

# **SERVICE MANUAL** **& PARTS LIST** (without price)

## **POCKET TELEVISION**

**TV-600C**

**TV-600D**

**TV-600I**

**TV-600N**

**DECEMBER 1994**

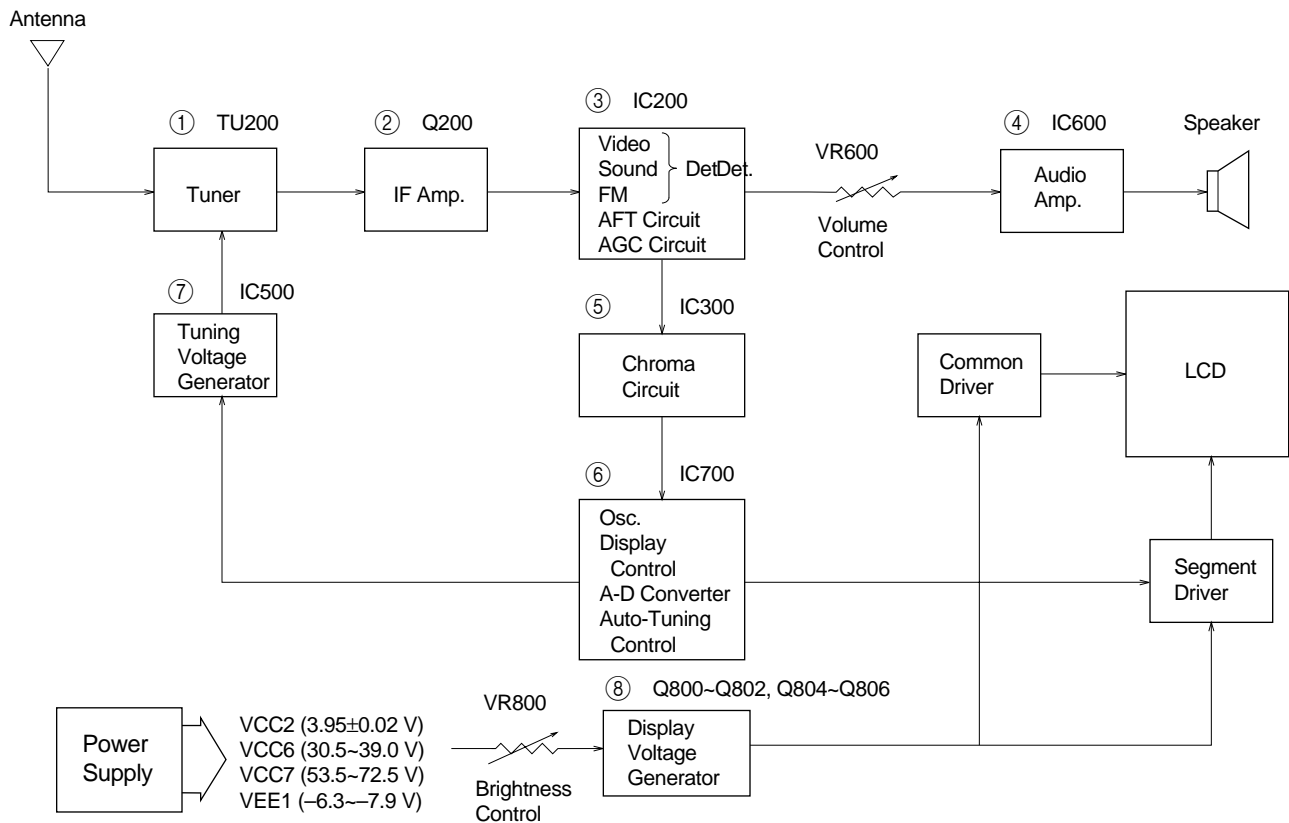
	Page
Specifications.....	1
Block Diagram .....	2
Circuit Description.....	3
Adjustment	
Linear PCB.....	5
A/D PCB.....	9
Troubleshooting .....	10
Printed Circuit Boards .....	11
Wiring Diagram .....	15
Exploded View / Disassembly.....	16
Electrical Parts List .....	17
Mechanical Parts List.....	23
IC and Transistor Lead Identification .....	24
Schematic Diagrams and Waveforms .....	26

**CASIO®**

## SPECIFICATIONS

Item	Specification
1. Reception channels	VHF : 2 ~ 13 ch    UHF : 14 ~ 69 ch
2. Power voltage	DC 6.0 V
3. Power consumption	Approx. 3.4 W
4. Current consumption	Approx. 566 mA
5. Battery life (with alkaline batteries)	Approx 3.0 hours
6. Power supply	Batteries        : 4 AA size batteries Car adaptor : CA-K65 AC adaptor    : ADK-65, 64
7. Connection terminals	Earphone jack        : 3.5ø mini External power jack    : 6.0V DC IN External antenna jack : 3.5ø mini Audio / Video jack     : 3.5ø
8. Screen size	2.2 inches
9. No. of Picture element	39,600 (110 × 360) dots
10. Dimensions	81 (W) × 32 (D) × 131 (H) mm 3 1/5" (W) × 1 1/4" (D) × 5 1/6" (H)
11. Weight	220 g excepting batteries 7.8 oz excepting batteries
12. Standard accessories	Test batteries (R6 × 4)
13. Options	AC adaptor                : AD-K65, 64 Car adaptor                : CA-K65 RF connector               : CF-13 Antenna matching device : AS-35S
14. Body color	Black

## BLOCK DIAGRAM



- ① — Color Tuner: TU200 TEPU5-02  
Selects a desired radio wave and changes it to the video IF signal.
- ② — Video IF Amp.: Q200 2SC4238  
Amplifies the video IF signal output from the tuner TU by 10 times (20 dB).
- ③ — Video Det./Sound Det./FM Det./AFT/AGC: IC200 M51348FP  
Eliminates the carrier wave in the video IF signal, and picks up the video signal and the sound IF signal. Also, the sound signal is picked up from the sound IF signal by FM detection.
- ④ — Audio Amp.: IC600 NJM2070M  
Sound amplification.
- ⑤ — Chroma Circuit: IC300 M52042FP  
Generates the tricolor (red, green, and blue) from the video signal.
- ⑥ — Osc./A-D Converter/Display Control/ Auto-Tuning Control : IC700 MSM6625-02 GSK-640F  
Converts the color signal into a digital signal.  
Also, generates the clock pulse for the display and controls the display.
- ⑦ — Tuning Voltage Generator: IC500 MSC1169MS-K  
Generates the tuning voltage with the tuning pulse (TU) output from ⑥
- ⑧ — Display Voltage Generator: Q800~Q802, Q804~Q806, 2SD601A-R x 4, 2SB709A-R, 2SD1149-S  
Generates the display voltages V0 ~ V4 with VEE1 and VCC7 outputs from the power supply.

# CIRCUIT DESCRIPTION

## TUNING VOLTAGE GENERATOR

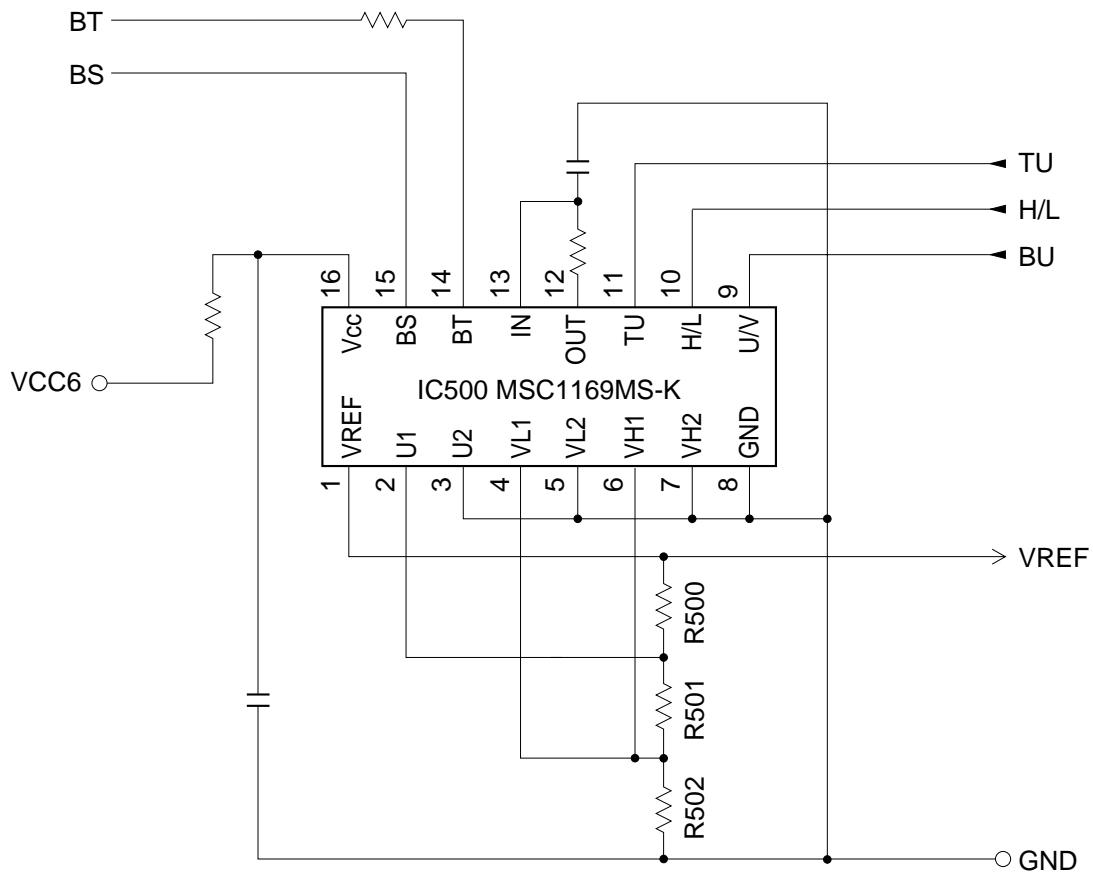


Figure 1

This circuit generates the DC tuning voltage BT for selecting a channel with a TU pulse being output from IC700.

IC500 has 3 circuits for converting pulses to voltages; it selects one of VHF-L, VHF-H, or UHF, and causes the tuning voltage to be output from the OUT terminal (pin 12). Figure 2 and Table 1 show the conditions for selection.

