87-010-182-080	C-CAP,S	2200P-50 B	C719	87-012-286-080		CAP, U 0.01-25
C164	87-A10-189-040	CAP,E	220-10	C721	87-012-176-080		CAP 15P
C170	87-012-157-080	C-CAP,S	330P-50 CH	C722	87-012-176-080		CAP 15P
C171	87-012-157-080	C-CAP,S	330P-50 CH	C723	87-010-401-080		CAP, ELECT 1-50V
C181	87-010-322-080	C-CAP,S	100P-50 CH	C723	87-012-274-080		CHIP CAP,U 1000P-50B
C182	87-010-322-080	C-CAP,S	100P-50 CH	C725	87-012-274-080		CHIP CAP,U 1000P-50B
C183	87-010-322-080	C-CAP,S	100P-50 CH	C726	87-010-405-080		CAP, ELECT 10-50V
C184	87-010-322-080	C-CAP,S	100P-50 CH	C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C185	87-010-322-080	C-CAP,S	100P-50 CH	C728	87-010-248-080		CAP, ELECT 220-10V
C186	87-010-322-080	C-CAP,S	100P-50 CH	C755	87-012-286-080		CAP, U 0.01-25
C187	87-010-322-080	C-CAP,S	100P-50 CH	C756	87-012-286-080		CAP, U 0.01-25
C188	87-010-322-080	C-CAP,S	100P-50 CH	C757	87-012-188-080		C-CAP,U 47P-50 CH
C189	87-010-322-080	C-CAP,S	100P-50 CH	C758	87-012-167-080		C-CAP,U 5P-50 CH
C190	87-010-322-080	C-CAP,S	100P-50 CH	C761	87-010-196-080		CHIP CAPACITOR,0.1-25
C240	87-016-526-080	C-CAP,S	0.47-16 BK	C763	87-010-829-080		CAP, U 0.047-16
C402	87-012-156-080	C-CAP,S	220P-50 CH	C764	87-012-337-080		C-CAP,U 56P-50 CH
C405	87-010-182-080	C-CAP,S	2200P-50 B	C765	87-012-286-080		CAP, U 0.01-25
C406	87-010-182-080	C-CAP,S	2200P-50 B	C766	87-012-286-080		CAP, U 0.01-25
C407	87-010-178-080	CHIP CAP	1000P	C769	87-010-260-080		CAP, ELECT 47-25V
C409	87-010-196-080	CHIP CAPACITOR,0.1-25		C770	87-010-829-080		CAP, U 0.047-16
C411	87-010-322-080	C-CAP,S	100P-50 CH	C771	87-010-383-080		CAP, ELECT 33-25V
C412	87-010-178-080	CHIP CAP	1000P	C772	87-010-829-080		CAP, U 0.047-16
CN201	87-A60-053-010	CONN,17P	V 9604S-17C	C773	87-010-196-080		CHIP CAPACITOR,0.1-25
CN202	87-A60-039-010	CONN,32P	V 9604S-32C	C774	87-010-263-080		CAP, ELECT 100-10V
CN203	87-A60-052-010	CONN,18P	V 9604S-18C	C775	87-010-404-080		CAP, ELECT 4.7-50V
D102	87-A40-496-040	LED,SLR-342MCT31	GRN	C776	87-012-286-080		CAP, U 0.01-25
D103	87-A40-496-040	LED,SLR-342MCT31	GRN	C777	87-010-400-080		CAP, ELECT 0.47-50V
D105	87-A40-496-040	LED,SLR-342MCT31	GRN	C778	87-010-401-080		CAP, ELECT 1-50V
D107	87-A40-496-040	LED,SLR-342MCT31	GRN	C779	87-010-401-080		CAP, ELECT 1-50V
D109	87-A40-496-040	LED,SLR-342MCT31	GRN	C780	87-010-196-080		CHIP CAPACITOR,0.1-25
D111	87-A40-496-040	LED,SLR-342MCT31	GRN	C781	87-010-405-080		CAP, ELECT 10-50V
D113	87-A40-496-040	LED,SLR-342MCT31	GRN	C782	87-010-405-080		CAP, ELECT 10-50V
D115	87-A40-496-040	LED,SLR-342MCT31	GRN	C783	87-012-286-080		CAP, U 0.01-25
D117	87-A40-496-040	LED,SLR-342MCT31	GRN	C784	87-012-286-080		CAP, U 0.01-25
FL101	8Z-AR1-602-010	FL,BJ691	GK	C785	87-010-805-080		CAP, S 1-16
LED101	87-A40-317-080	LED,SLR-342VCT31	RED	C786	87-010-805-080		CAP, S 1-16
LED104	87-A40-317-080	LED,SLR-342VCT31	RED	C787	87-012-280-080		CAP, U 3300P-50
LED106	87-A40-317-080	LED,SLR-342VCT31	RED	C788	87-012-280-080		CAP, U 3300P-50
LED108	87-A40-317-080	LED,SLR-342VCT31	RED	C789	87-012-275-080		C-CAP,U 1200P-50 B
LED110	87-A40-317-080	LED,SLR-342VCT31	RED	C790	87-012-275-080		C-CAP,U 1200P-50 B
LED112	87-A40-317-080	LED,SLR-342VCT31	RED	C791	87-010-405-080		CAP, ELECT 10-50V
LED114	87-A40-317-080	LED,SLR-342VCT31	RED	C793	87-012-273-080		C-CAP,U 820P-50 B
LED116	87-A40-317-080	LED,SLR-342VCT31	RED	C794	87-010-406-080		CAP, ELECT 22-50
LED119	87-A40-317-080	LED,SLR-342VCT31	RED	C795	87-010-596-080		CAP, S 0.047-16
S101	87-A90-095-080	SW,TACT	EVQ11G04M	C796	87-010-403-080		CAP, ELECT 3.3-50V
S107	87-A90-095-080	SW,TACT	EVQ11G04M	C797	87-012-278-080		C-CAP,U 2200P-50 B
S108	87-A90-095-080	SW,TACT	EVQ11G04M	C798	87-012-278-080		C-CAP,U 2200P-50 B
S109	87-A90-095-080	SW,TACT	EVQ11G04M	C799	87-010-829-080		CAP, U 0.047-16
S110	87-A90-095-080	SW,TACT	EVQ11G04M	C812	87-012-286-080		CAP, U 0.01-25
S111	87-A90-095-080	SW,TACT	EVQ11G04M	C813	87-010-197-080		CAP, CHIP 0.01 DM
S112	87-A90-095-080	SW,TACT	EVQ11G04M	C814	87-012-286-080		CAP, U 0.01-25
S113	87-A90-095-080	SW,TACT	EVQ11G04M	C819	87-010-197-080		CAP, CHIP 0.01 DM
S114	87-A90-095-080	SW,TACT	EVQ11G04M	C820	87-010-260-080		CAP, ELECT 47-25V
S115	87-A90-095-080	SW,TACT	EVQ11G04M	C821	87-012-286-080		CAP, U 0.01-25
S116	87-A90-095-080	SW,TACT	EVQ11G04M	C822	87-012-286-080		CAP, U 0.01-25
SW101	87-A90-535-010	SW,RTRY	EC16B24304	C823	87-012-286-080		CAP, U 0.01-25
SW102	87-A90-950-010	SW,RTRY	EC12E12504 ENCODER	C828	87-010-196-080		CHIP CAPACITOR,0.1-25
X101	87-A70-075-080	VIB,CER	4.19MHZ CRHF	C829	87-010-196-080		CHIP CAPACITOR,0.1-25
				C959	87-010-196-080		CHIP CAPACITOR,0.1-25
TUNER C.B				C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C701	87-010-260-080	CAP, ELECT	47-25V	C961	87-012-170-080		C-CAP,U 8P-50 CH
C702	87-010-404-080	CAP, ELECT	4.7-50V	CF801	87-008-261-010		FILTER, SFE10.7MA5-A
C703	87-012-286-080	CAP, U	0.01-25	CF802	87-008-261-010		FILTER, SFE10.7MA5-A
C704	87-012-286-080	CAP, U	0.01-25	CN601	87-099-028-010		CONN,11P 6216 H
C711	87-010-263-080	CAP, ELECT	100-10V	FFE801	A8-8ZA-190-030		8ZA-1 FEUNM
C712	87-010-196-080	CHIP CAPACITOR,0.1-25		J801	87-A60-657-010		TERMINAL,4P HSP-154V5-02
C713	87-012-286-080	CAP, U	0.01-25	L771	87-A50-266-010		COIL,FM DET-2N(TOK)
C714	87-012-286-080	CAP, U	0.01-25	L772	87-A90-733-010		FLTR,PCFAZH-450 (TOK)
				L781	87-005-847-080		COIL,2.2UH(CECS)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
L791	87-A50-209-010		COIL,1POLE MPX(MIT)	C234	87-010-196-080		CHIP CAPACITOR,0.1-25
L792	87-A50-209-010		COIL,1POLE MPX(MIT)	C235	87-010-405-080		CAP, ELECT 10-50V
L832	87-005-847-080		COIL,2.2UH(CECS)	C238	87-012-156-080		C-CAP,S 220P-50 CH
L981	87-NF4-650-010		COIL,AM PACK 4N(TOK)	C239	87-010-405-080		CAP, ELECT 10-50V
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309	C240	87-012-156-080		C-CAP,S 220P-50 CH
DIGITAL C.B				C242	87-010-196-080		CHIP CAPACITOR,0.1-25
C101	87-010-196-080		CHIP CAPACITOR,0.1-25	C243	87-010-196-080		CHIP CAPACITOR,0.1-25
C102	87-010-196-080		CHIP CAPACITOR,0.1-25	C245	87-010-178-080		CHIP CAP 1000P
C103	87-010-314-080		C-CAP,S 22P-50V	C246	87-010-405-080		CAP, ELECT 10-50V
C104	87-010-196-080		CHIP CAPACITOR,0.1-25	C247	87-012-156-080		C-CAP,S 220P-50 CH
C105	87-010-379-080		CAP, ELECT 22-16V	C248	87-010-178-080		CHIP CAP 1000P
C106	87-010-196-080		CHIP CAPACITOR,0.1-25	C249	87-010-405-080		CAP, ELECT 10-50V
C107	87-010-401-080		CAP, ELECT 1-50V	C250	87-012-156-080		C-CAP,S 220P-50 CH
C108	87-010-322-080		C-CAP,S 100P-50 CH	C251	87-010-405-080		CAP, ELECT 10-50V
C109	87-010-182-080		C-CAP,S 2200P-50 B	C252	87-010-196-080		CHIP CAPACITOR,0.1-25
C110	87-010-182-080		C-CAP,S 2200P-50 B	C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-182-080		C-CAP,S 2200P-50 B	C254	87-010-405-080		CAP, ELECT 10-50V
C112	87-010-384-080		CAP, ELECT 100-25V	C255	87-010-178-080		CHIP CAP 1000P
C113	87-010-196-080		CHIP CAPACITOR,0.1-25	C256	87-010-405-080		CAP, ELECT 10-50V
C114	87-010-263-080		CAP, ELECT 100-10V	C257	87-010-182-080		C-CAP,S 2200P-50 B
C115	87-010-196-080		CHIP CAPACITOR,0.1-25	C258	87-A10-201-080		C-CAP,S0.33-16 KB
C118	87-010-311-080		CAP 12P	C259	87-010-405-080		CAP, ELECT 10-50V
C119	87-010-311-080		CAP 12P	C260	87-010-405-080		CAP, ELECT 10-50V
C120	87-010-401-080		CAP, ELECT 1-50V	C261	87-010-405-080		CAP, ELECT 10-50V
C121	87-010-196-080		CHIP CAPACITOR,0.1-25	C262	87-010-405-080		CAP, ELECT 10-50V
C122	87-010-196-080		CHIP CAPACITOR,0.1-25	C263	87-010-405-080		CAP, ELECT 10-50V
C123	87-010-401-080		CAP, ELECT 1-50V	C264	87-010-169-080		C-CAP,S 180P-50 SL
C124	87-010-196-080		CHIP CAPACITOR,0.1-25	C265	87-010-196-080		CHIP CAPACITOR,0.1-25
C125	87-010-191-080		C-CAP,S 0.015-50 F	C267	87-010-405-080		CAP, ELECT 10-50V
C126	87-010-987-080		C-CAP,S 1500P-50 CH	C268	87-010-196-080		CHIP CAPACITOR,0.1-25
C127	87-010-196-080		CHIP CAPACITOR,0.1-25	C269	87-010-169-080		C-CAP,S 180P-50 SL
C128	87-010-401-080		CAP, ELECT 1-50V	C270	87-010-405-080		CAP, ELECT 10-50V
C129	87-010-384-080		CAP, ELECT 100-25V	C271	87-010-196-080		CHIP CAPACITOR,0.1-25
C130	87-010-196-080		CHIP CAPACITOR,0.1-25	C272	87-010-196-080		CHIP CAPACITOR,0.1-25
C131	87-010-263-080		CAP, ELECT 100-10V	C273	87-010-314-080		C-CAP,S 22P-50V
C132	87-010-196-080		CHIP CAPACITOR,0.1-25	C274	87-010-196-080		CHIP CAPACITOR,0.1-25
C133	87-010-263-080		CAP, ELECT 100-10V	C275	87-010-196-080		CHIP CAPACITOR,0.1-25
C134	87-010-196-080		CHIP CAPACITOR,0.1-25	C276	87-010-405-080		CAP, ELECT 10-50V
C135	87-010-196-080		CHIP CAPACITOR,0.1-25	C277	87-010-196-080		CHIP CAPACITOR,0.1-25
C136	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C278	87-010-196-080		CHIP CAPACITOR,0.1-25
C137	87-010-196-080		CHIP CAPACITOR,0.1-25	C279	87-010-196-080		CHIP CAPACITOR,0.1-25
C138	87-010-263-080		CAP, ELECT 100-10V	C280	87-010-314-080		C-CAP,S 22P-50V
C139	87-010-263-080		CAP, ELECT 100-10V	C281	87-010-401-080		CAP, ELECT 1-50V
C140	87-010-196-080		CHIP CAPACITOR,0.1-25	C282	87-010-405-080		CAP, ELECT 10-50V
C141	87-010-263-080		CAP, ELECT 100-10V	C283	87-010-405-080		CAP, ELECT 10-50V
C142	87-010-196-080		CHIP CAPACITOR,0.1-25	C301	87-012-393-080		C-CAP,S 0.22-16 R K
C143	87-010-196-080		CHIP CAPACITOR,0.1-25	C302	87-012-393-080		C-CAP,S 0.22-16 R K
C145	87-010-196-080		CHIP CAPACITOR,0.1-25	C303	87-010-196-080		CHIP CAPACITOR,0.1-25
C146	87-010-196-080		CHIP CAPACITOR,0.1-25	C304	87-012-393-080		C-CAP,S 0.22-16 R K
C147	87-010-263-080		CAP, ELECT 100-10V	C305	87-010-184-080		CHIP CAPACITOR 3300P(K)
C154	87-010-401-080		CAP, ELECT 1-50V	C306	87-010-183-080		C-CAP,S 2700P-50 B
C201	87-010-401-080		CAP, ELECT 1-50V	C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C202	87-010-316-080		C-CAP,S 33P-50 CH	C308	87-010-196-080		CHIP CAPACITOR,0.1-25
C203	87-010-196-080		CHIP CAPACITOR,0.1-25	C309	87-010-184-080		CHIP CAPACITOR 3300P(K)
C205	87-010-405-080		CAP, ELECT 10-50V	C310	87-010-183-080		C-CAP,S 2700P-50 B
C206	87-010-196-080		CHIP CAPACITOR,0.1-25	C311	87-012-393-080		C-CAP,S 0.22-16 R K
C208	87-A10-369-080		C-CAP,S 0.47-16 K B	C312	87-010-374-080		CAP, ELECT 47-10V
C209	87-010-316-080		C-CAP,S 33P-50 CH	C313	87-010-196-080		CHIP CAPACITOR,0.1-25
C210	87-010-405-080		CAP, ELECT 10-50V	C315	87-010-404-080		CAP, ELECT 4.7-50V
C221	87-012-156-080		C-CAP,S 220P-50 CH	C316	87-010-404-080		CAP, ELECT 4.7-50V
C225	87-010-178-080		CHIP CAP 1000P	C317	87-010-183-080		C-CAP,S 2700P-50 B
C226	87-010-405-080		CAP, ELECT 10-50V	C318	87-010-183-080		C-CAP,S 2700P-50 B
C227	87-012-156-080		C-CAP,S 220P-50 CH	C319	87-010-545-080		CAP, ELECT 0.22-50V
C228	87-010-178-080		CHIP CAP 1000P	C320	87-010-196-080		CHIP CAPACITOR,0.1-25
C229	87-010-405-080		CAP, ELECT 10-50V	CN101	87-099-563-010		CONN,20P TUC-P20X-B1
C231	87-012-156-080		C-CAP,S 220P-50 CH	CN102	87-A60-190-010		CONN,16P H TUC-P16X-B1
C232	87-010-405-080		CAP, ELECT 10-50V	FB101	87-008-372-080		FILTER, EMI BL OIRNI
C233	87-010-196-080		CHIP CAPACITOR,0.1-25	FB102	87-008-372-080		FILTER, EMI BL OIRNI
				FB103	87-008-372-080		FILTER, EMI BL OIRNI
				FB105	87-008-372-080		FILTER, EMI BL OIRNI

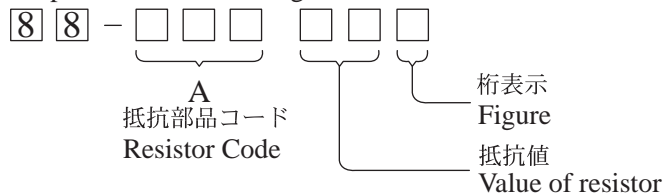


- Regarding connectors, they are not stocked as they are not the initial order items.  
The connectors are available after they are supplied from connector manufacturers upon the order is received.