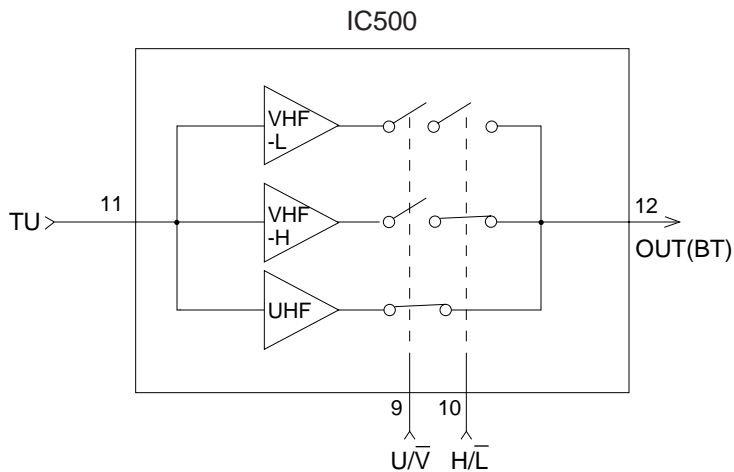


Figure 2

Inputs		Function
U/V	H/L	
L	L	VHF-L receiving
L	H	VHF-H receiving
H	L	UHF receiving
H	H	UHF receiving

Table 1

# POWER SUPPLY

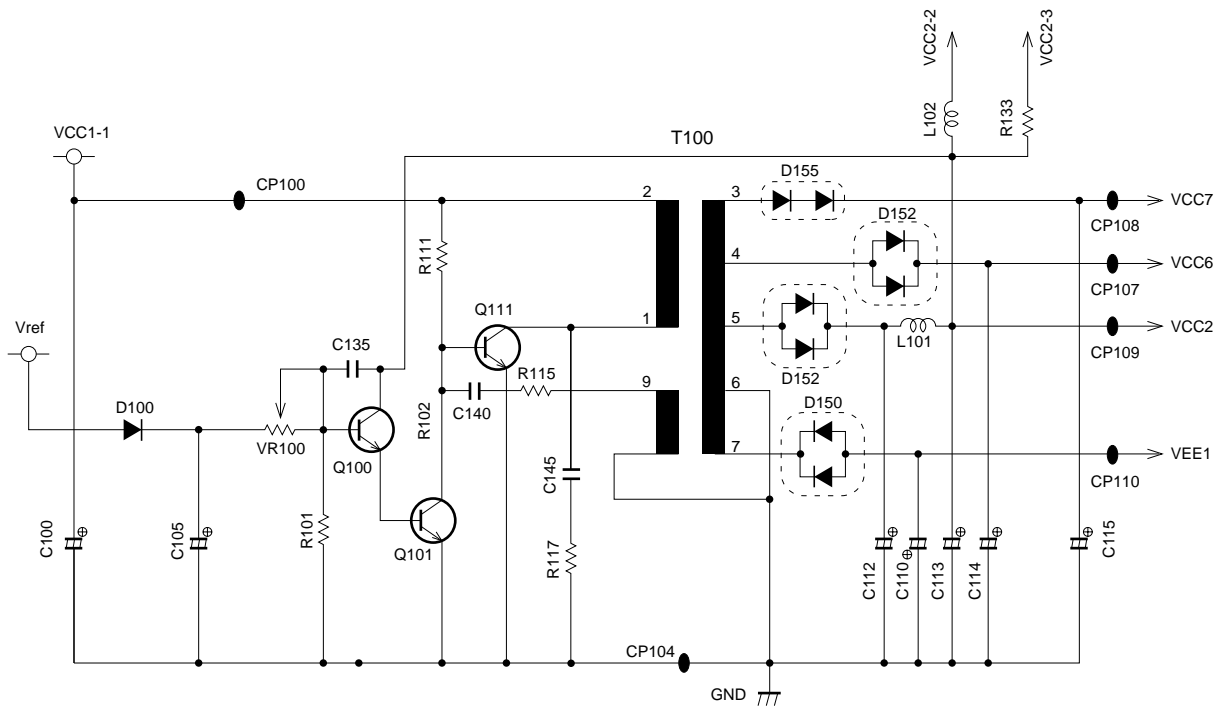


Figure 3

The power supply consists of a DC-DC converter and causes the voltages to be output as shown in Table 2.

Name	Voltage	Function
VCC2	$3.95 \pm 0.02$ V	Main voltage
VCC6	30.5 ~ 39.0 V	Tuning voltage
VCC7	53.5 ~ 72.5 V	Tuning voltage/Display voltage
VEE1	-6.3 ~ -7.9 V	Display voltage

Table 2

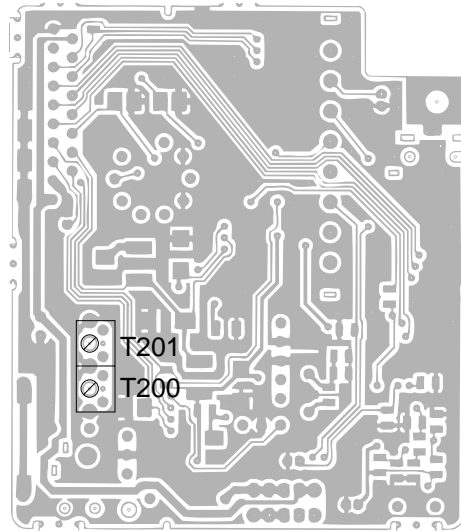
# ADJUSTMENT

## LINEAR PCB

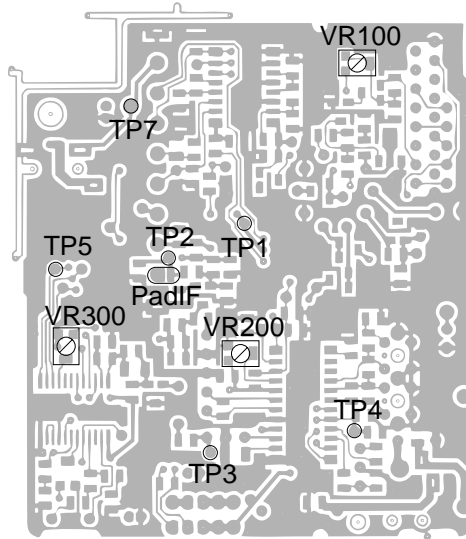
### Items To Be Adjusted

Item	Measuring Instrument
VCC2 voltage setting	Voltmeter
Video detection coil adjustment	TV signal generator, pattern generator, oscilloscope, low-pass filter
AFT coil adjustment	Sweep generator, oscilloscope, voltmeter
Contrast adjustment	TV signal generator, pattern generator, oscilloscope
AGC adjustment	TV signal generator, pattern generator, IF levelmeter

### Adjustment And Test Point Locations



Top View



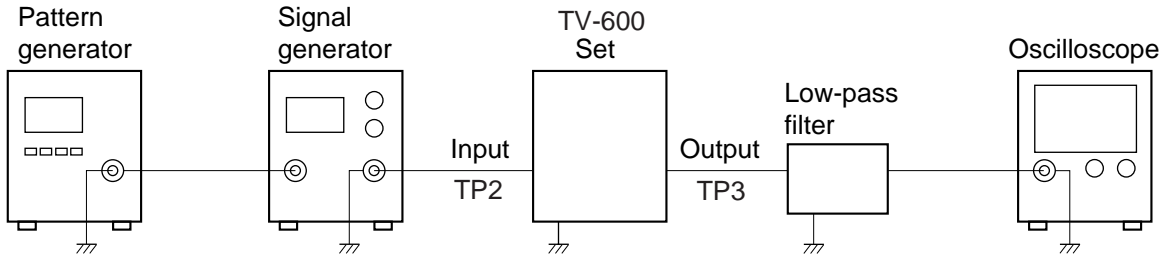
Bottom View

### Equipment Connection / Adjustment Procedure

VCC2 Voltage Setting						
<p>The diagram illustrates the connection for VCC2 voltage setting. A TV-600 Set is connected to ground. Its 'Output' terminal, labeled TP1, is connected to the positive terminal of a Voltmeter. The Voltmeter is also connected to ground.</p>						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
—————	—————	—————	VR100	Voltmeter	TP1	Adjust for $3.95 \pm 0.02$ V reading on voltmeter.

### Video Detection Coil Adjustment

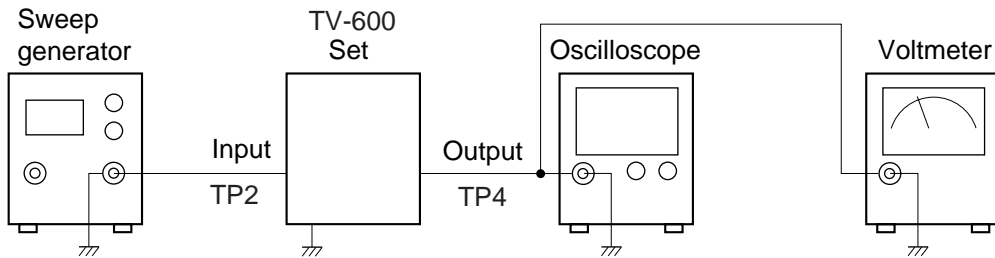
\* Desolder the IF pad to open.



Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
Pattern generator Signal generator	TP2	Color bar 38.9 MHz (TV-600C, I, N) 39.5 MHz (TV-600D) 40 ± 3 dBμ	T200	Low-pass filter Oscilloscope	TP3	Adjust for DC level at mini-

### AFT Coil Adjustment

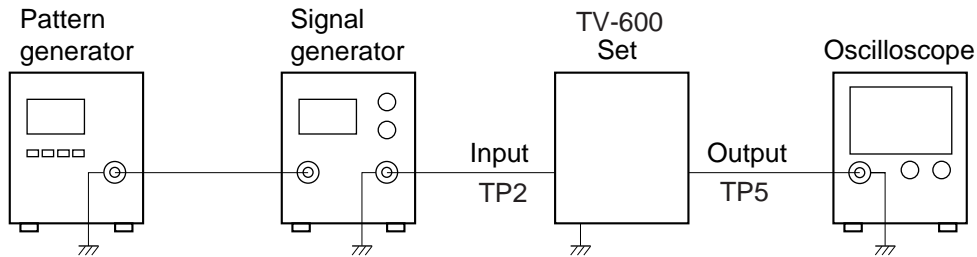
\* Desolder the IF pad to open.



Sweep generator	TP2	38.9 ± 5 MHz (Sweep) Marker: 38.9 MHz 70 ± 3 dBμ (TV-600C, I, N) 39.5 ± 5 MHz (Sweep) Marker: 39.5 MHz 70dBμ (TV-600D)	T201	Voltmeter Oscilloscope	TP4	Adjust for 2.0 ± 0.2 V reading on voltmeter. Confirm that the marker is at the middle of S-curve on oscilloscope.
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### Contrast Adjustment

\* Desolder the IF pad to open.

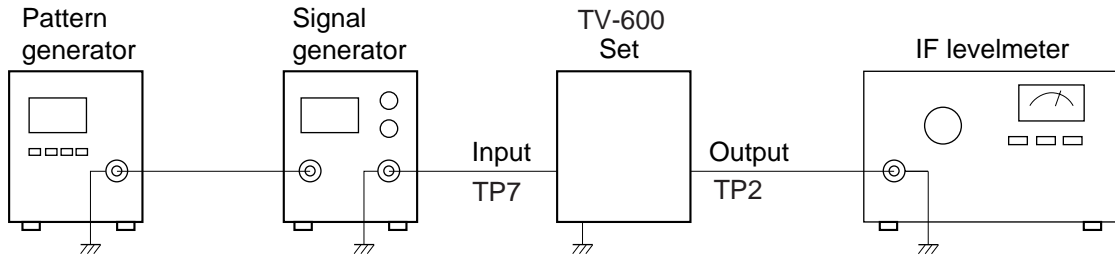


Pattern generator Signal generator	TP2	Color bar 38.9 MHz 70 ± 3 dBμ (TV-600C, I, N) 39.5 MHz 70 dBμ (TV-600D)	VR300	Oscilloscope	TP5	Adjust step form wave to read 0.8 ± 0.05 Vp-p.
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### AGC Adjustment

\* Short the IF pads.



Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
Pattern generator TV signal generator	TP7	Color bar $65 \pm 5 \text{ dB}\mu$	VR200	IF levelmeter	TP2	Adjust for $84 \pm 2 \text{ dB}\mu$ (TV-600C, I, N) $84 \pm 1 \text{ dB}\mu$ (TV-600D) reading on the IF levelmeter

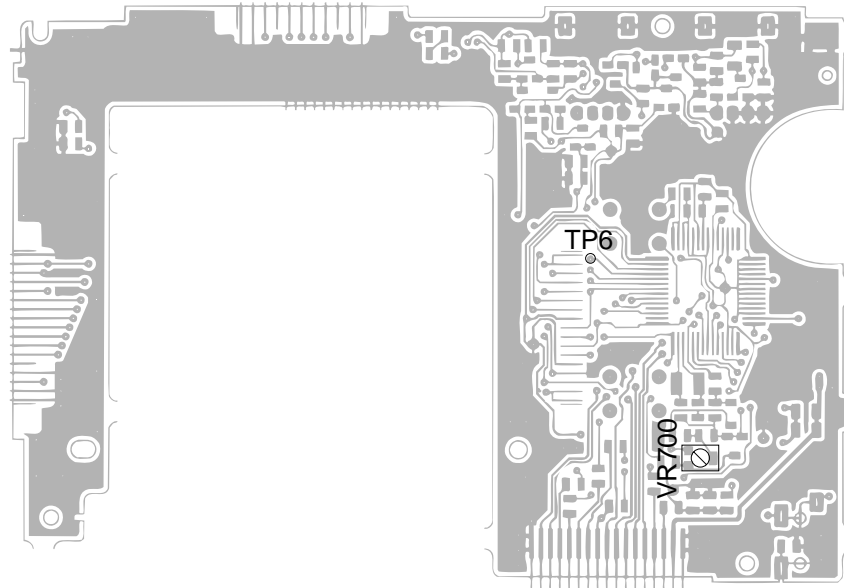
## A/D PCB

### Item to Be Adjusted

Item	Measuring Instrument
Clock adjustment	Voltmeter

### Adjustment And Test Point Locations

#### TOP VIEW



### Equipment Connection / Procedure

Clock Adjustment						
<p>The diagram illustrates the connection for clock adjustment. A box labeled 'TV-600 Set' is connected to ground. A line labeled 'Output TP6' connects the TV-600 Set to a 'Voltmeter' box, which is also connected to ground. The voltmeter symbol shows a needle on a scale.</p>						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
_____	_____	_____	VR700	Voltmeter	TP6	Adjust for $2.05 \pm 0.05$ V reading on voltmeter.

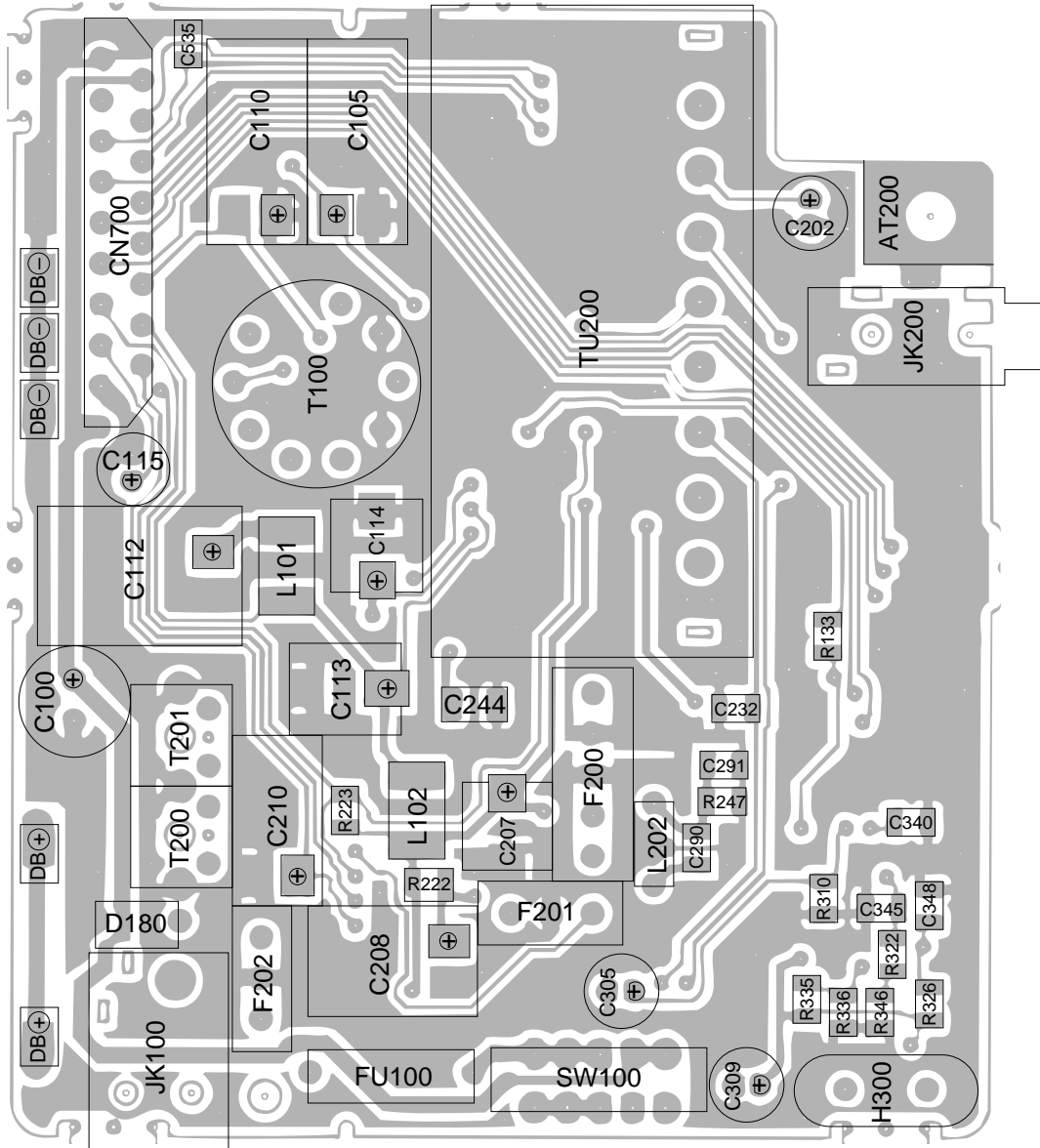
## TROUBLESHOOTING

Symptom	Cause	Solution
No power supply	Defective power switch (SW100).	Replace.
No picture and no sound	Defective DC-DC converter (T100).	Replace.
	Defective tuner (TU200).	Replace.
	Defective Q200.	Replace.
	Defective IC200.	Replace.
	Defective IC300.	Replace.
	Defective IC500.	Replace.
	Defective IC700.	Replace.
Picture OK but no sound	Defective F201 (ceramic discriminator).	Replace.
	Defective IC200.	Replace.
	Defective IC700.	Replace.
	Defective phone jack (JK600).	Replace.
No reception of VHF or UHF	Defective tuner (TU200).	Replace.
	Defective IC500.	Replace.
	Defective power switch (SW100).	Replace.