○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

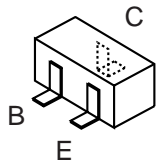
Chip Resistor Part Coding



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



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

DTA144WK  
DTC124EK  
RN1410  
RT1N141C  
RT1N144C  
RT1P141C  
RT1P144C



E C B

2SA1296  
CC5551  
CSD1489  
DTC114ES  
KTA1266GR  
KTA1267GR  
KTC3198GR



BCE

DTA114YS



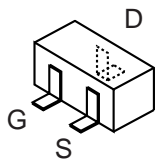
BCE

2SB1370  
2SB1375  
FN 1016  
FP 1016  
KTC3199GR



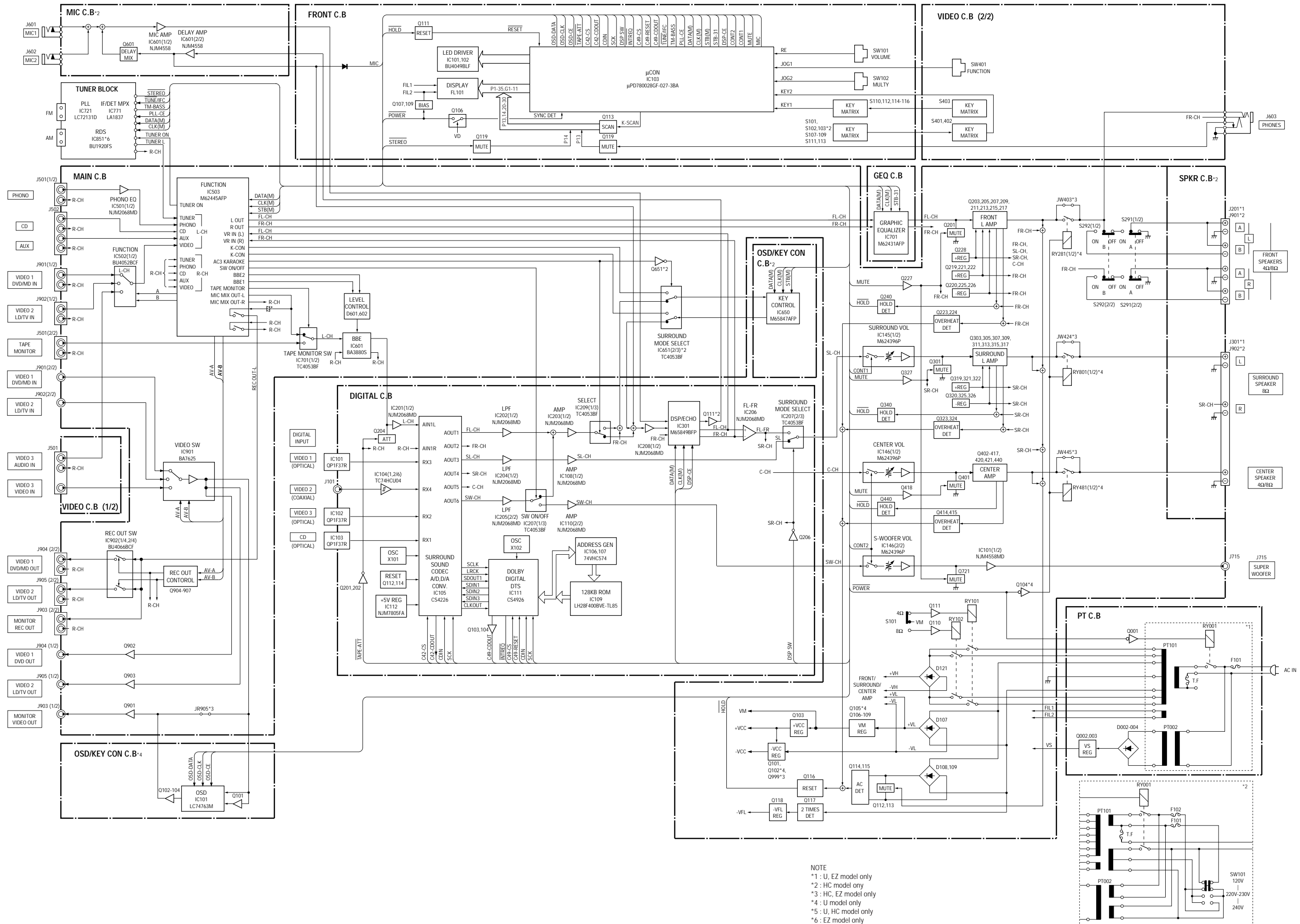
E C B

2SC4115



2SK2158  
2SK2937

# BLOCK DIAGRAM



NOTE  
 \*1 : U, EZ model only  
 \*2 : HC model only  
 \*3 : HC, EZ model only  
 \*4 : U model only  
 \*5 : U, HC model only  
 \*6 : EZ model only

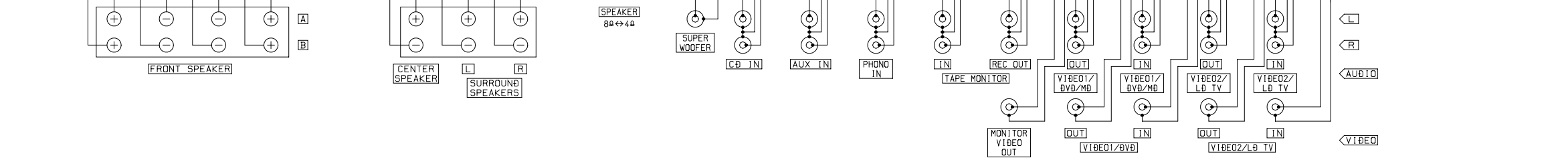
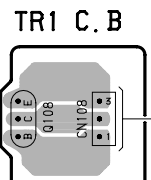
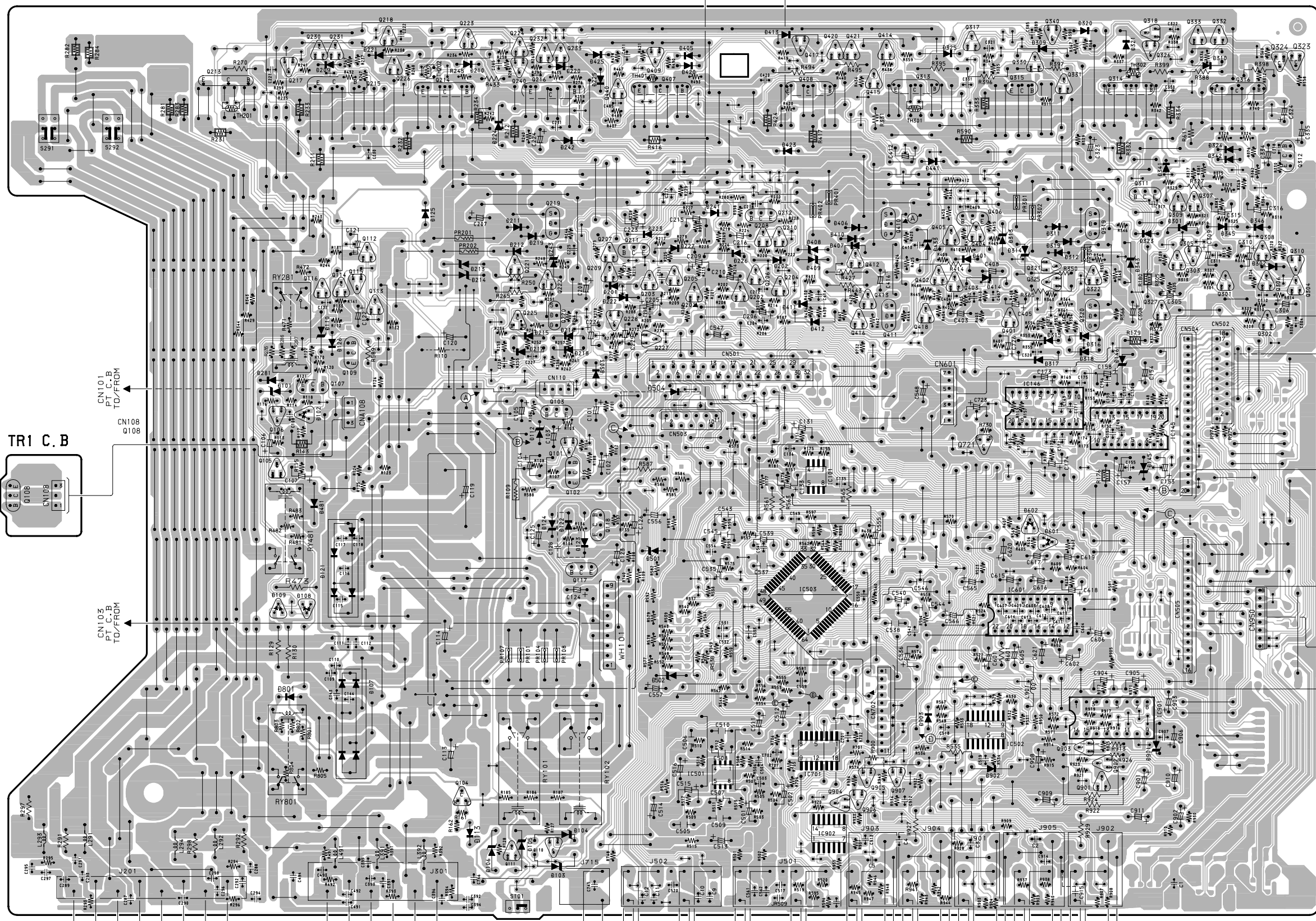
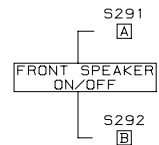


WIRING-1 (MAIN)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

MAIN C. B (U MODEL)

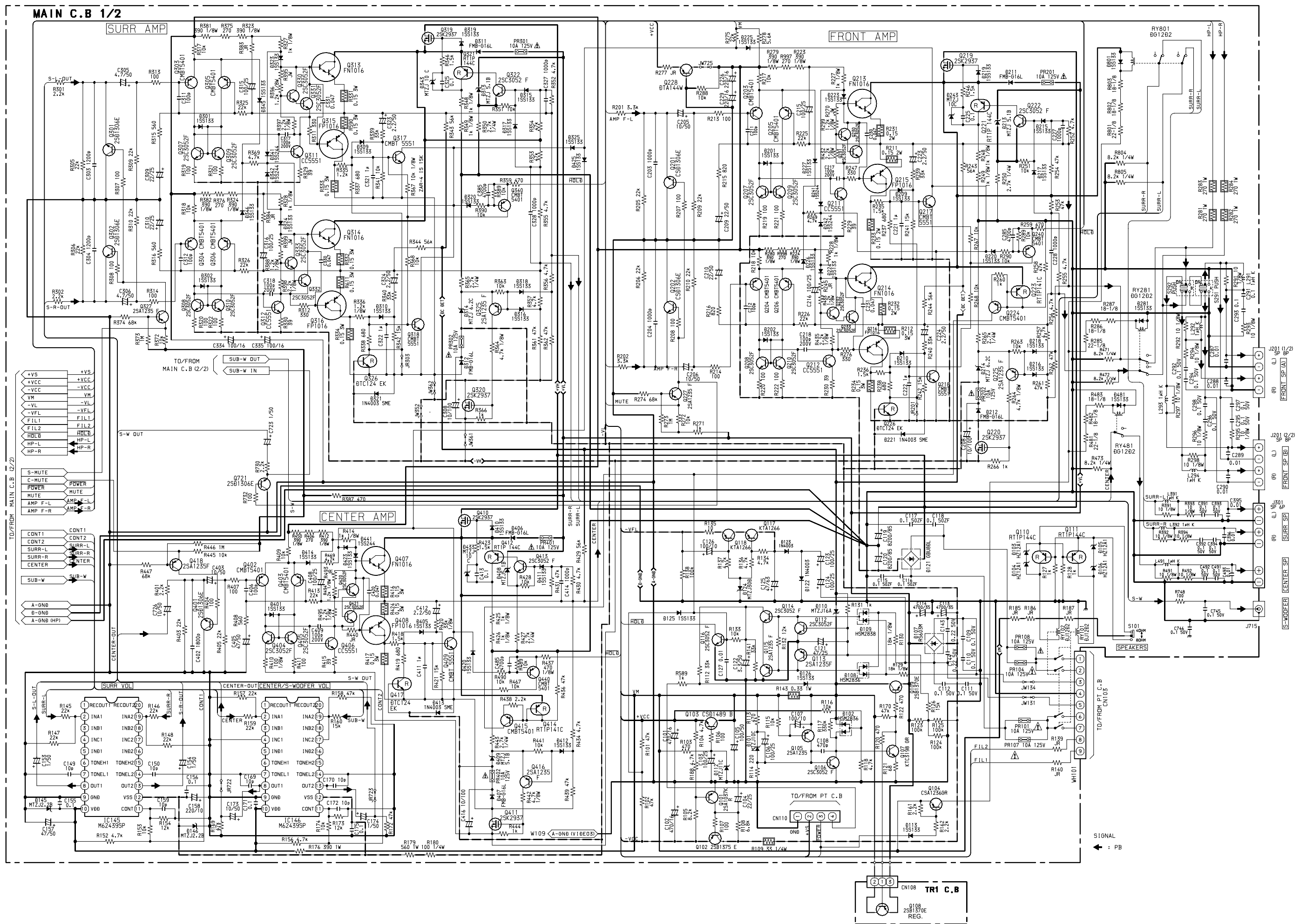
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K