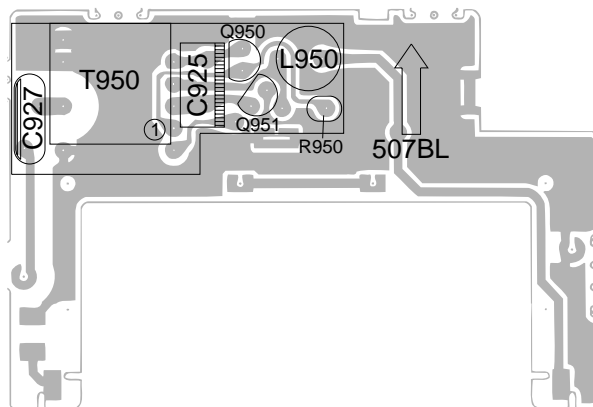
# PRINTED CIRCUIT BOARDS

## TOP VIEWS

### Linear

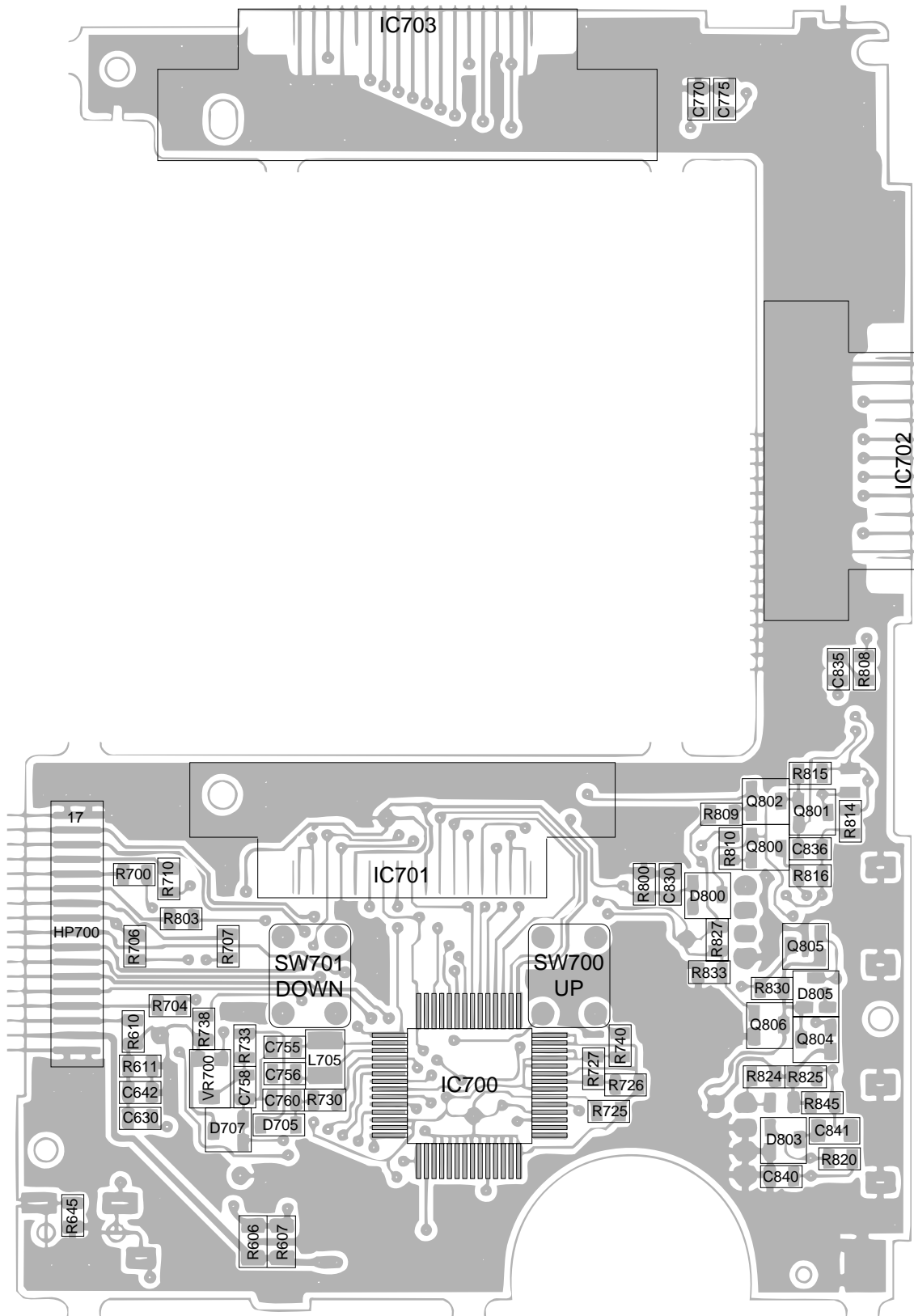


### BL

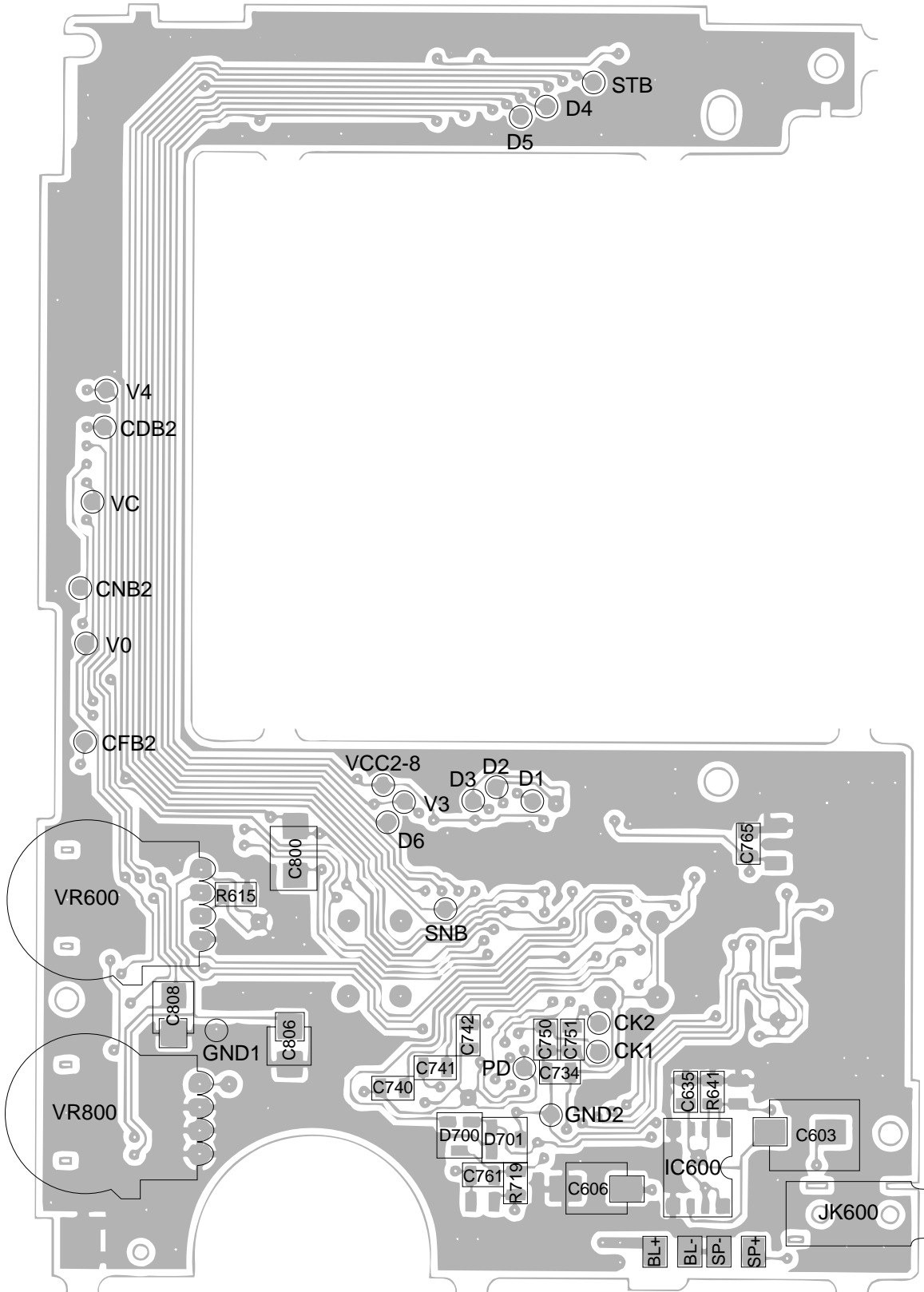




TOP VIEW  
A/D

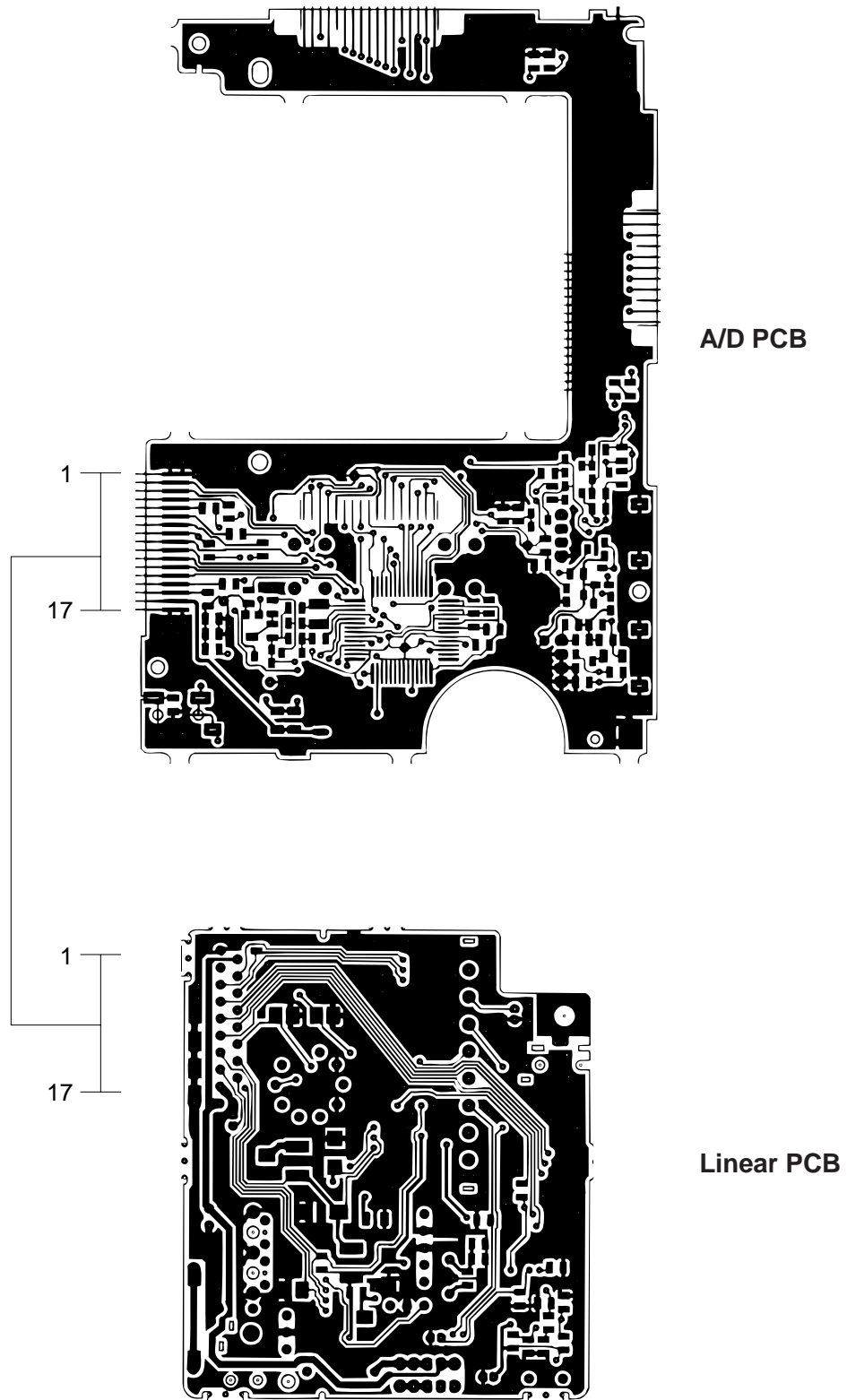


**BOTTOM VIEW**  
**A/D**



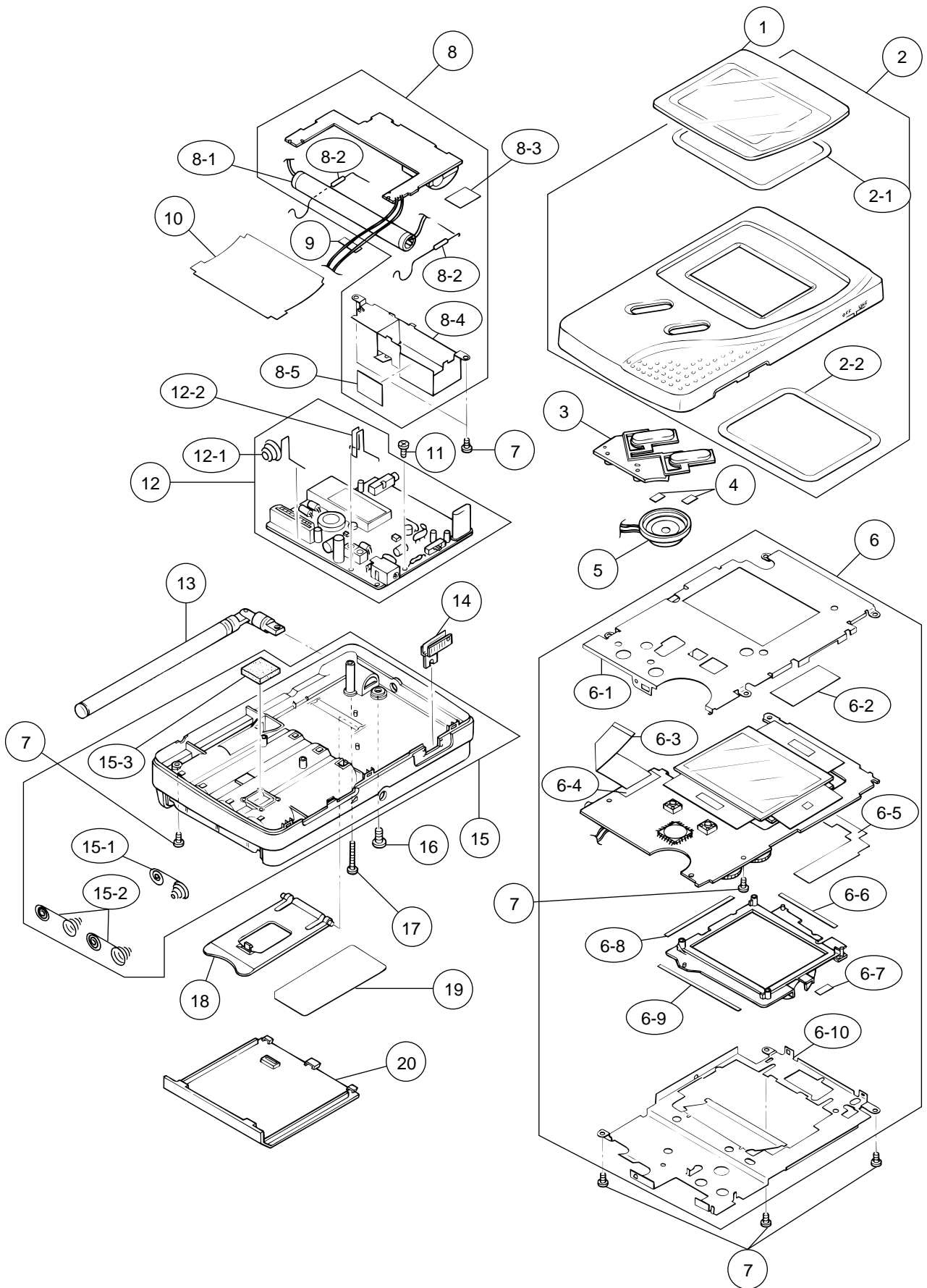
# WIRING DIAGRAM

## TOP VIEWS





# EXPLODED VIEW / DISASSEMBLY



# ELECTRICAL PARTS LIST

Linear PCB No. 1

N	Item	Code No.	Parts Name	Specification	Quantity		M	FOB Japan N.R.Yen Unit Price	R	
					C/I/N	D				
<b>Capacitors</b>										
N	C100	2805 2180	Electrolytic capacitor (V)	10RE2-220	1	1	20		C	
	C105	2807 6553	Electrolytic capacitor	6.3RV2-47-T	1	1	20		C	
	C110	2805 2430	Electrolytic capacitor (V)	16RC2-10-G11	1	1	20		C	
	C112	2806 9301	Electrolytic capacitor (V)	6.3RC2S-100-G11	1	1	20		C	
	C113	2828 5552	Electrolytic capacitor	6.3RV2-100-T	1	1	20		C	
	C114	2807 6938	Electrolytic capacitor	50RV2-4R7-T	1	1	20		C	
	C115	2805 9582	Electrolytic capacitor (V)	100RC2-1	1	1	20		C	
	N	C135	2845 2324	Chip capacitor	21N1HB562K-T1	1	1	20		C
		C140	2897 0259	Chip capacitor	GR40W5R332K50PT	1	1	20		C
		C145	2892 0016	Chip capacitor	GR40W5R102K50PT	1	1	20		C
C146		2897 1617	Chip capacitor	GR40CH221J200PT	1	1	20		C	
C185		2892 0040	Chip capacitor	GR40Y5V104Z25PT	1	1	20		C	
C202		2807 6553	Electrolytic capacitor	6.3RV2-47-T	1	1	20		C	
C207		2807 6553	Electrolytic capacitor	6.3RV2-47-T	1	1	20		C	
N		C208	2806 9315	Electrolytic capacitor (V)	ECA-0JKS470-FY	1	1	20		C
		C210	2804 9641	Electrolytic capacitor (V)	16RC310-G11	1	1	20		C
		C234	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C
	C235	2897 0924	Chip capacitor	GR42-6W5R823K50PT	1	1	20		C	
	C236	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	C237	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	C239	2892 0113	Chip capacitor	GR40CH150J50PT	1	0	20		C	
	C239	2897 0350	Chip capacitor	GR40CH160J50PT	0	1	20		C	
	C240	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	N	C244	2895 1099	Tantalum capacitor	ECST1CY225R	1	1	20		C
C245		2892 0229	Chip capacitor	GR40W5R103K25PT	1	1	20		C	
C246		2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
C249		2892 0844	Chip capacitor	GR42-6Y5V474Z16PT	1	1	20		C	
C257		2892 0407	Chip capacitor	GR40CH270J50PT	1	1	20		C	
C259		2897 0539	Chip capacitor	GR40W5R223K50PT	1	1	20		C	
C261		2892 0890	Chip capacitor	GR40PH560J50PT	1	1	20		C	
C262		2897 0378	Chip capacitor	GR40PH270J50PT	1	0	20		C	
N		C262	2897 2058	Chip capacitor	GR40PH470J50PT	0	1	20		C
		C263	2892 0890	Chip capacitor	GR40PH560J50PT	1	1	20		C
	C264	2892 0474	Chip capacitor	GR40CH010C50PT	1	1	20		C	
	N	C290	2897 2100	Chip capacitor	GR40CH111J50PT	1	0	20		C
		C290	2897 0462	Chip capacitor	GR40CH910J50PT	0	1	20		C
	N	C291	2897 0756	Chip capacitor	GR40CH240J50PT	1	0	20		C
		C291	2892 0440	Chip capacitor	GR40CH120J50PT	0	1	20		C
	C305	2804 9064	Electrolytic capacitor (V)	16RC2-10	1	1	20		C	
	C309	2800 9182	Electrolytic capacitor	6.3RC2-47MS	1	1	20		C	
	C330	2897 1827	Chip capacitor	EMK316B474K-T	1	1	20		C	
C335	2845 1344	Chip capacitor	GR40W5R471K50PT	1	1	20		C		
C340	2892 0229	Chip capacitor	GR40W5R103K25PT	1	1	20		C		
C345	2897 0112	Chip capacitor	GR40W5R562K50PT	1	1	20		C		
C346	2897 0973	Chip capacitor	GR40W5R683K25PT	1	1	20		C		
C347	2897 0973	Chip capacitor	GR40W5R683K25PT	1	1	20		C		
C350	2892 0326	Chip capacitor	GR40CH101J50PT	1	1	20		C		
C351	2897 0245	Chip capacitor	GR40CH180J50PT	1	1	20		C		
C545	2897 0693	Chip capacitor	GR40W5R333K25PT	1	1	20		C		
C550	2897 0021	Chip capacitor	GR40Y5V683Z50PT	1	1	20		C		

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

Linear PCB No. 2

N	Item	Code No.	Parts Name	Specification	Quantity		M	FOB Japan N.R.Yen Unit Price	R
					C/I/N	D			
<b>Diodes</b>									
	D100	2390 1176	Chip diode	MA152WK-(TX)	1	1	20		C
	D150	2390 1176	Chip diode	MA152WK-(TX)	1	1	20		C
	D152	2390 1176	Chip diode	MA152WK-(TX)	1	1	20		C
	D154	2390 1176	Chip diode	MA152WK-(TX)	1	1	20		C
	D155	2390 1302	Chip diode	MA153A-(TX)	1	1	20		C
	D180	2390 1190	Chip diode	ERA15-01Y	1	1	20		C
<b>Filters</b>									
	F200	3025 0189	SAW filter	SAF38.9MZ60Z	1	0	1		C
	F200	3025 0210	SAW filter	SAF39.5MZ60Z	0	1	1		C
	F201	3025 0728	SIF filter	SFSL5.5MDB12	1	0	10		C
	F201	3025 0721	SIF filter	SFSL6.0MDB12	0	1	10		C
	F202	3851 1148	Ceramic discriminator	CDSL5.5MC30B12	1	0	10		C
	F202	3851 1141	Ceramic discriminator	CDSL6.0MC30B12	0	1	10		C
<b>Fuse</b>									
	FU100	3632 0469	Fuse	PI-251001(F10)	1	1	10		C
<b>Oscillator</b>									
	H300	2590 0651	Crystal oscillator	HC-49U-C	1	1	1		C
<b>ICs</b>									
	IC200	2114 1827	Linear IC	M51348FP-T1	1	1	1		B
	IC300	2114 3332	Linear IC	M52042FP-T1	1	1	1		B
	IC500	2114 0182	Linear IC	MSC1169MS-KR1-620	1	1	1		B
<b>Jacks</b>									
	JK100	3501 8281	Jack	HEC0811-010010	1	1	10		C
	JK200	3501 5439	Jack	HSJ1456-01-210	1	1	20		C
<b>Inductors</b>									
	L101	3013 1379	Chip inductor	LEM4532-101K-TP	1	1	20		C
	L102	3013 1379	Chip inductor	LEM4532-101K-TP	1	1	20		C
	L200	3013 1393	Chip inductor	LK2125-R82K-TP	1	1	20		C
N	L202	3013 1659	Chip inductor	PL0203S-8R2J-7	1	1	20		C
<b>Transistors</b>									
	Q100	2210 8026	Chip transistor	2SB709A-R(TX)	1	1	20		C
	Q101	2230 7011	Chip transistor	2SD601A-R(TX)	1	1	20		C
	Q111	2253 0308	Chip transistor	2SD1119-R(TX)	1	1	10		C
	Q200	2252 0707	Chip transistor	2SC4238-(TX)	1	1	20		C
	Q300	2210 8026	Chip transistor	2SB709A-R(TX)	1	1	20		C
<b>Resistors</b>									
	R101	2791 1595	Chip resistor	ERJ-6GEYJ153V	1	1	20		C
	R111	2791 0815	Chip resistor	ERJ-6GEYJ102V	1	1	20		C
	R115	2791 2117	Chip resistor	ERJ-6GEYJ820V	1	1	20		C
	R117	2791 0696	Chip resistor	ERJ-6GEYJ470V	1	1	20		C
	R133	2791 1617	Chip resistor	ERJ-6GEYJ100V	1	1	20		C
	R150	2792 0110	Chip jumper	ERJ-6GEY0R00V	0	1	20		C
	R201	2791 2117	Chip resistor	ERJ-6GEYJ820V	1	1	20		C
	R202	2791 0580	Chip resistor	ERJ-6GEYJ392V	1	0	20		C
	R202	2791 2095	Chip resistor	ERJ-6GEYJ682V	0	1	20		C
	R203	2791 0712	Chip resistor	ERJ-6GEYJ152V	1	0	20		C
	R203	2791 0734	Chip resistor	ERJ-6GEYJ272V	0	1	20		C
	R204	2791 0831	Chip resistor	ERJ-6GEYJ681V	1	1	20		C
	R205	2797 2079	Chip resistor	ERJ-6GEYJ120V	1	1	20		C
	R207	2791 2117	Chip resistor	ERJ-6GEYJ820V	1	0	20		C
	R207	2791 1617	Chip resistor	ERJ-6GEYJ100V	0	1	20		C
	R208	2791 0734	Chip resistor	ERJ-6GEYJ272V	1	1	20		C
	R209	2791 0313	Chip resistor	ERJ-6GEYJ103V	1	1	20		C