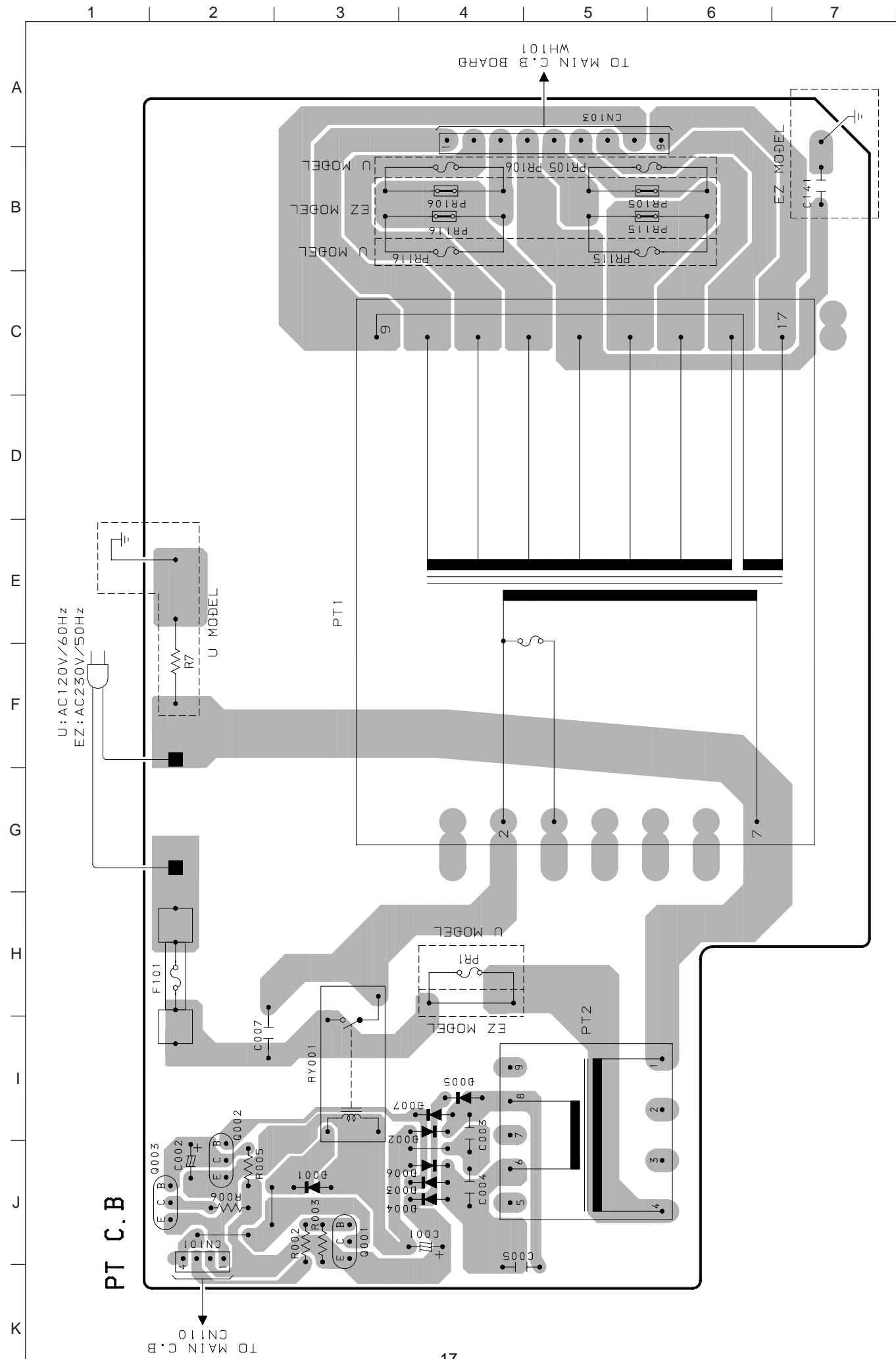
TO/FROM TUNER C.B CN601  
TO/FROM FRONT C.B CN202

CN702 GEO C.B TO/FROM  
CN203 FRONT C.B TO/FROM  
CN101 DIGITAL C.B TO/FROM  
CN102 DIGITAL C.B TO/FROM  
CN510 GEO C.B TO/FROM  
OSB/KED C.B TO/FROM

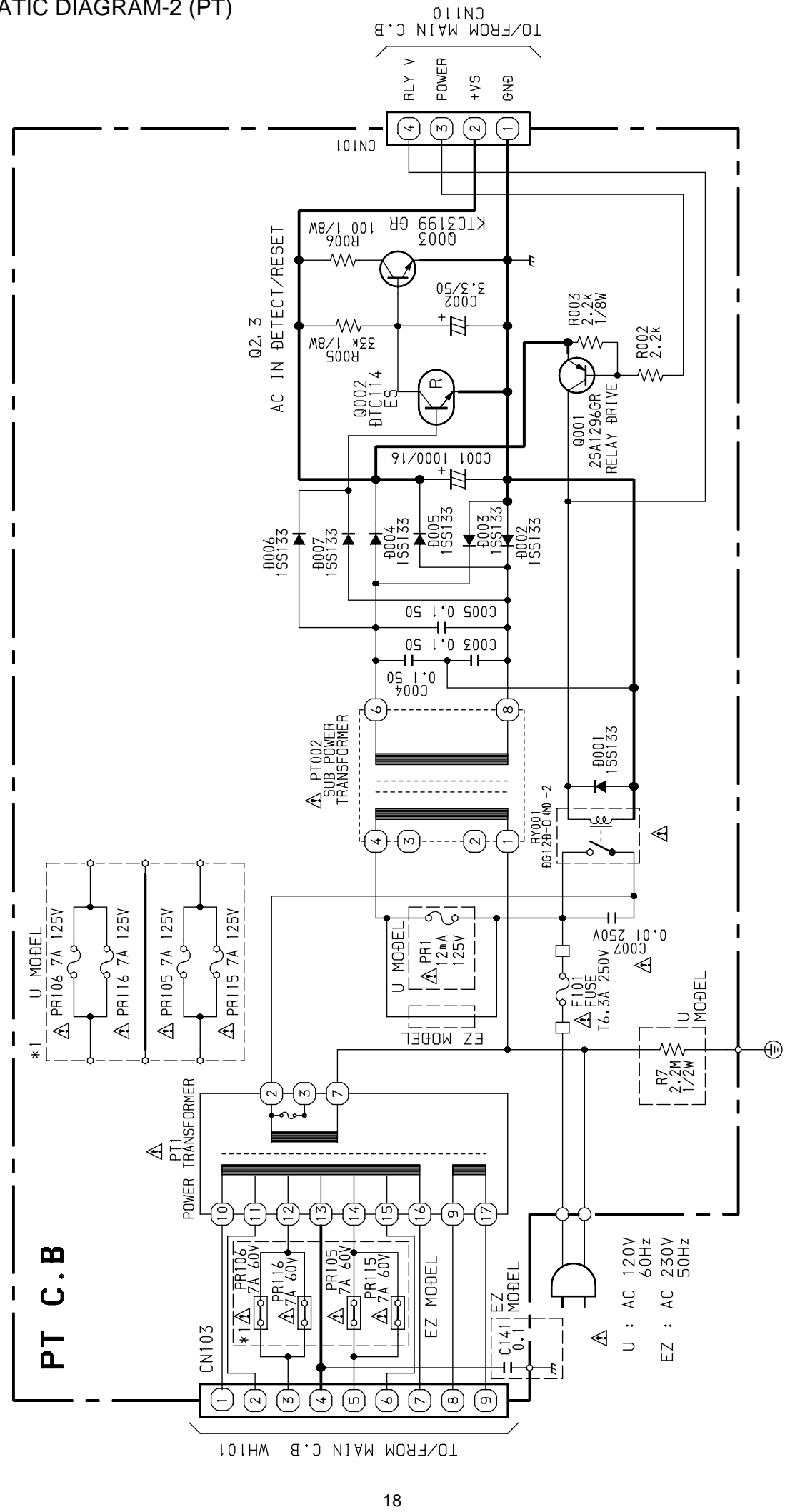




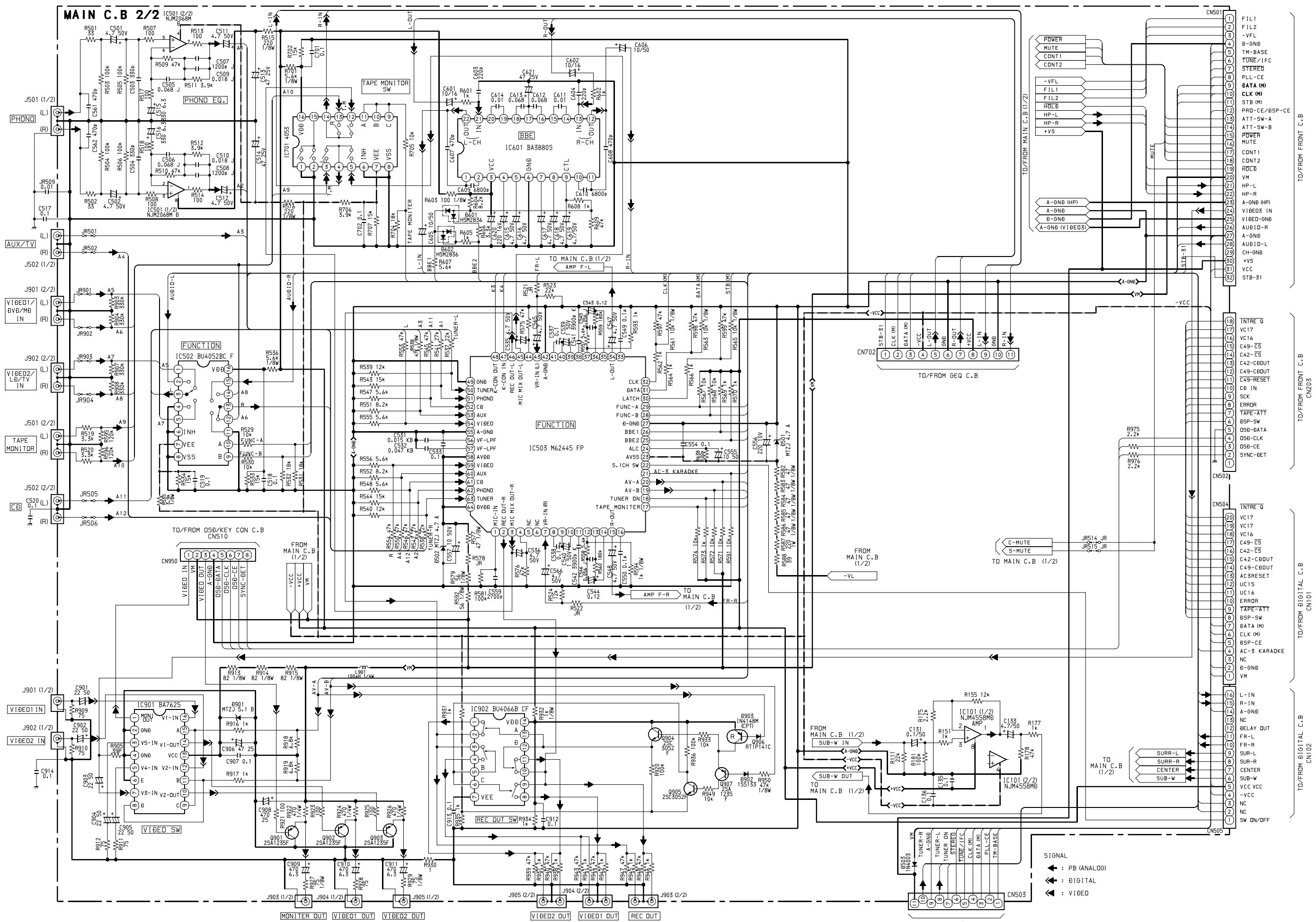
WIRING-2 (PT)



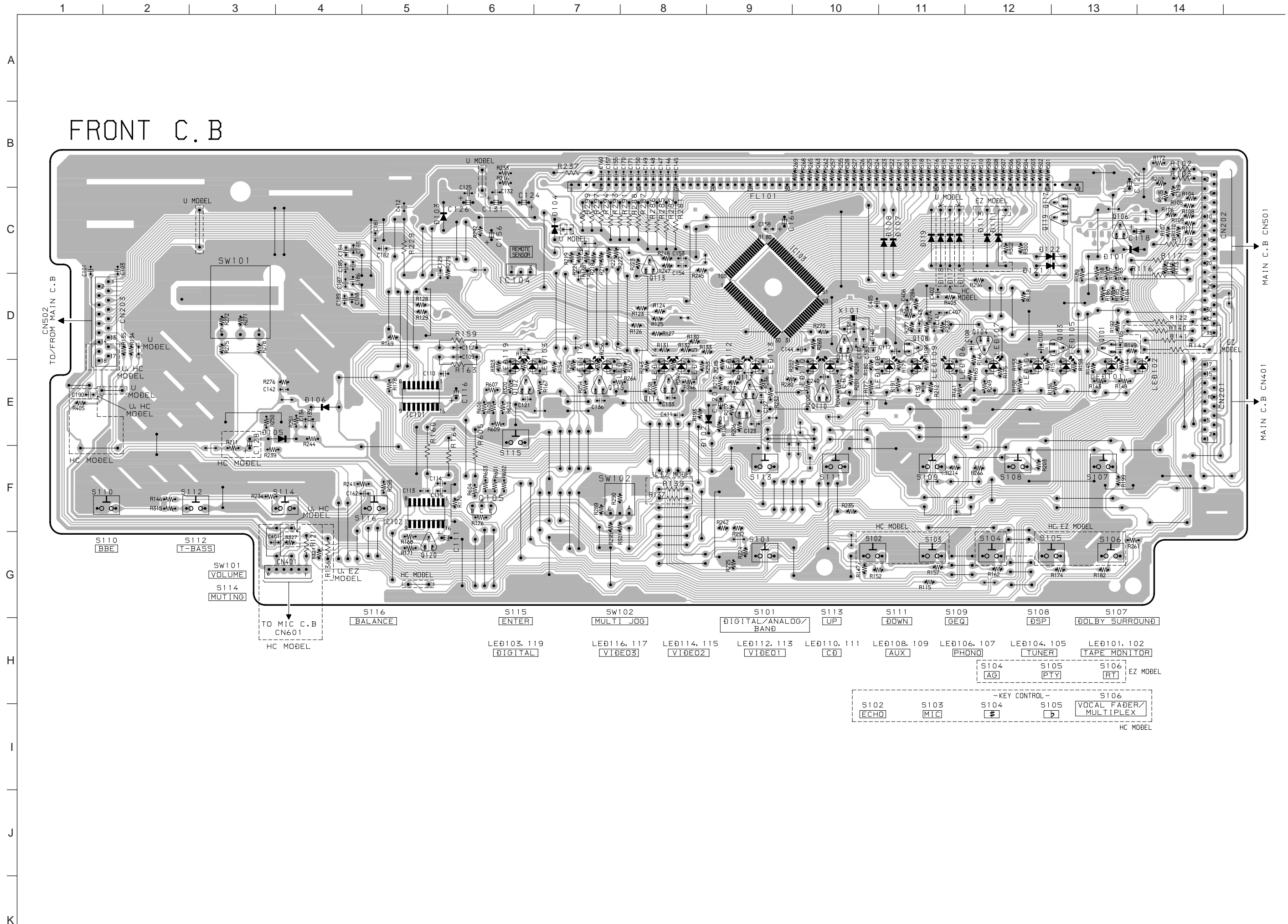
SCHEMATIC DIAGRAM-2 (PT)



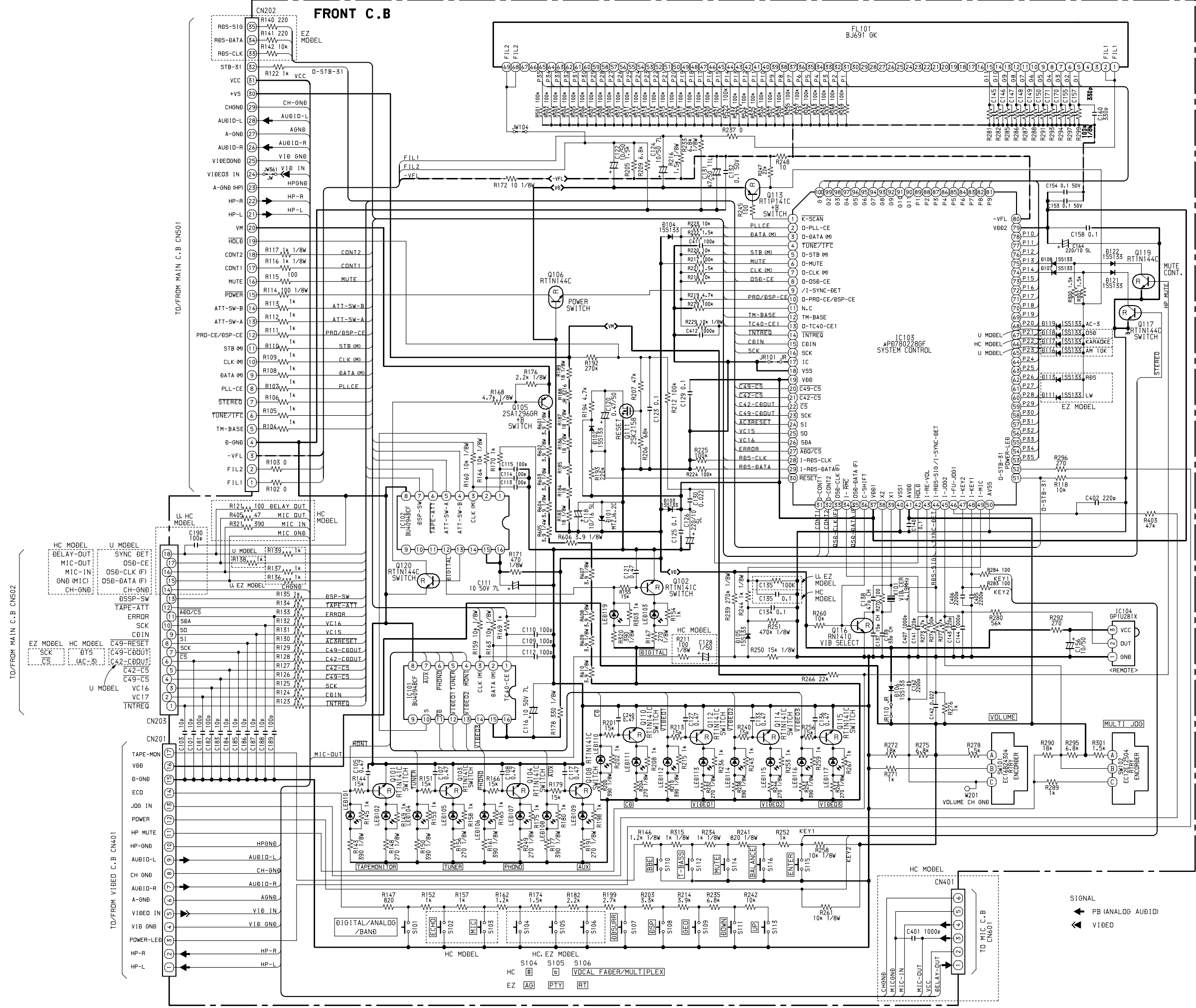
SCHEMATIC DIAGRAM-3 (MAIN 2/2)



WIRING-3 (FRONT)



SCHEMATIC DIAGRAM-4 (FRONT)





A

B

C

D

E

F

G

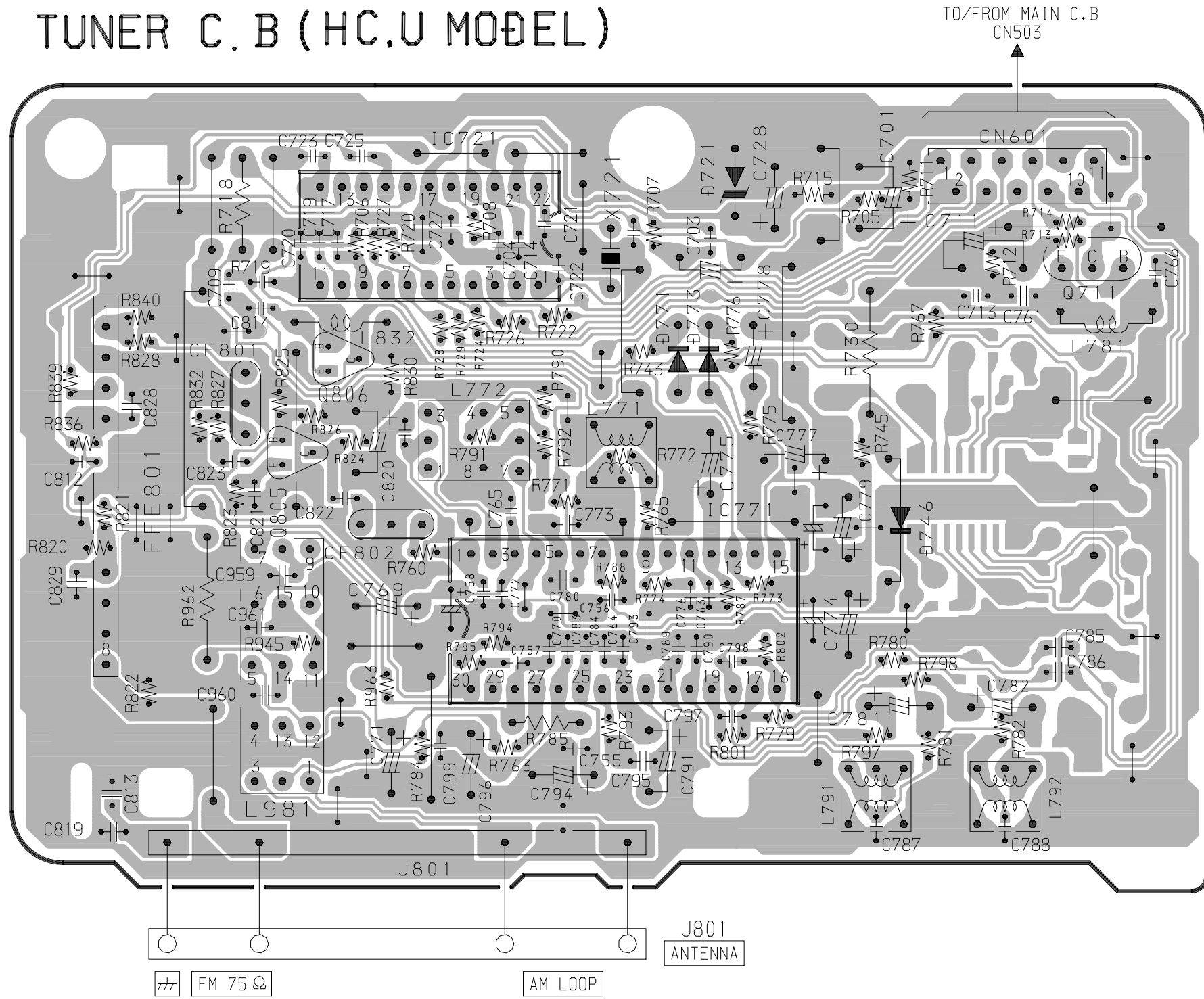
H

I

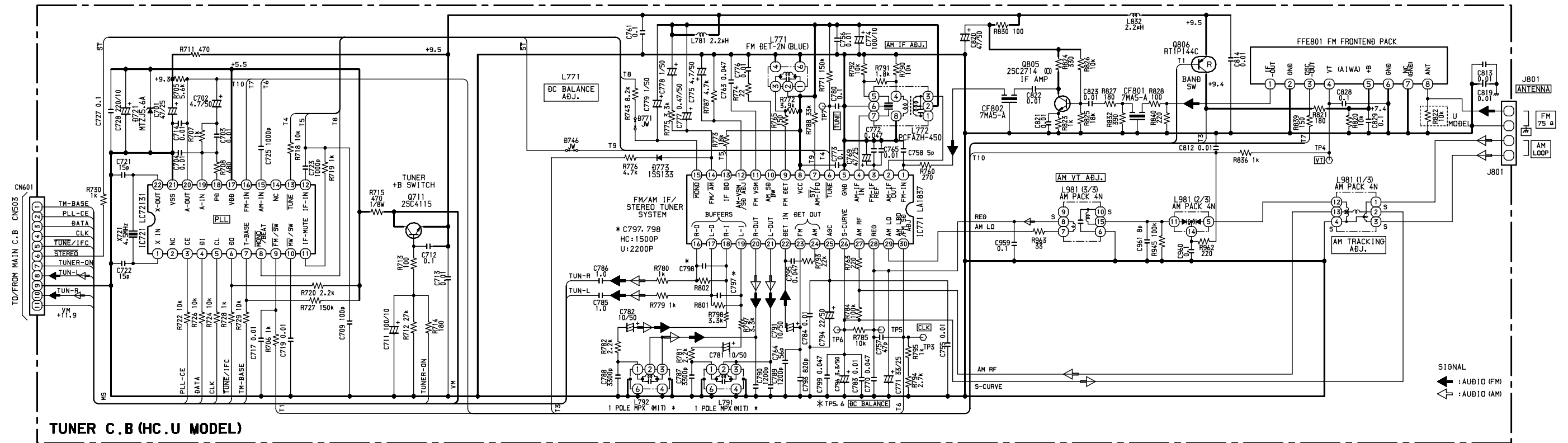
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K

# TUNER C. B (H.C.U MODEL)



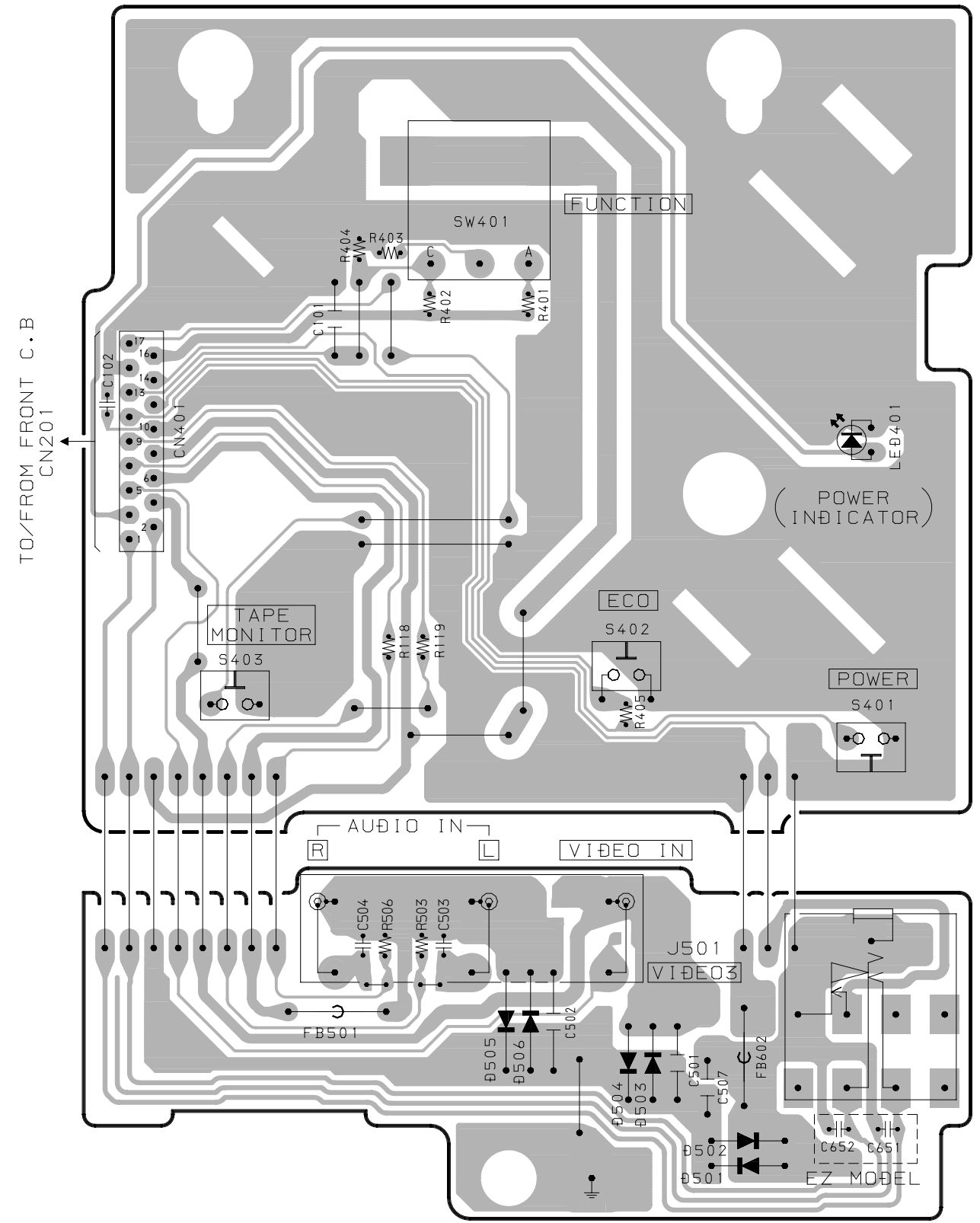
SCHEMATIC DIAGRAM-5 (TUNER)



1 2 3 4 5 6 7 8 9 10 11 12 13 14

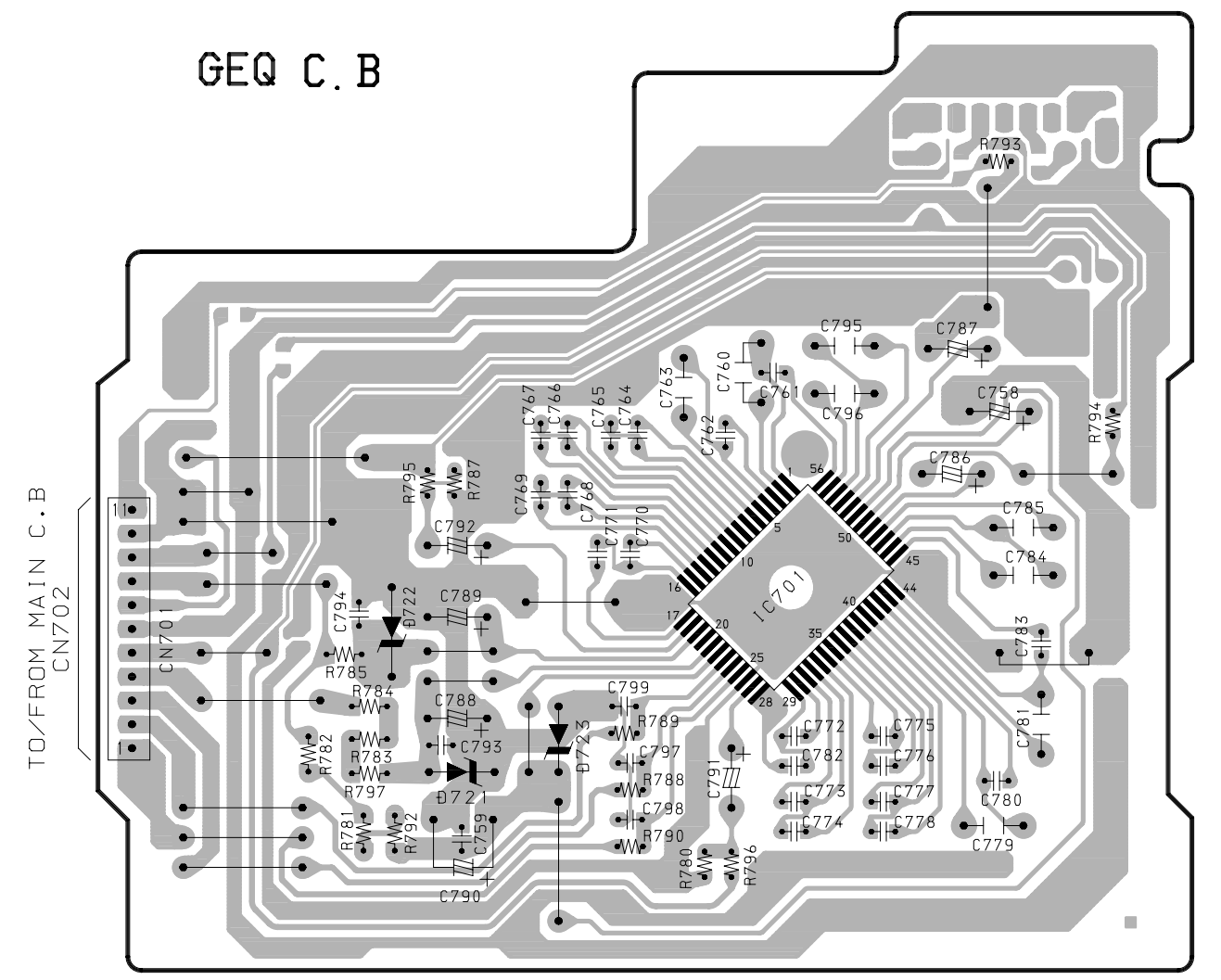
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K