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

Linear PCB No. 3

N	Item	Code No.	Parts Name	Specification	Quantity		M	FOB Japan N.R.Yen Unit Price	R
					C/I/N	D			
	R210	2791 0305	Chip resistor	ERJ-6GEYJ472V	1	1	20		C
	R212	2791 0720	Chip resistor	ERJ-6GEYJ222V	1	1	20		C
	R222	2791 0696	Chip resistor	ERJ-6GEYJ470V	1	1	20		C
	R223	2791 0615	Chip resistor	ERJ-6GEYJ154V	1	1	20		C
	R224	2797 1127	Chip resistor	ERJ-6GEYK475V	1	1	20		C
	R229	2791 2176	Chip resistor	ERJ-6GEYJ471V	1	1	20		C
	R230	2791 1131	Chip resistor	ERJ-6GEYJ271V	1	1	20		C
	R236	2791 2044	Chip resistor	ERJ-6GEYJ124V	1	1	20		C
	R239	2791 0580	Chip resistor	ERJ-6GEYJ392V	1	1	20		C
	R246	2791 1420	Chip resistor	ERJ-6GEYJ331V	1	1	20		C
	R247	2791 0720	Chip resistor	ERJ-6GEYJ222V	1	1	20		C
	R305	2791 0815	Chip resistor	ERJ-6GEYJ102V	1	1	20		C
	R306	2791 1390	Chip resistor	ERJ-6GEYJ473V	1	1	20		C
	R307	2791 0712	Chip resistor	ERJ-6GEYJ152V	1	1	20		C
	R310	2791 1579	Chip resistor	ERJ-6GEYJ474V	1	1	20		C
	R322	2791 0607	Chip resistor	ERJ-6GEYJ333V	1	1	20		C
	R325	2791 1684	Chip resistor	ERJ-6GEYJ183V	1	1	20		C
	R326	2797 1015	Chip resistor	ERJ-6GEYK225V	1	1	20		C
	R330	2797 0014	Chip resistor	ERJ-6GEYJ821V	1	1	20		C
	R331	2791 2176	Chip resistor	ERJ-6GEYJ471V	1	1	20		C
	R335	2791 0750	Chip resistor	ERJ-6GEYJ223V	1	1	20		C
	R336	2791 0769	Chip resistor	ERJ-6GEYJ563V	1	1	20		C
N	R500	2797 2646	Chip resistor	ERJ-6GEYJ753V	1	0	20		C
	R500	2791 0769	Chip resistor	ERJ-6GEYJ563V	0	1	20		C
	R501	2797 0252	Chip resistor	ERJ-6GEYJ823V	1	0	20		C
	R502	2791 1919	Chip resistor	ERJ-6GEYJ274V	1	0	20		C
	R503	2791 2052	Chip resistor	ERJ-6GEYJ224V	0	1	20		C
	R541	2791 0750	Chip resistor	ERJ-6GEYJ223V	1	1	20		C
	R545	2791 1579	Chip resistor	ERJ-6GEYJ474V	1	1	20		C
	R550	2791 0815	Chip resistor	ERJ-6GEYJ102V	1	1	20		C
<b>Switch</b>									
N	SW100	3412 0798	Slide switch	ESD-11H231	1	0	10		C
	SW100	3412 1253	Slide switch	ESD-11H221	0	1	10		C
<b>Coils and Converter</b>									
	T100	3065 0441	DC-DC converter	LC12U-29	1	1	5		C
	T200	3841 0700	Coil	5KAC-03A	1	1	5		C
	T201	3841 0700	Coil	5KAC-03A	1	1	5		C
<b>Tuner</b>									
	TU200	1013 5315	Tuner	TEPE5-01	1	0	1		C
	TU200	1013 5525	Tuner	TEPB5-02	0	1	1		C
<b>Variable resistors</b>									
	VR100	2775 1316	Semi-fixed resistor	EVM-1SSW50B53	1	1	20		C
	VR200	2775 1211	Semi-fixed resistor	EVM-1SSW50B54	1	1	20		C
	VR300	2775 1211	Semi-fixed resistor	EVM-1SSW50B54	1	1	20		C
	VR301	2775 1211	Semi-fixed resistor	EVM-1SSW50B54	1	1	20		C

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

## A/D PCB No. 1

N	Item	Code No.	Parts Name	Specification	Quantity		M	FOB Japan N.R.Yen Unit Price	R	
					C/I/N	D				
<b>Capacitor</b>										
N	C603	2828 5552	Electrolytic capacitor	6.3RV2-100-T	1	1	20		C	
	C606	2828 5552	Electrolytic capacitor	6.3RV2-100-T	1	1	20		C	
	C630	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	C635	2897 2114	Chip capacitor	EMK212F105Z-T	1	1	20		C	
	C642	2892 0040	Chip capacitor	GR40Y5V104Z25PT	1	1	20		C	
	C730	2892 0016	Chip capacitor	GR40W5R102K50PT	1	1	20		C	
	C734	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	C740	2892 0040	Chip capacitor	GR40Y5V104Z25PT	1	1	20		C	
	C741	2892 0040	Chip capacitor	GR40Y5V104Z25PT	1	1	20		C	
	C742	2892 0040	Chip capacitor	GR40Y5V104Z25PT	1	1	20		C	
	C750	2892 0300	Chip capacitor	GR40CH470J50PT	1	0	20		C	
	C751	2892 0300	Chip capacitor	GR40CH470J50PT	1	0	20		C	
	C755	2892 0903	Chip capacitor	GR40UJ270J50PT	1	1	20		C	
	C756	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	C758	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	C760	2892 0237	Chip capacitor	GR40W5R222K50PT	1	1	20		C	
	C761	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	1	20		C	
	N	C765	2897 2114	Chip capacitor	EMK212F105Z-T	1	1	20		C
		C770	2892 0059	Chip capacitor	GR40Y5V103Z50PT	1	0	20		C
		C775	2892 0016	Chip capacitor	GR40W5R102K50PT	1	0	20		C
N	C806	2807 7015	Chip electrolytic capacitor	50RV2-3R3-T	1	1	20		C	
	C808	2807 6735	Chip electrolytic capacitor	50RV2-2R2-T	1	1	20		C	
	C830	2897 2114	Chip capacitor	EMK212F105Z-T	1	1	20		C	
N	C835	2892 0016	Chip capacitor	GR40W5R102K50PT	1	1	20		C	
	C836	2892 0040	Chip capacitor	GR40Y5V104Z25PT	1	1	20		C	
	C840	2897 0021	Chip capacitor	GR40Y5V683Z50PT	1	1	20		C	
	C841	2845 5089	Chip capacitor	UMK316F474Z-T	1	1	20		C	
	C845	2892 0288	Chip capacitor	GR40CH100D50PT	1	1	20		C	
<b>Connector</b>										
N	CN700	3501 8631	Connector	9603S-17C	1	1	20		C	
<b>Diodes</b>										
	D700	2390 1176	Chip diode	MA152WK-(TX)	1	1	20		C	
	D701	2390 1253	Chip diode	MA152WA-(TX)	1	1	20		C	
	D705	2390 1358	Variable diode	MA329-(TX)	1	1	10		C	
	D707	2360 0854	Chip diode	MA3100-M(TX)	1	1	20		C	
	D800	2360 1652	Chip diode	MA3075-H(TX)	1	1	20		C	
	D803	2390 0469	Chip diode	MA157A-(TX)	1	1	20		C	
	D805	2390 1253	Chip diode	MA152WA-(TX)	1	1	20		C	
<b>ICs</b>										
	IC600	2114 2464	Linear IC	NJM2070M	1	1	5		B	
	IC700	2011 3514	LSI	MSM6625-02GSK-640F	1	1	1		B	
<b>Jack</b>										
	JK600	3501 5439	Jack	HSJ1456-01-210	1	1	20		C	
<b>Inductor</b>										
N	L705	3013 1666	Chip inductor	LEM3225-270J-TP	1	1	20		C	
<b>Transistors</b>										
	Q800	2230 7011	Chip transistor	2SD601A-R(TX)	1	1	20		C	
	Q801	2210 8026	Chip transistor	2SB709A-R(TX)	1	1	20		C	
	Q802	2230 7011	Chip transistor	2SD601A-R(TX)	1	1	20		C	
	Q804	2230 7011	Chip transistor	2SD601A-R(TX)	1	1	20		C	
	Q805	2253 0476	Chip transistor	2SD1149-S(TX)	1	1	20		C	
	Q806	2230 7011	Chip transistor	2SD601A-R(TX)	1	1	20		C	

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

A/D PCB No. 2

N	Item	Code No.	Parts Name	Specification	Quantity		M	FOB Japan N.R.Yen Unit Price	R
					C/I/N	D			
<b>Resistors</b>									
N	R606	2791 0343	Chip resistor	ERJ-8GEYJ150V	1	0	20		C
	R606	2797 3794	Chip resistor	ERJ-8GEYK3R9V	0	1	20		C
N	R607	2791 0343	Chip resistor	ERJ-8GEYJ150V	1	0	20		C
	R607	2797 3794	Chip resistor	ERJ-8GEYK3R9V	0	1	20		C
N	R610	2797 1841	Chip resistor	ERJ-6GEYJ512V	1	0	20		C
	R610	2797 1785	Chip resistor	ERJ-6GEYJ242V	0	1	20		C
N	R611	2791 0815	Chip resistor	ERJ-6GEYJ102V	1	0	20		C
	R611	2797 2135	Chip resistor	ERJ-6GEYJ132V	0	1	20		C
N	R615	2797 1785	Chip resistor	ERJ-6GEYJ242V	1	1	20		C
	R641	2791 0777	Chip resistor	ERJ-6GEYJ104V	1	1	20		C
N	R645	2791 0696	Chip resistor	ERJ-6GEYJ470V	1	1	20		C
	R700	2791 1390	Chip resistor	ERJ-6GEYJ473V	1	1	20		C
N	R704	2791 2141	Chip resistor	ERJ-6GEYJ273V	1	1	20		C
	R706	2791 0815	Chip resistor	ERJ-6GEYJ102V	1	1	20		C
N	R707	2791 1650	Chip resistor	ERJ-6GEYJ122V	1	1	20		C
	R710	2797 2191	Chip resistor	ERJ-6GEYK6R8V	1	1	20		C
N	R718	2792 0110	Chip jumper	ERJ-6GEY0R00V	1	1	20		C
	R725	2797 0245	Chip resistor	ERJ-6GEYJ181V	1	1	20		C
N	R726	2797 2331	Chip resistor	ERJ-6GEYF681V	1	1	20		C
	R727	2797 3605	Chip resistor	ERJ-6GEYF821V	1	1	20		C
N	R730	2791 2079	Chip resistor	ERJ-6GEYJ562V	1	1	20		C
	R733	2791 0777	Chip resistor	ERJ-6GEYJ104V	1	1	20		C
N	R738	2791 2052	Chip resistor	ERJ-6GEYJ224V	1	1	20		C
	R740	2791 1633	Chip resistor	ERJ-6GEYJ123V	1	1	20		C
N	R800	2791 1390	Chip resistor	ERJ-6GEYJ473V	1	1	20		C
	R803	2791 0815	Chip resistor	ERJ-6GEYJ102V	1	1	20		C
N	R808	2791 0599	Chip resistor	ERJ-6GEYJ822V	1	1	20		C
	R809	2791 1595	Chip resistor	ERJ-6GEYJ153V	1	1	20		C
N	R810	2791 1595	Chip resistor	ERJ-6GEYJ153V	1	1	20		C
	R814	2791 0750	Chip resistor	ERJ-6GEYJ223V	1	1	20		C
N	R815	2791 2079	Chip resistor	ERJ-6GEYJ562V	1	1	20		C
	R816	2791 0750	Chip resistor	ERJ-6GEYJ223V	1	1	20		C
N	R820	2797 1127	Chip resistor	ERJ-6GEYK475V	1	1	20		C
	R824	2797 3801	Chip resistor	RR1220P-153-D	1	1	20		C
N	R825	2797 3808	Chip resistor	RR1220R-114-D	1	1	20		C
	R827	2791 0607	Chip resistor	ERJ-6GEYJ333V	1	1	20		C
N	R830	2791 2052	Chip resistor	ERJ-6GEYJ224V	1	1	20		C
	R833	2791 0750	Chip resistor	ERJ-6GEYJ223V	1	1	20		C
<b>Switches</b>									
	SW700	3412 1029	Switch	SKHHAL	1	1	20		C
	SW701	3412 1029	Switch	SKHHAL	1	1	20		C
<b>Variable Resistors</b>									
	VR600	2765 0616	Volume	RK09H11T-10KB	1	1	5		C
	VR700	2775 1323	Semi-fixed resistor	EVM-1SSW50B15	1	1	20		C
	VR800	2765 1127	Volume	RK09H11T-100KC	1	1	5		C

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

**BL PCB**

N	Item	Code No.	Parts Name	Specification	Quantity		M	FOB Japan N.R.Yen Unit Price	R
					C/I/N	D			
<b>Capacitors</b>									
N	C925	2825 0434	TF capacitor	ECQ-V1H184JL	1	1	20		C
	C927	2813 2814	Ceramic capacitor	DE0805SL151J2K	1	1	20		C
<b>Fuses</b>									
	FU900	3632 0308	Temperature fuse	EYP-1BF102L	1	1	20		B
	FU901	3632 0308	Temperature fuse	EYP-1BF102L	1	1	20		B
<b>Coil</b>									
	L950	3013 0756	Choke coil	RCH-875-101K	1	1	5		C
<b>Lamp</b>									
	LA900	3851 1085	Fluorescent lamp	8.67AC1P2-C	1	1	1		C
<b>Transistors</b>									
	Q950	2253 0287	Chip transistor	2SD965-R	1	1	10		C
	Q951	2253 0287	Chip transistor	2SD965-R	1	1	10		C
<b>Resistor</b>									
	R950	2609 0266	Carbon film resistor	ERD-S2TJ821A	1	1	20		C
<b>Transformer</b>									
	T950	3012 0574	Inverter	NT-01	1	1	1		C