VIDEO C. B

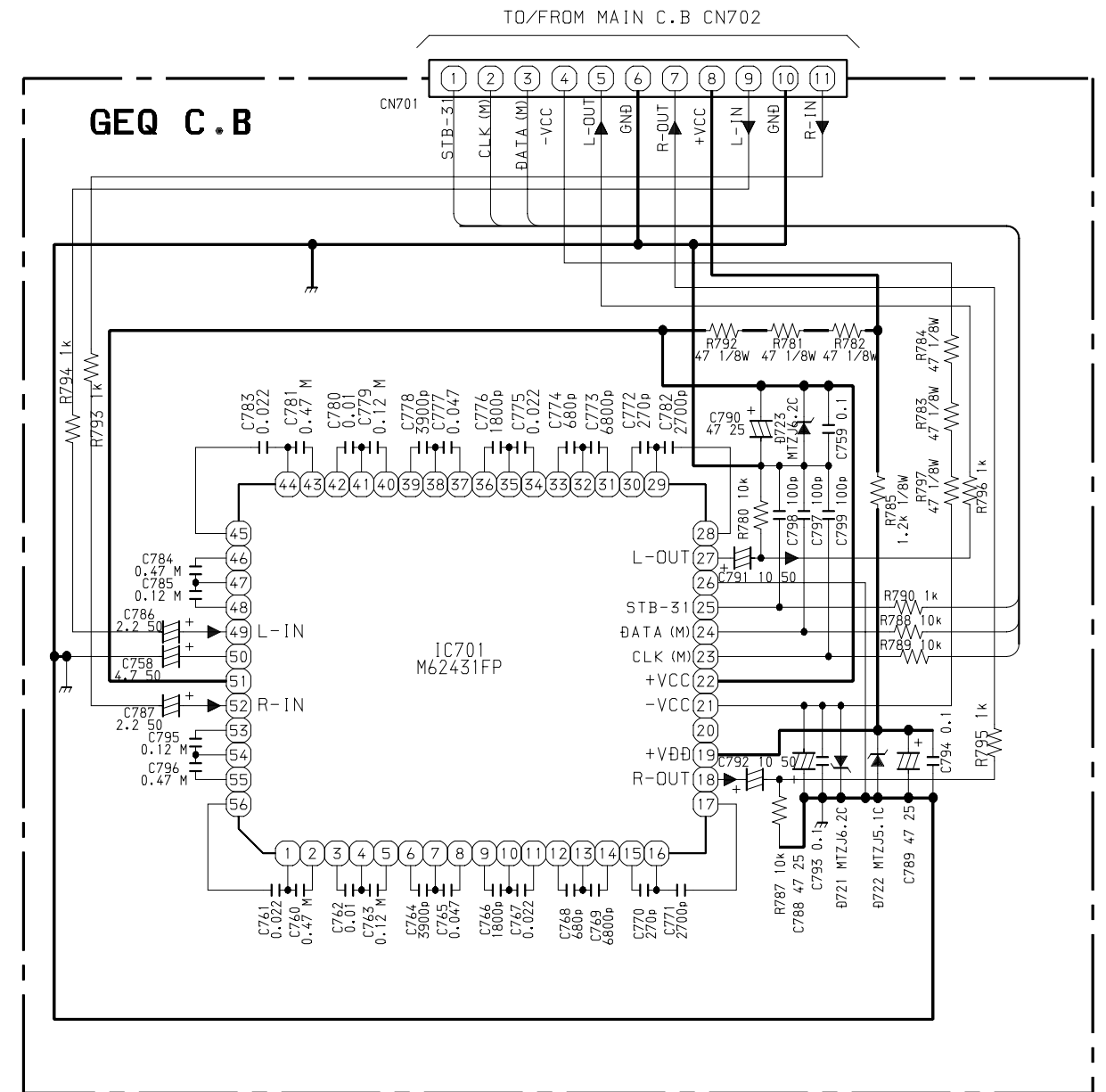
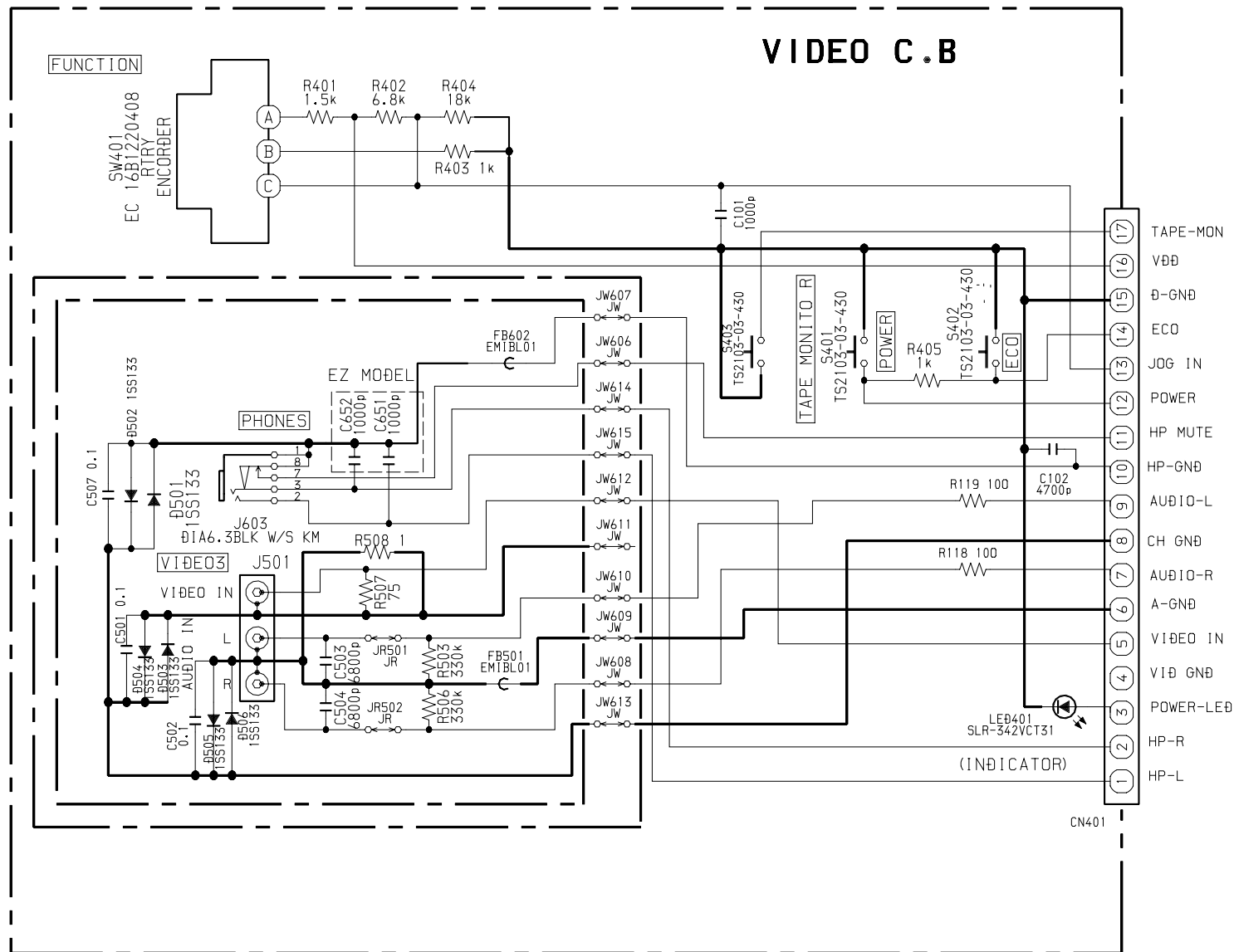


J603  
PHONES

GEQ C. B



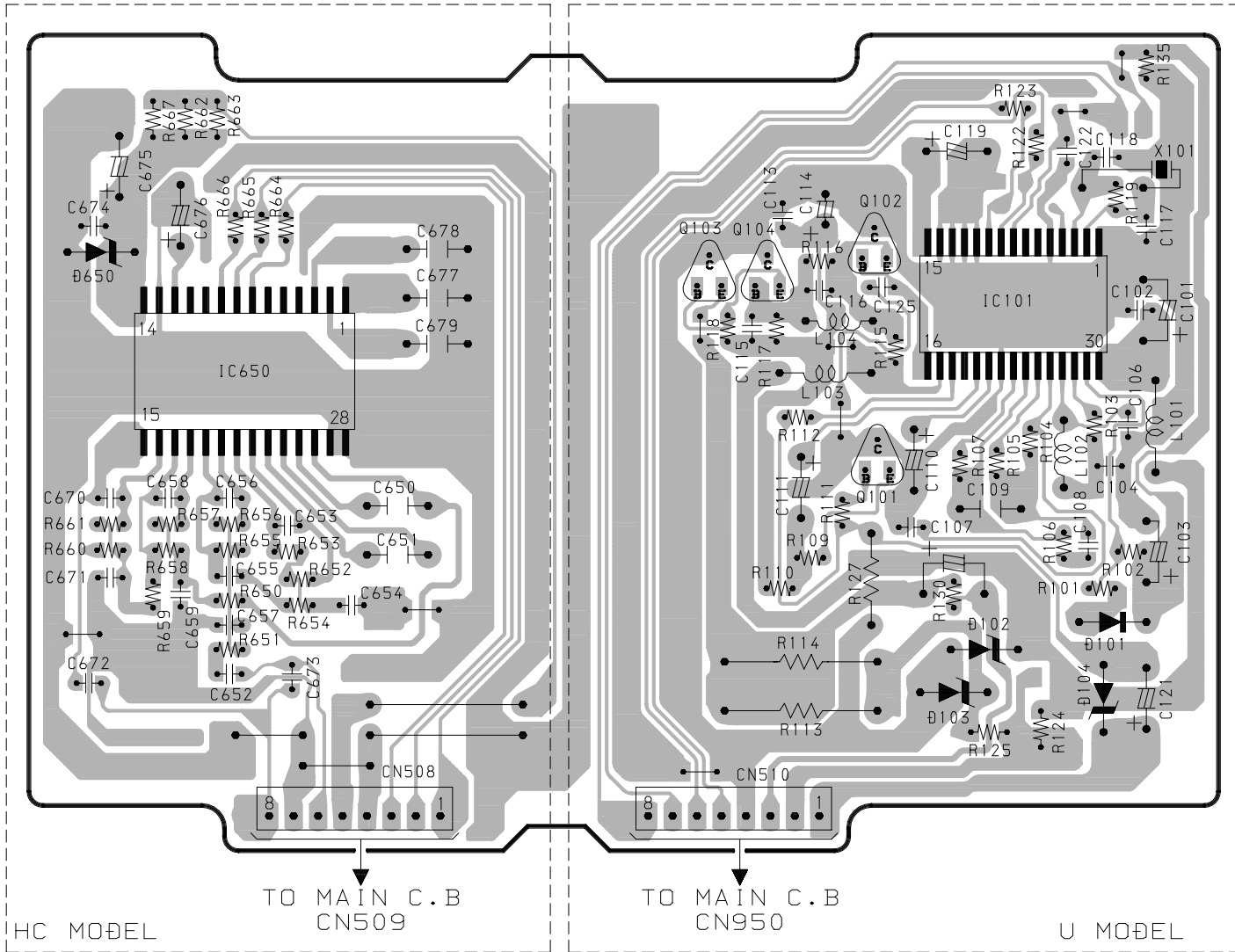




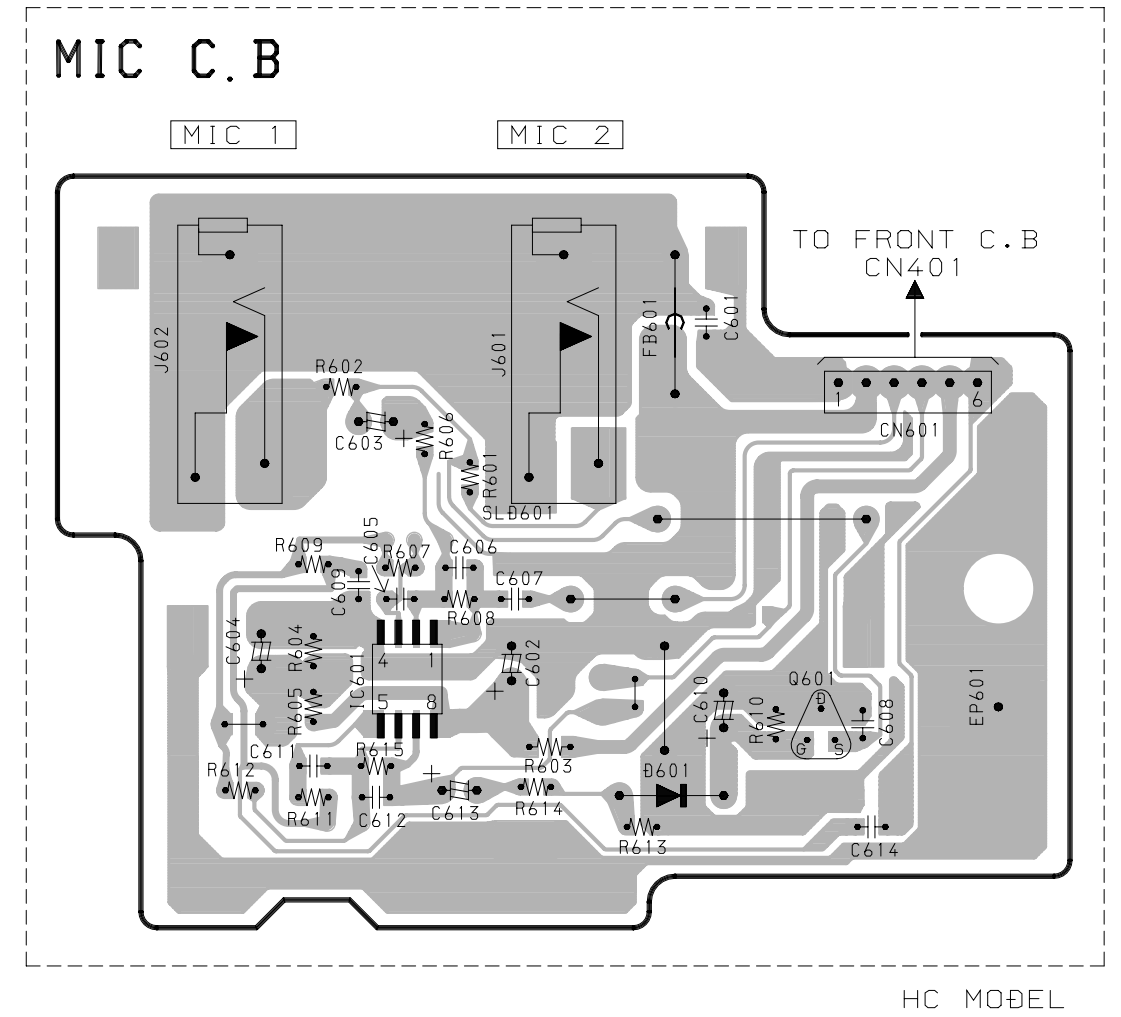
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K

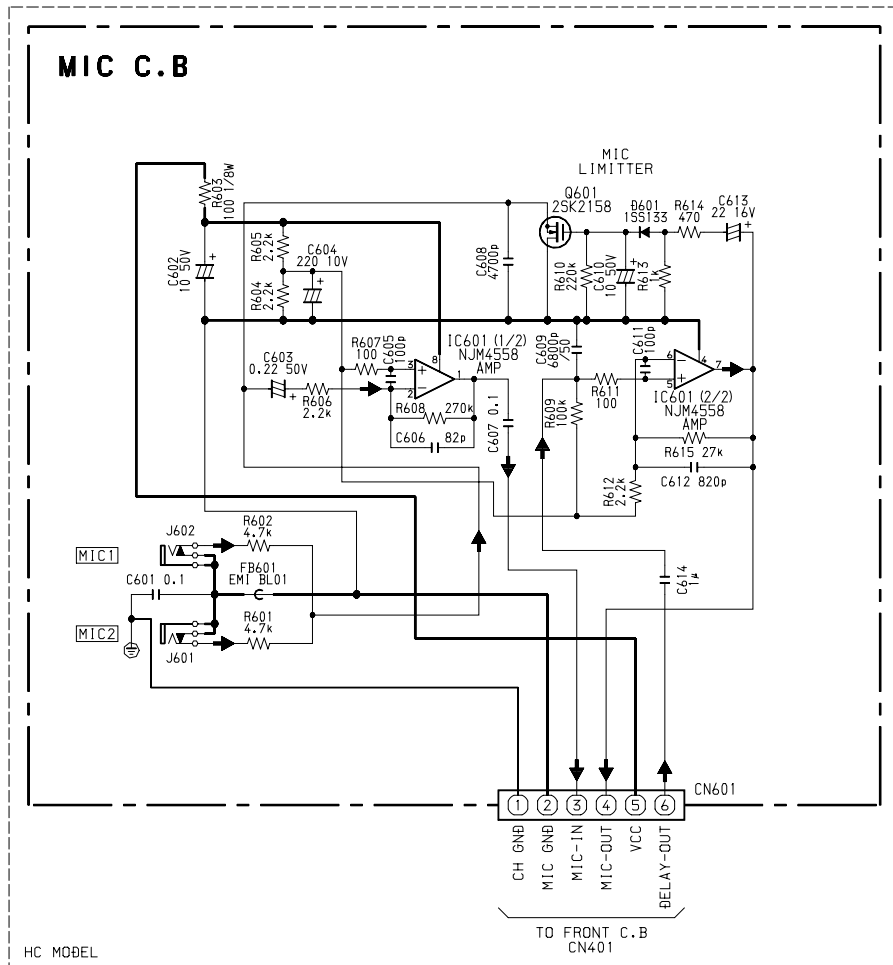
OSD/KEY CON C.B



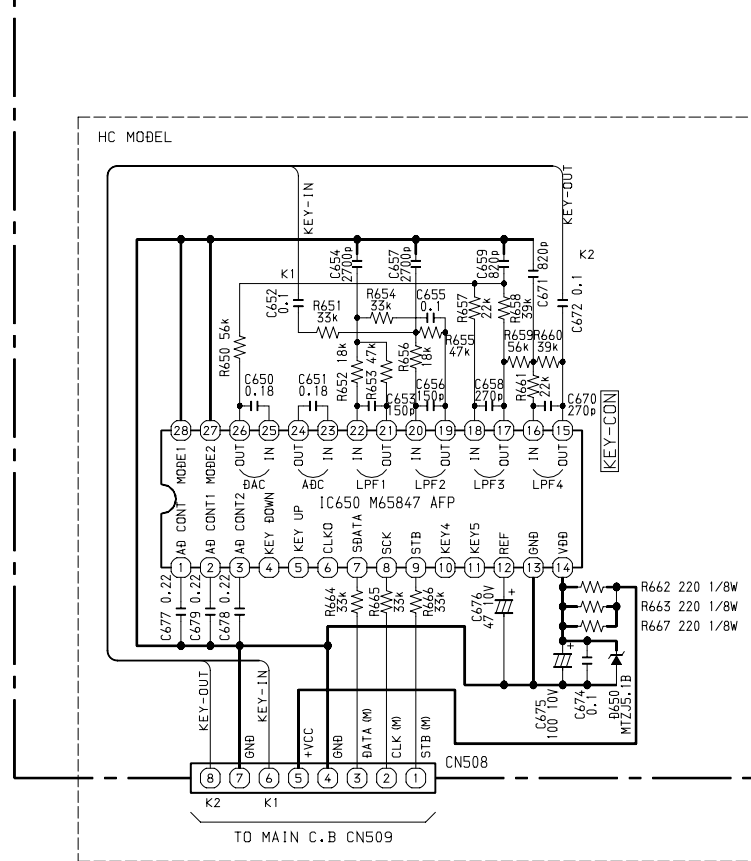
MIC C.B



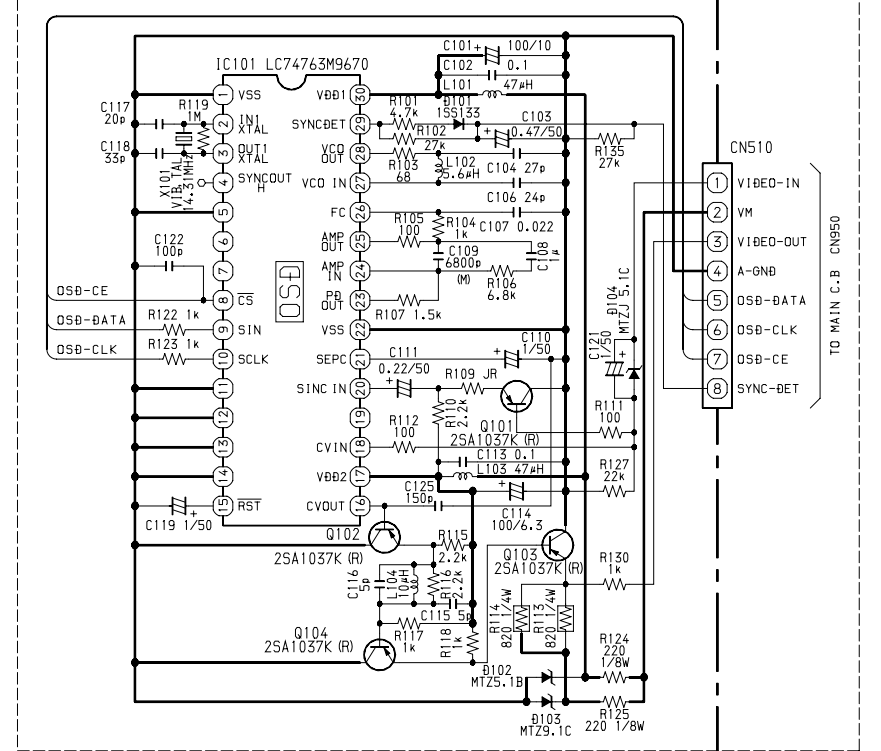
SCHEMATIC DIAGRAM-7 (OSD/KEY CONTROL)



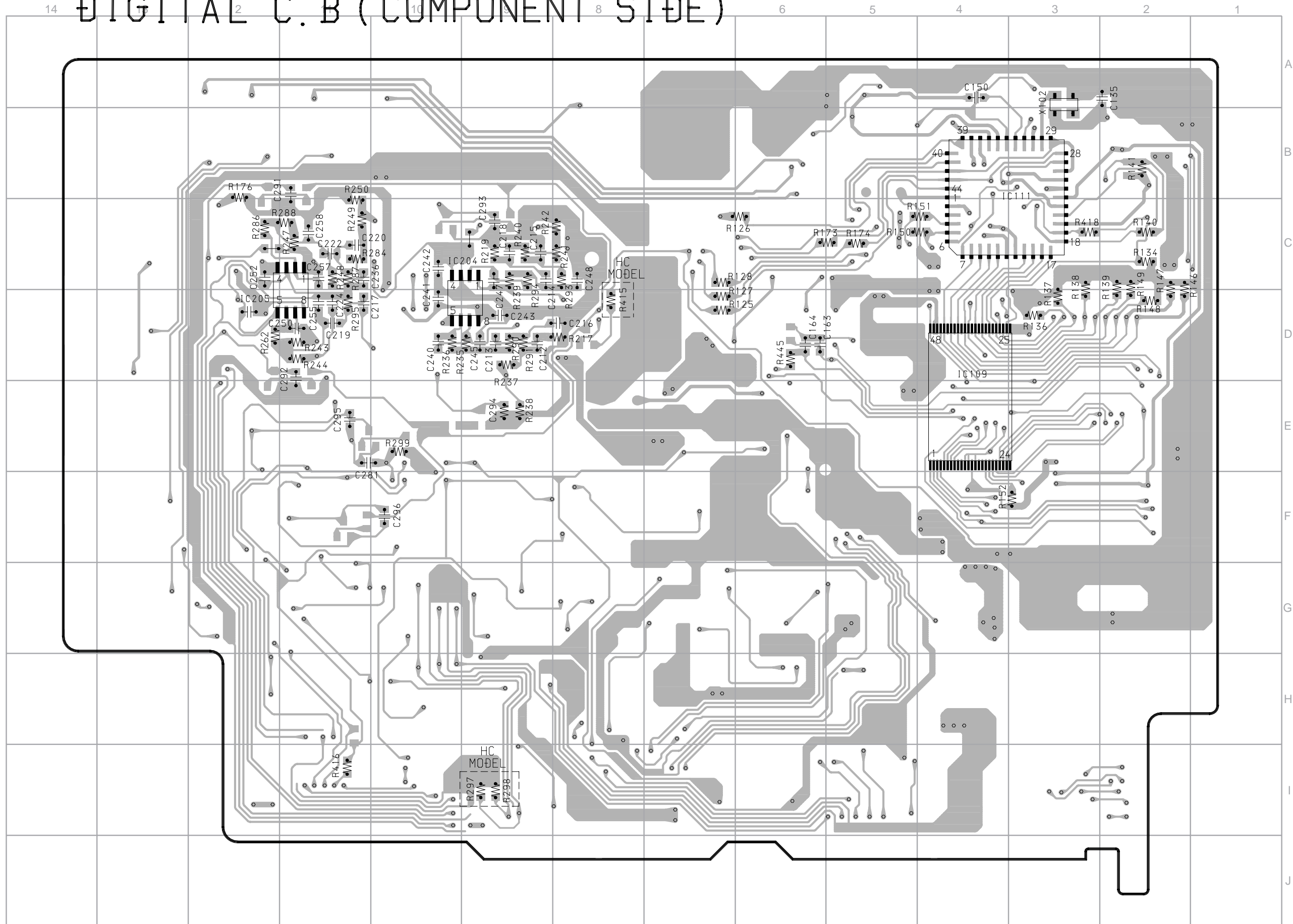
### OSD/KEY CON C.B



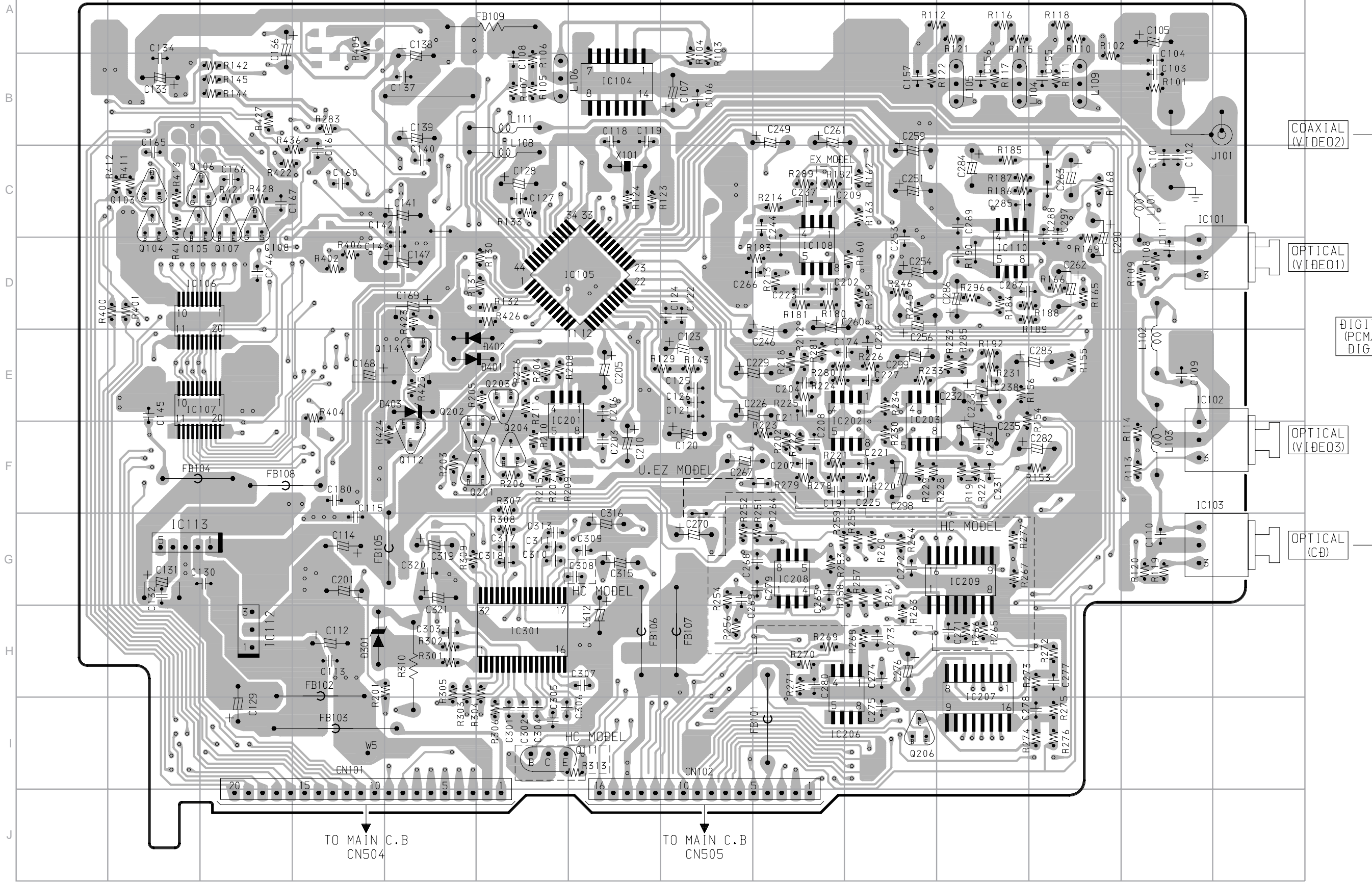
### U MODEL



# DIGITAL C.B (COMPONENT SIDE)



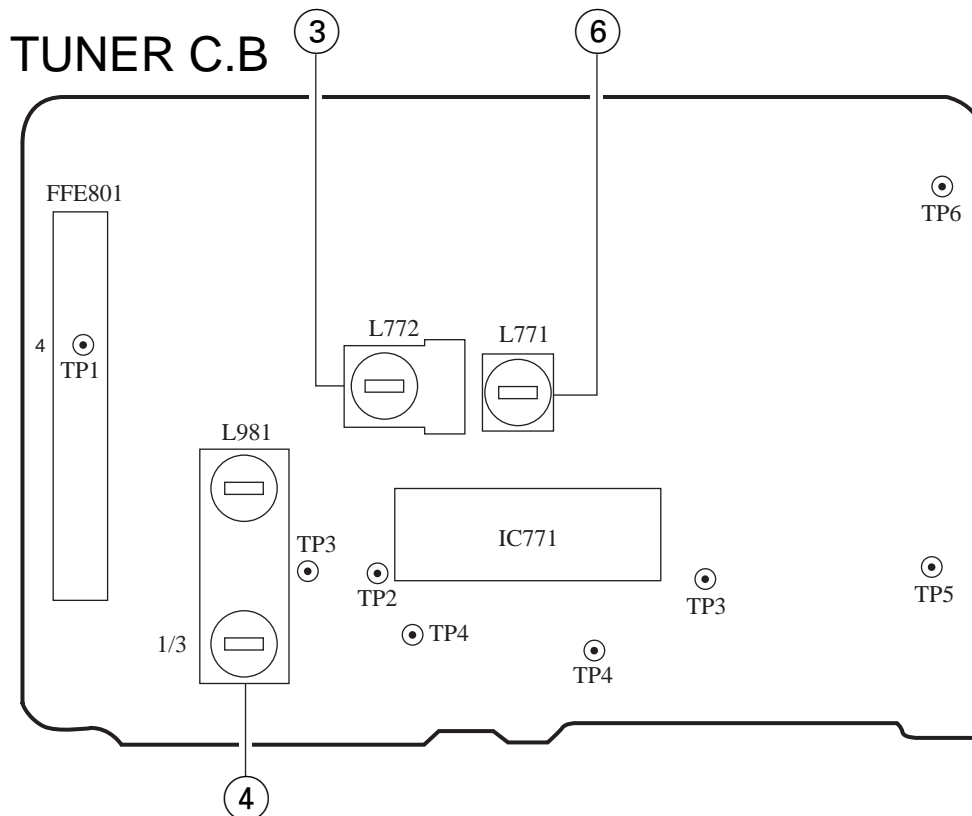
# DIGITAL C.B (CONDUCTOR SIDE)







# ELECTRICAL ADJUSTMENT



## < TUNER SECTION >

1. Clock Frequency Check
  - Settings: • Test point: TP2 (CLK IC770 pin30)
  - Method: Set to AM 1602kHz and check that the test point becomes 2052kHz±45Hz.
  