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

## MECHANICAL PARTS LIST

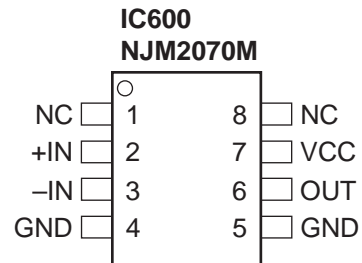
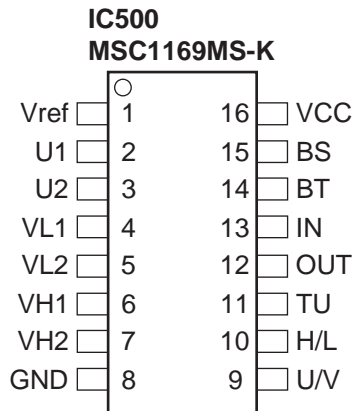
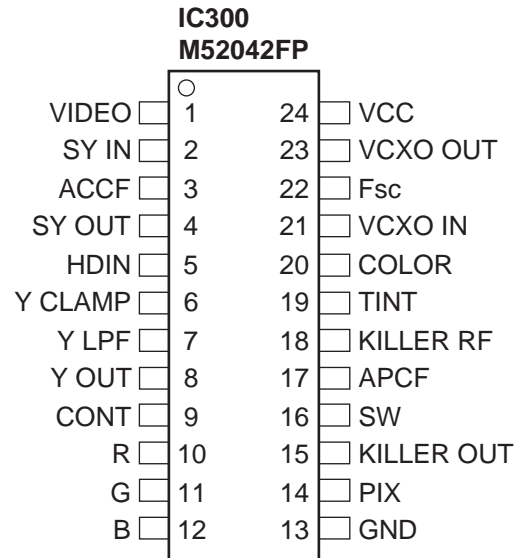
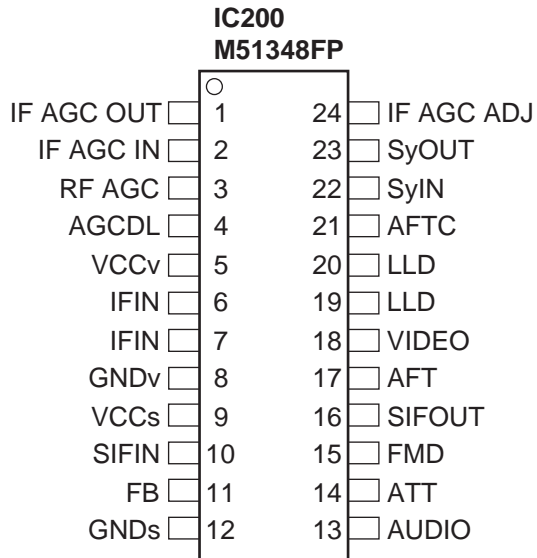
N	Item	Code No.	Parts Name	Specification	Quantity				M	FOB Japan N.R.Yen Unit Price	R
					C	N	I	D			
N	1	6609 5760	Display plate CIM-K507	K412075-3	1	1	0	0	1		C
N	1	6609 5990	Display plate IAM-K507	K412075-7	0	0	1	0	1		C
N	1	6609 3080	Display plate DAM-K507	K412075-4	0	0	0	1	1		C
N	2	6630 6833	Upper case ass'y	K311716*5	1	1	0	0	1		X
N	2	6609 5817	Upper case ass'y	K311716*6	0	0	1	0	1		X
N	2	6630 6460	Upper case ass'y	K311716*1	0	0	0	1	1		X
N	2-1	6609 2820	Adhesive tape A-K507	K412077-1	1	1	1	1	20		X
N	2-2	6609 2830	Adhesive tape B-K507	K412078-1	1	1	1	1	20		X
N	3	6609 2840	Tuning button A-K507	K311575-1	1	1	1	1	20		X
N	4	6608 9810	Adhesive tape C-K613	K412009-2	2	2	2	2	20		X
	5	6609 3377	Speaker	K412231*1	1	1	1	1	1		C
	6	6609 5820	Display unit	K110806*3	1	1	1	0	1		B
	6	6609 3490	Display unit	K110806*2	0	0	0	1	1		B
N	6-1	6609 2750	Shield case A-K507	K110767-1	1	1	1	0	10		X
	6-2	6630 0020	Insulation plate G-K63	K4728-7	0	0	0	1	20		X
N	6-3	6609 2880	Flat cable K507	K412081-1	1	1	1	1	10		C
	6-4	6605 1720	Felt A-K333	K410292-1	1	1	1	1	20		X
N	6-5	6609 2770	Insulation plate A-K507	K412079-1	1	1	1	1	20		X
	6-6	6608 7271	Adhesive tape B-K502	K410903A-2	1	1	1	1	20		X
	6-7	6606 6201	Adhesive tape C-K502	K410903A-3	1	1	1	1	20		X
	6-8	6602 6970	Adhesive tape A-K59	K4332-6	1	1	1	1	20		X
	6-9	6606 4160	Adhesive tape A-K502	K410903-1	1	1	1	1	20		X
N	6-10	6609 2760	Shield case B-K507	K110768-1	1	1	1	1	10		X
	7	5112 0868	Screw	BT3 1.7X5 Bk	5	5	5	5	20		X
N	8	6630 6351	BL unit	K311715*1	1	1	1	1	1		B
	8-1	3851 1085	Fluorescent lamp	8.67AC1P2-C	1	1	1	1	1		C
	8-2	3632 0308	Temperature fuse	EYP-1BF102L	2	2	2	2	20		B
	8-3	6607 0690	Insulation sheet D-K508	K410441-3	1	1	1	1	20		X
N	8-4	6609 2730	Shield case C-K507	K311573-1	1	1	1	1	10		X
N	8-5	6603 9090	Insulation sheet A-K310	K4728-8	1	1	1	1	20		X
	9	6601 1700	Felt A-K60	K4117-3	1	1	1	1	20		X
N	10	6609 2851	Reflector K507	K412080A-1	1	1	1	1	10		X
	11	5860 0301	Screw	BT3 1.7X3.5 NI	1	1	1	1	20		X
N	12	6630 6835	Linear PCB ass'y	K440053*2	1	1	1	0	1		B
N	12	6630 6462	Linear PCB ass'y	K412228*1	0	0	0	1	1		B
N	12-1	6606 4522	Battery spring A-K502	K410845B-1	1	1	1	1	20		C
	12-2	6606 4531	Battery spring B-K502	K410846A-1	1	1	1	1	20		C
	13	3851 1470	Rod antenna	VR70100GA	1	1	1	1	1		B
N	14	6609 2780	Switch knob A-K507	K311574-1	1	1	1	1	20		C
N	15	6630 6461	Lower case ass'y	K311718*1	1	1	0	1	1		C
N	15	6609 5822	Lower case ass'y	K311718*3	0	0	1	0	1		C
	15-1	6020 7658	Battery spring B1 G513	P408A-1	1	1	1	1	20		C
	15-2	6020 7666	Battery spring B2 G513	P409A-1	2	2	2	2	20		C
	15-3	6606 6390	Cushion A-K502	K410731-2	1	1	1	1	20		X
	16	6609 1290	Screw A-K610	K412031-1	1	1	1	1	20		X
	17	6604 9980	Screw A-K334	K410188-1	1	1	1	1	20		X
	18	6608 8420	Stand A-K331	K310518-1	1	1	1	1	10		X
N	19	6609 5740	Rating plate CIM-K507	K412076-4	1	0	0	0	20		X
N	19	6609 5840	Rating plate NAM-K507	K412235-5	0	1	0	0	20		X
N	19	6609 5830	Rating plate IAM-K507	K412235-4	0	0	1	0	20		X
N	19	6609 3040	Rating plate DAM-K507	K412076-5	0	0	0	1	20		X
N	20	6609 2860	Battery cover A-K507	K211231-1	1	1	1	1	10		C

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank

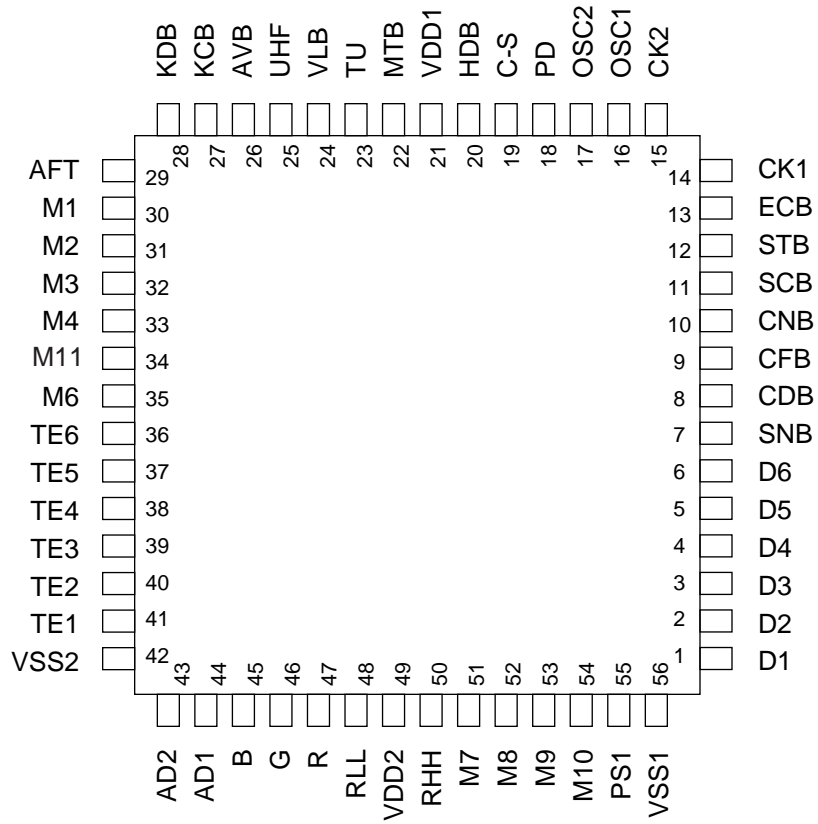


# IC AND TRANSISTOR LEAD IDENTIFICATION

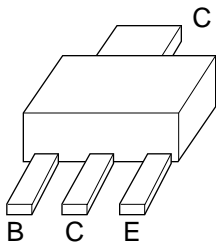
## IC/LSI



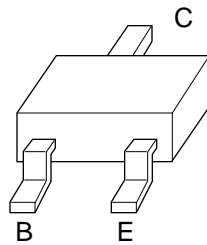
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**MSM6625-02GSK-640F**