2. AM VT Check
  - Settings: • Test point: TP1 (VT)
  - Method: Set to AM 1710kHz and check that the test point is less than 8.5V. Then set to AM 530kHz and check that the test point is more than 0.6V.
  
3. AM IF Adjustment
  - Settings: • Test point: TP5, TP6
  - L772 ..... 450kHz
  
4. AM Tracking Adjustment
  - Settings: • Test point: TP5, TP6
  - Adjustment location: L981 (1/3)
  - Method: Set to AM 999kHz and adjust L981 so that the test point becomes maximum.
  
5. FM VT Check
  - Settings: • Test point: TP1 (VT)
  - Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).
  
6. DC Balance/Mono Distortion Adjustment
  - Settings: • Test point: TP3, TP4
  - Adjustment location: L771
  - Input level: 60dB
  - Method: Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V±0.04V. Next, check that the distortion is less than 1.3%.

## PRACTICAL SERVICE FIGURE

### < TUNER SECTION >

#### <FM SECTION>

Signal to noise ratio:	More than 62dB (at 98.0MHz)
Distortion: (Input: 60dB)	Less than 2.0% (at 98.0MHz)
Stereo separation:	More than 22dB (at 98.0MHz)
Intermediate frequency:	10.7MHz

#### <AM SECTION>

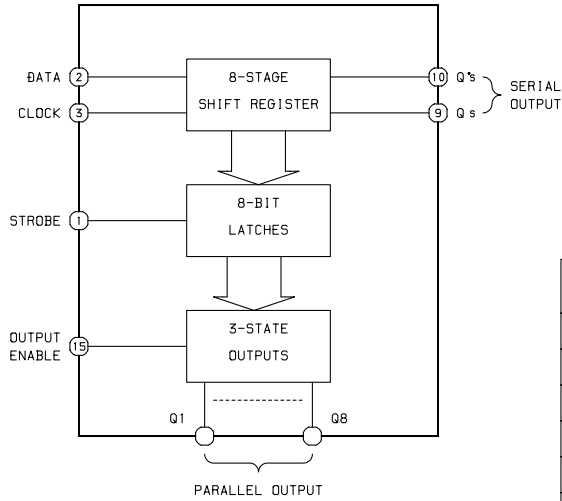
Sensitivity: (S/N 20dB)	Less than 60dB (at 600kHz) Less than 58dB (at 1000/1400kHz)
Signal to noise ratio: (Input: 74dB)	More than 36dB (at 1000kHz)
Distortion:	Less than 1.5% (at 1000kHz)
Intermediate frequency:	450kHz





# IC BLOCK DIAGRAM

## IC, BU4094BCF

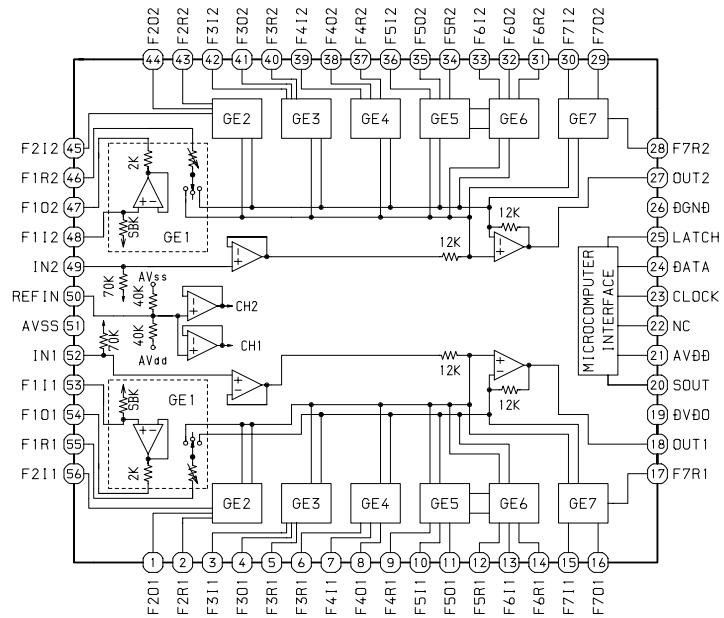


TRUTH TABLE

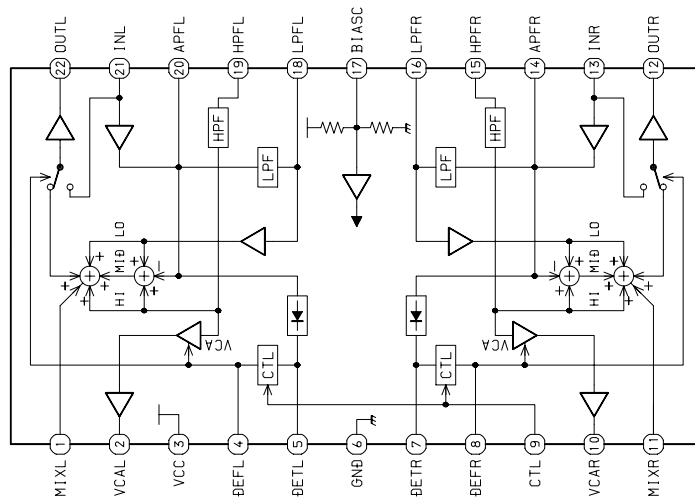
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
	L	X	X	Z	Z	Q7	NO Chg.
	L	X	X	Z	Z	No Chg.	Qs
	H	L	X	No Chg.	No Chg.	Q7	No Chg.
	H	H	L	L	Qn-1	Q7	No Chg.
	H	H	H	H	Qn-1	Q7	No Chg.
	H	X	X	No Chg.	No Chg.	No Chg.	Qs

Z=High Impedance  
X=Don't Care

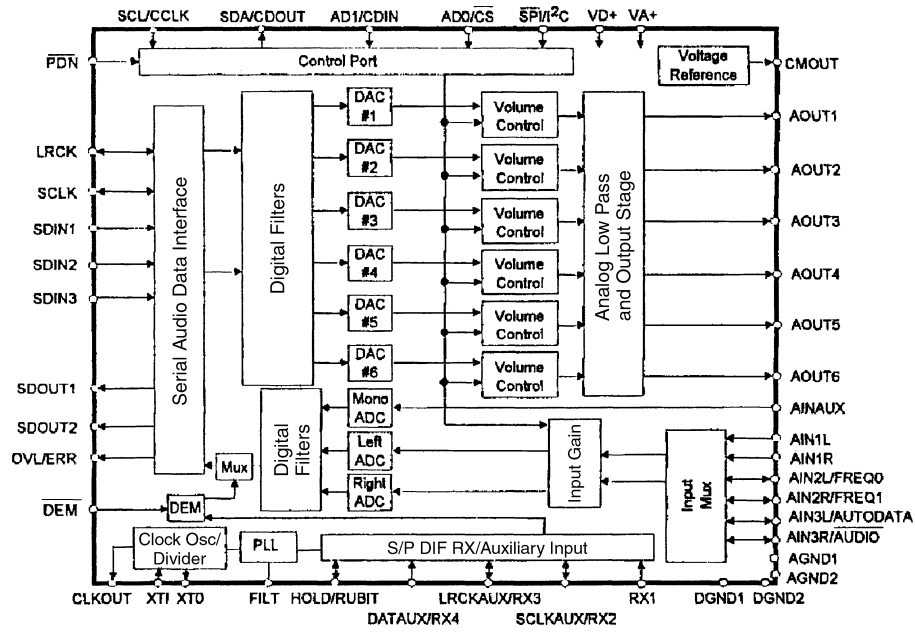
## IC, M62431FP



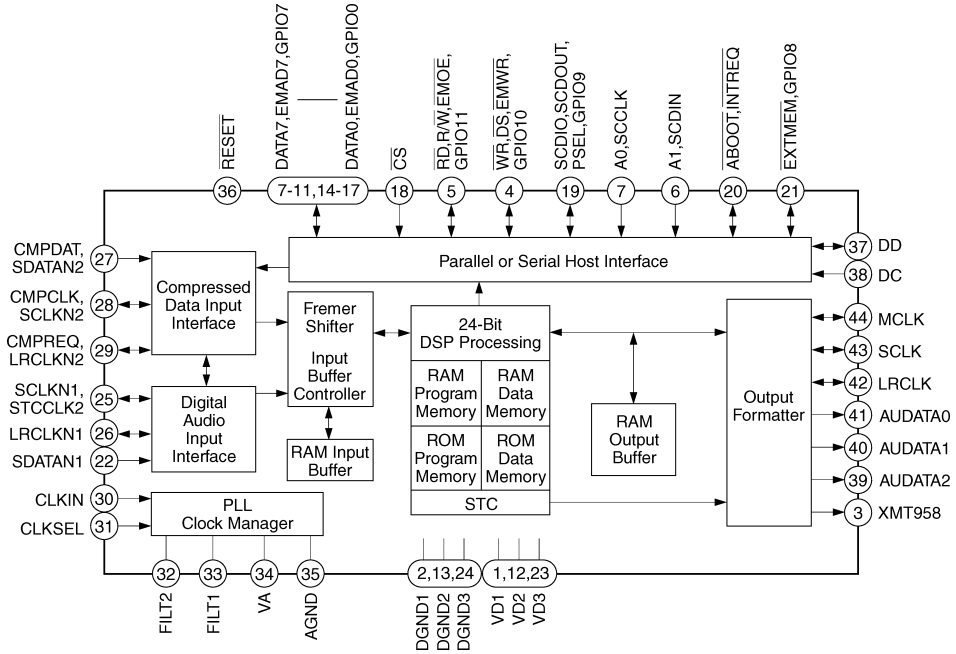
## IC, BA3880S



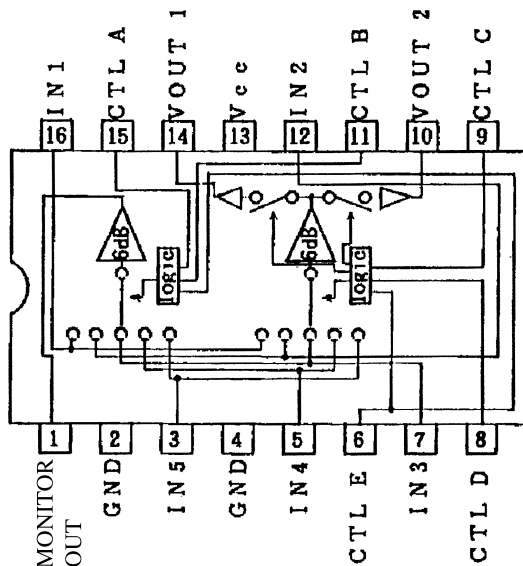
IC, CS4226



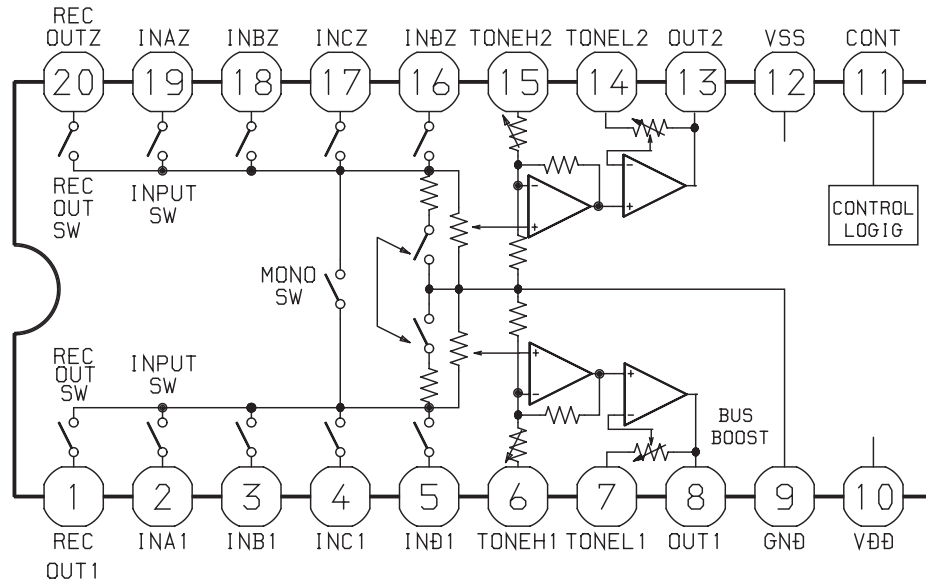
IC, CS4926



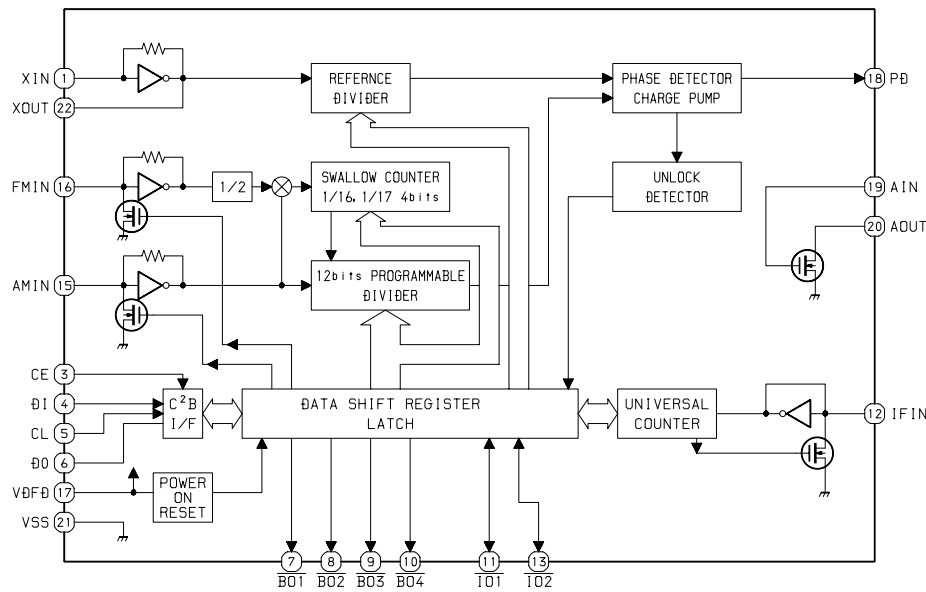
IC, BA7625



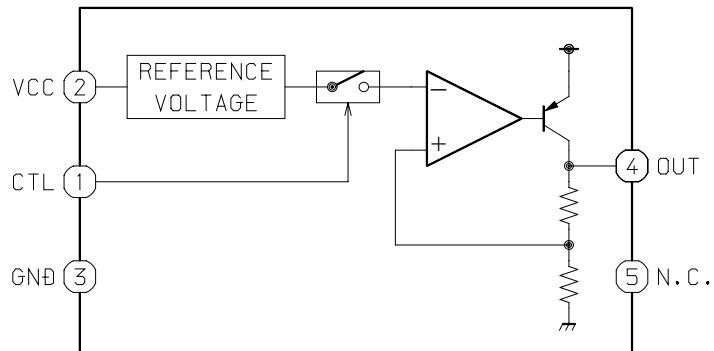
IC, M62439SP



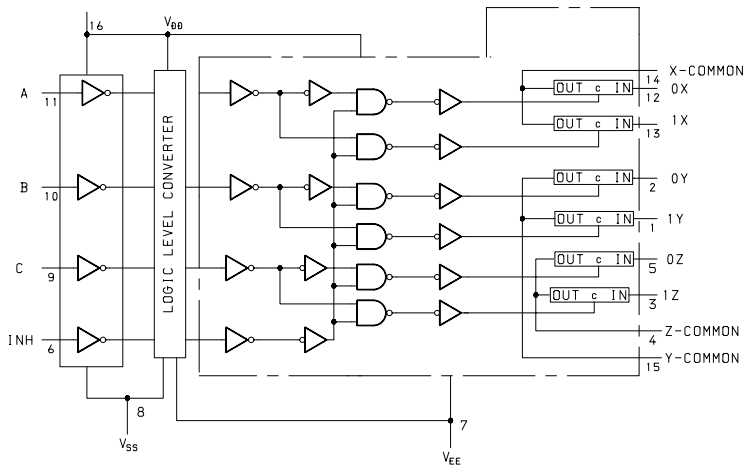
IC, LC72131D



IC, BA033ST



# IC, TC4053BF



— OUT C IN —

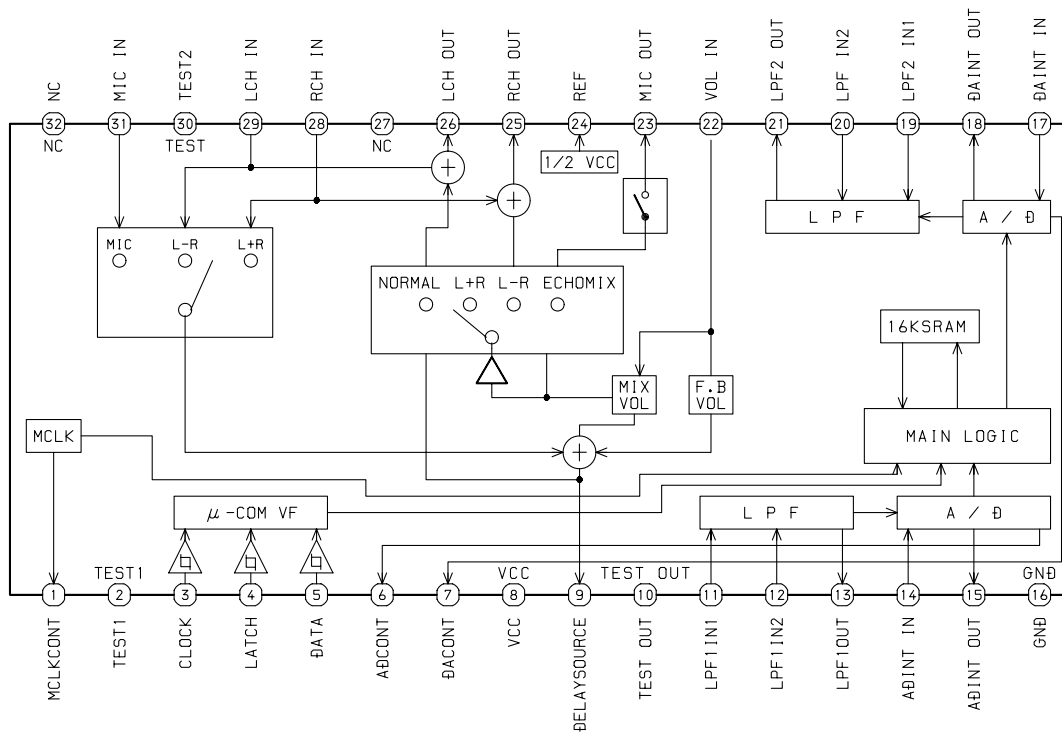
CONTROL C	Impedance Between IN-OUT*
H	$0.5 \sim 5 \times 10^2 \Omega$
L	$> 10^9 \Omega$

\* See Electrical Characteristics

CONTROL INPUTS			
INHIBIT	C $\Delta$	B	A
L	L	L	L
L	L	L	H
L	L	H	L
L	L	H	H
L	H	L	L
L	H	L	H
L	H	H	L
L	H	H	H
H	*	*	*

\*: DON'T CARE  $\Delta$ : Expect TC4052B

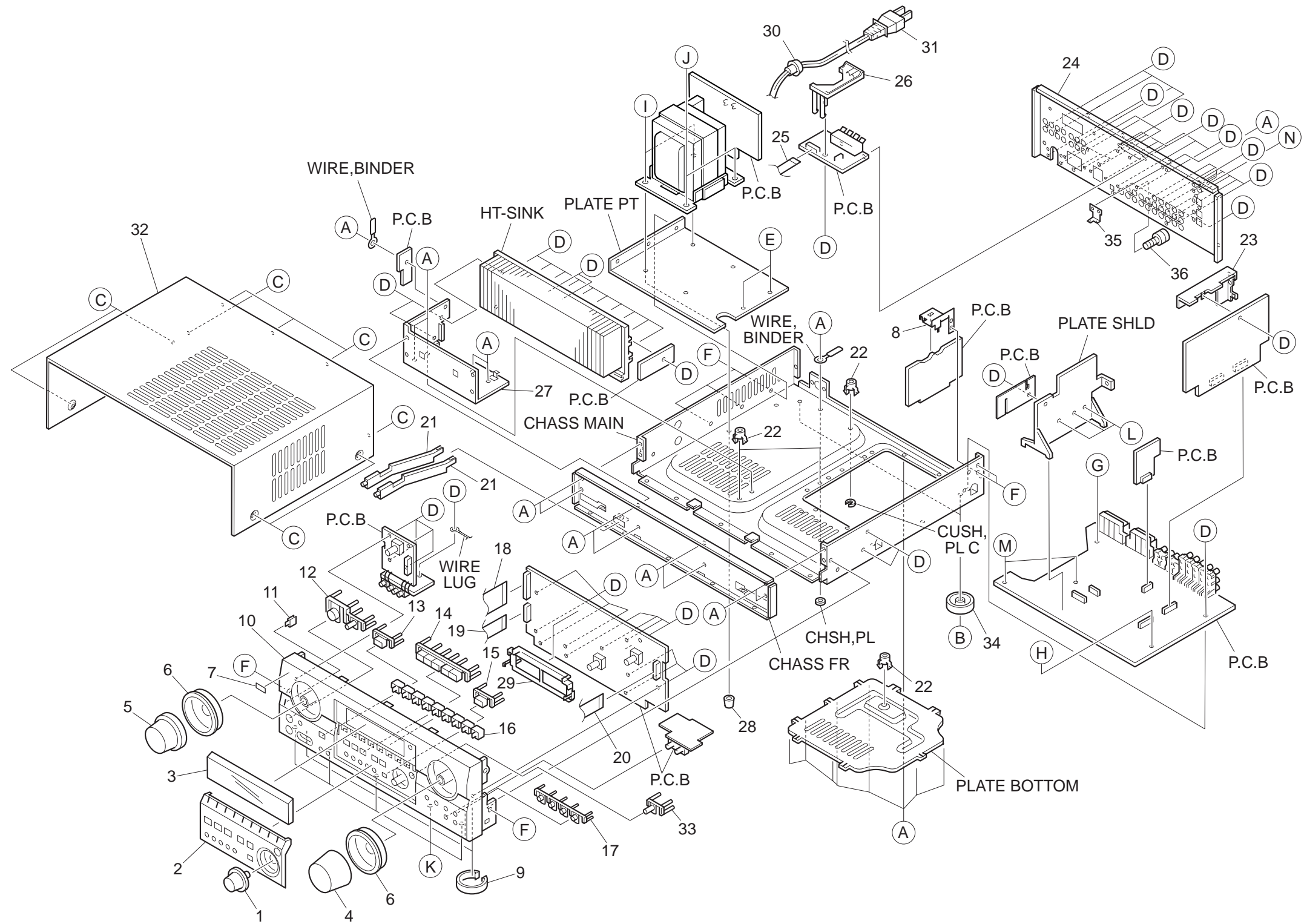
# IC, M65849BFP631D



IC DESCRIPTION  
IC, UPD780228GF

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{K-SCAN}}$	O	Scan output to diode input (Active "L").
2	O-PLL-CE	O	Tuner PLL chip enable output.
3	O-DATA (M)	O	Sound CTRL, PLL, DOLBY PROLOGIC or DSP, AC-3 VOL, GEQ. Data output.
4	TUNE/IFC	I	Tuner $\overline{\text{TUNE/IFC}}$ detection input.
5	O-STB (M)	O	Sound CTRL, KEYCON strobe output.
6	O-MUTE	O	System mute ON/ $\overline{\text{OFF}}$ output.
7	O-CLK (M)	O	Sound CTRL, PLL, DOLBY PROLOGIC or DSP, AC-3 VOL, GEQ. Clock output.
8	O-OSD (CE)	O	OSD chip enable output.
9	/I-SYNC-DET	O	System power supply. $\overline{\text{ON/OFF}}$ output.
10	O-PRO-CE/O-DSP-CE	O	DOLBY PROLOGIC or DSP chip enable output.
11	—	—	Not used.
12	TM-BASE	I	Reference clock input for watch.
13	—	O	IC101. Strobe output from shift register (1).
14-16	—	—	Not used.
17	IC	—	GND.
18	VSS	—	GND.
19	VDD	—	Power supply pin.
20, 21	—	—	Not used.
22	$\overline{\text{CS}}$	O	DOLBY digital (AC-3) control. CS output.
23	SCK	O	DOLBY digital (AC-3) control. Clock output.
24	SI	O	DOLBY digital (AC-3) control. Data output.
25	SO	I	DOLBY digital (AC-3) control. Data input.
26	SDA	I	CODEC IC (CS4226) control. Data output.
27	$\overline{\text{ADO/CS}}$	O	CODEC IC (CS4226) control. $\overline{\text{CS}}$ output.
28	I-RDS-CLK	I	RDS clock input (external interrupt).
29	I-RDS-DATA	I	RDS data input.
30	$\overline{\text{RESET}}$	—	Reset.
31	O-CONT.1	O	Master VOL control output for SL/SR.
32	O-CONT.2	O	Master VOL control output for center/SUB-woofer (TRIM control output for center/SUB-woofer).
33	OSD-CLK	O	OSD clock output.
34	$\overline{\text{I-RMC}}$	I	Remote control input.
35	OSD-DATA	O	OSD data output.
36	C-SHIFT	O	Microprocessor clock shift output (Active "H").
37	VDD1	—	Power supply pin.
38	X1	—	Connected to 5.76MHz oscillator.
39	X2	—	Connected to 5.76MHz oscillator.
40	VSS1	—	GND.
41	AVDD	—	Power supply pin.
42	$\overline{\text{HOLD}}$	I	System power supply voltage monitoring. AD input.
43	I-RE-VOL	I	Rotary encoder (VOL). AD input.

Pin No.	Pin Name	I/O	Description
44	I-SYNC-DET/I-RDS-SIG	I	OSD sync. AD input. RDS tuning signal level. AD input.
45	I-JOG2	I	Rotary encoder (JOG2). AD input.
46	I-FU-JOG1	I	Function selector rotary encoder (JOG1). AD input.
47, 48	I-KEY2, I-KEY1	I	Key 2, 1. AD input.
49	I-MIC	I	Microphone signal level detector. AD input.
50	AVSS	—	ADND.
51	O-STB-31	O	GEQ IC chip enable output.
52	POWER-LED	O	Power LED ON/ $\overline{\text{OFF}}$ output (Active "H").
53-64	P35-P24	O	FL segment output (P35-P24).
65	P23/I-AM10K	O	FL segment output (P23)/supporting AM step initialization 10 kHz.
66, 67	P22/I-VF.KC.EC	I/O	FL segment output (P22, P21)/supporting VF, key control, ECHO. Diode input.
68	P20/I-AC3	I/O	FL segment output (P20)/supporting AC-3. Diode input.
69-73	P19-O-P15	O	FL segment output (P19-P15).
74	P14/ $\overline{\text{I-STEREO}}$	I/O	FL segment output (P14). Turner/stereo detection input (stereo at "L").
75	P13/I-HPMUTE	I/O	FL segment output (P13). Headphones insertion detection input (HP insertion at "L").
76-78	P12-P10	O	FL segment output (P12-P10).
79	VDD2	—	Power supply pin.
80	-VFL	—	- Voltage.
81-89	P9-P1	O	FL segment output (P9-P1).
90-100	G11-G1	O	FL grid output (G11-G1).



# MECHANICAL PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-AR1-013-010		KNOB,RTRY JOG	26	88-AR1-203-010		HLDR,TU
2	8Z-AR1-002-010		PANEL,FR	27	8Z-AR1-205-010		HLDR,HT-SINK
3	8Z-AR1-014-010		WINDOW,DISPLAY	28	8Z-NB8-240-010		COVER,PL
4	8Z-AR1-011-010		KNOB,RTRY VOL	29	88-NF6-205-010		GUIDE,FL 40-150- 9
5	8Z-AR1-012-010		KNOB,RTRY FUN	30	87-085-189-010		BUSHING, CORD (U)
6	8Z-AR1-017-010		RING,VOL	△ 31	87-A80-110-010		AC CORD ASSY,U SPT-2W
7	82-NE6-067-010		BADGE,AIWA 30N	32	8Z-AR1-003-010		CABI,STEEL
8	88-AR2-205-110		HLDR,PWB OSD	33	8Z-AR1-007-010		KEY,ENTER
9	8Z-AR1-020-110		RING,FOOT SIL	34	8Z-AR1-021-110		FOOT,REAR
10	8Z-AR1-001-010		CABI,FR U	35	8Z-AR1-210-010		HLDR,PT PWB
11	8Z-AR1-016-010		REFLECTOR,ECO	36	87-033-209-010		TERMINAL, EARTH
12	8Z-AR1-004-010		KEY,POWER	A	87-067-584-010		TAPPING SCREW, BVT2+3-6
13	8Z-AR1-019-010		KEY,MONITOR	B	87-067-689-010		TAPPING SCREW, BVTT+3-8
14	8Z-AR1-005-010		KEY,GEQ	C	87-067-641-010		UTT2+3-8(W/O SLOT)BL
15	8Z-AR1-006-010		KEY,DIGITAL	D	87-067-703-010		TAPPING SCREW, BVT2+3-10
16	8Z-AR1-015-010		REFLECTOR,FUN	E	87-067-585-010		TAPPING SCREW, BVTT+4-6
17	8Z-AR1-018-010		KEY,BBE	F	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
18	8Z-AR1-603-010		FF-CABLE, 32P 1.25 400MM	G	87-067-632-010		TAPPING SCREW, BVT2+3-15
19	88-917-101-210		FF-CABLE, 17P 1.25	H	87-067-633-010		TAPPING SCREW, BVT2+3-8
20	8Z-AR1-606-010		FF-CABLE, 18P 1.25 340MM	I	87-078-191-010		S-SCREW,IT+4-10
21	8Z-AR1-010-010		BTN,SP	J	87-067-975-010		S-SCREW,IT+4-8
22	88-AR1-218-010		HLDR,PWB H8.9	K	87-067-761-010		TAPPING SCREW, BVT2+3-10
23	8Z-AR1-219-010		HLDR,PWB PRO	L	87-067-579-010		TAPPING SCREW, BVT2+3-8
24	8Z-AR1-025-010		PANEL,REAR UBNM	M	87-067-581-010		TAPPING SCREW, BVT2+3-15
25	88-911-161-110		FF-CABLE,11P 1.25	N	87-751-092-410		VT2+3-4 W/O SLOT

## 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		



サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

**アイワ株式会社** 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)  
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