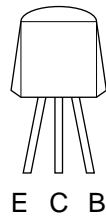
**TRANSISTORS**



**2SD1119**



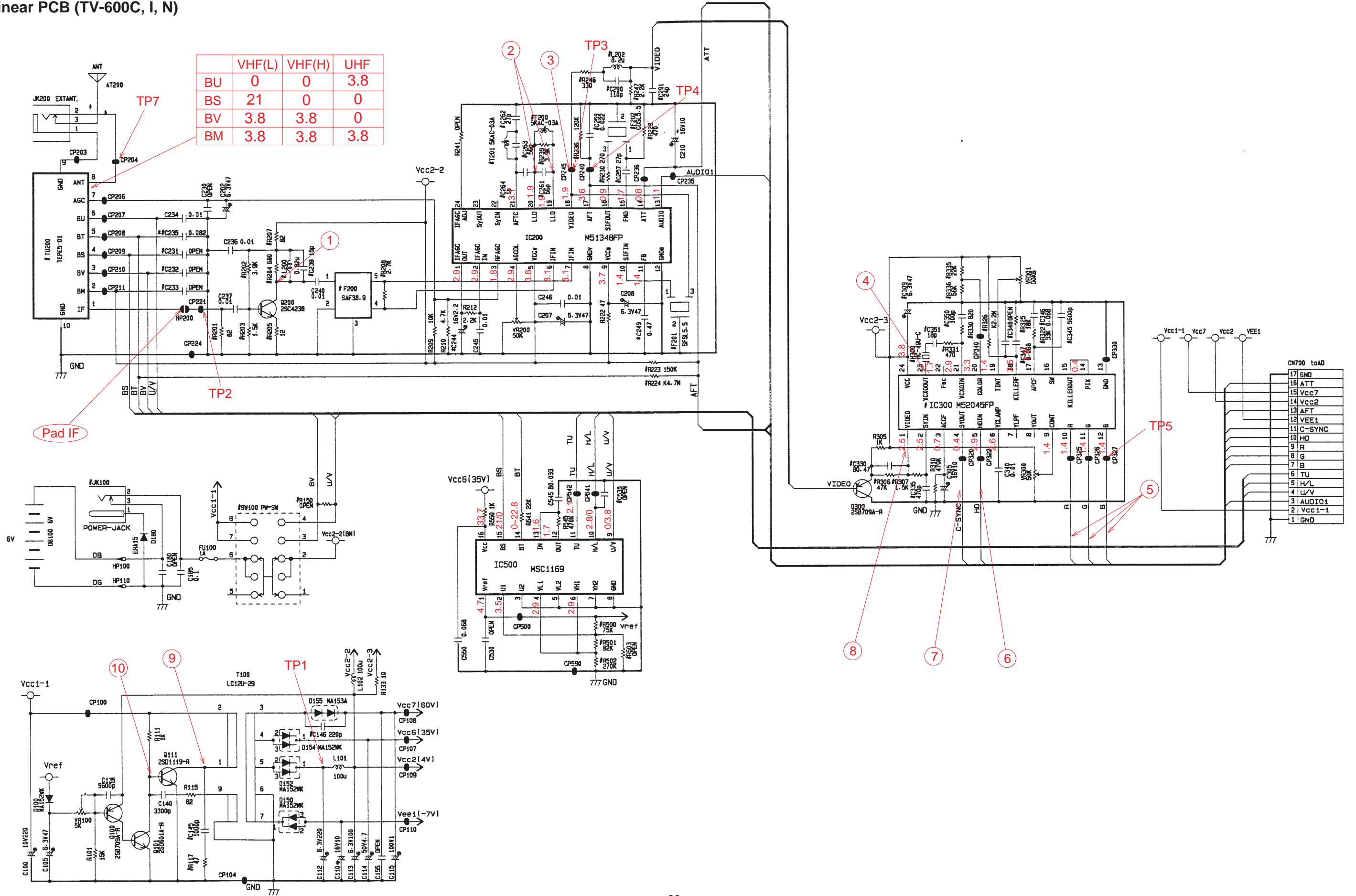
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**2SC4238 2SD1149-S**



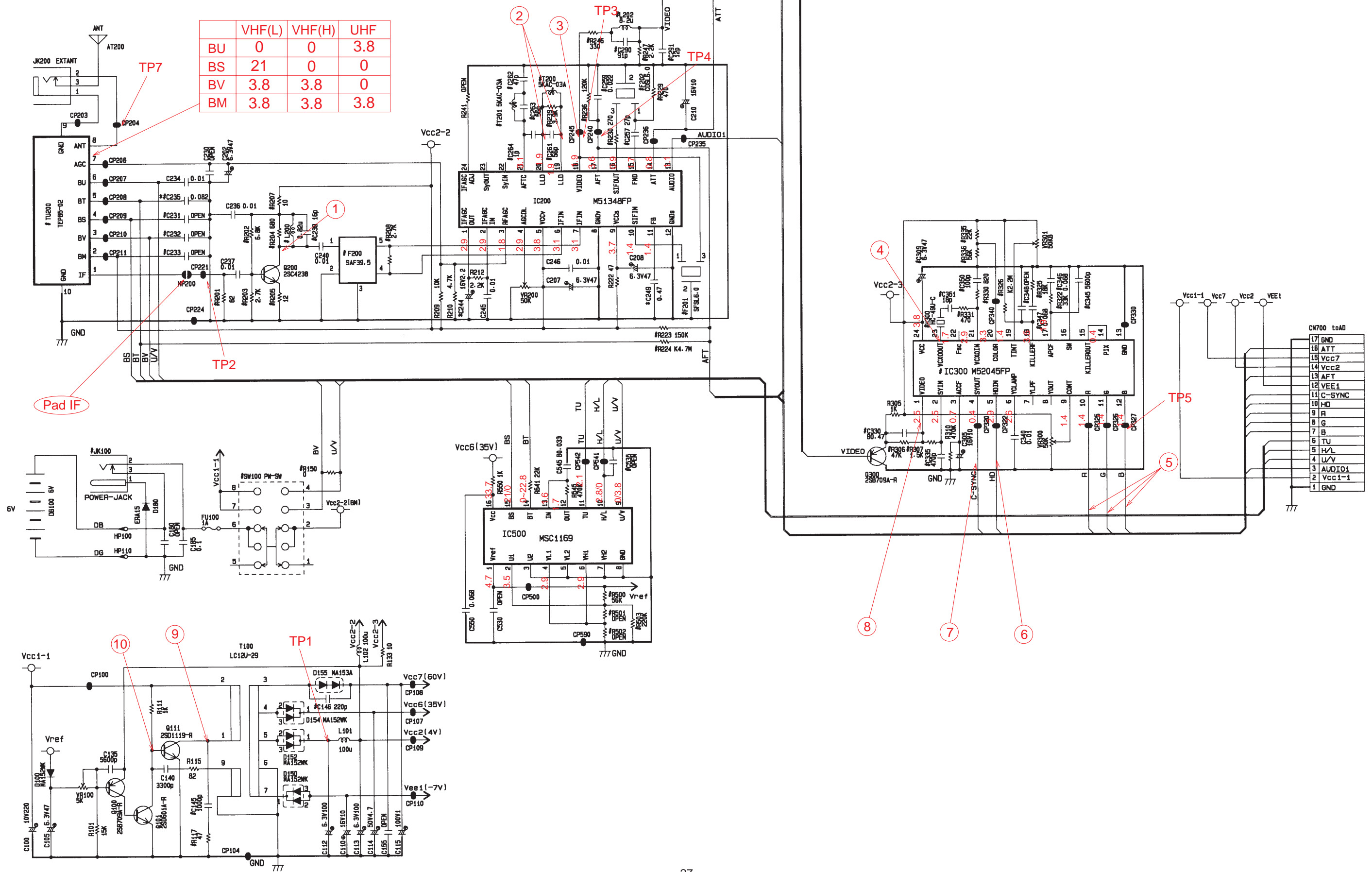
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# SCHEMATIC DIAGRAMS AND WAVEFORMS

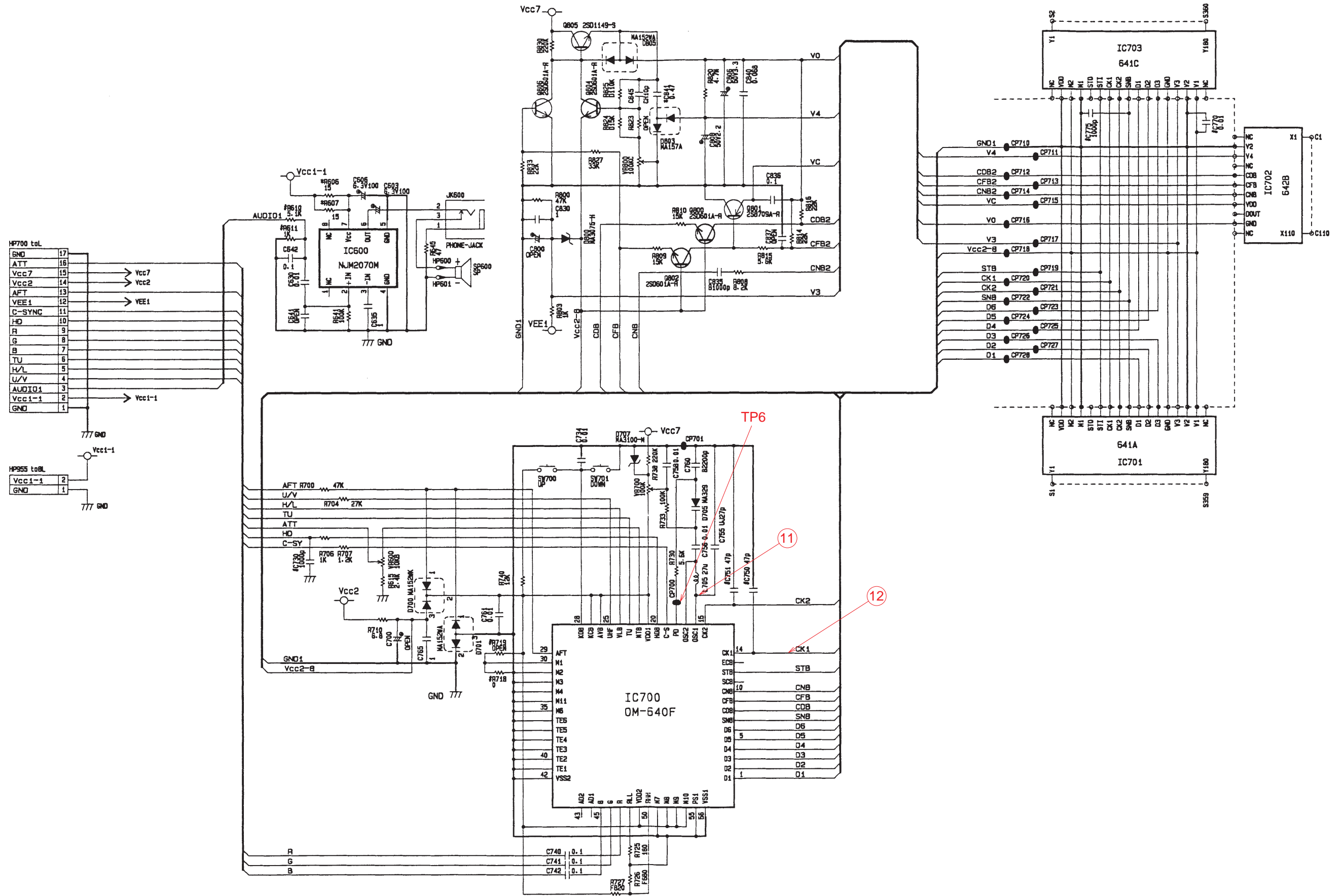
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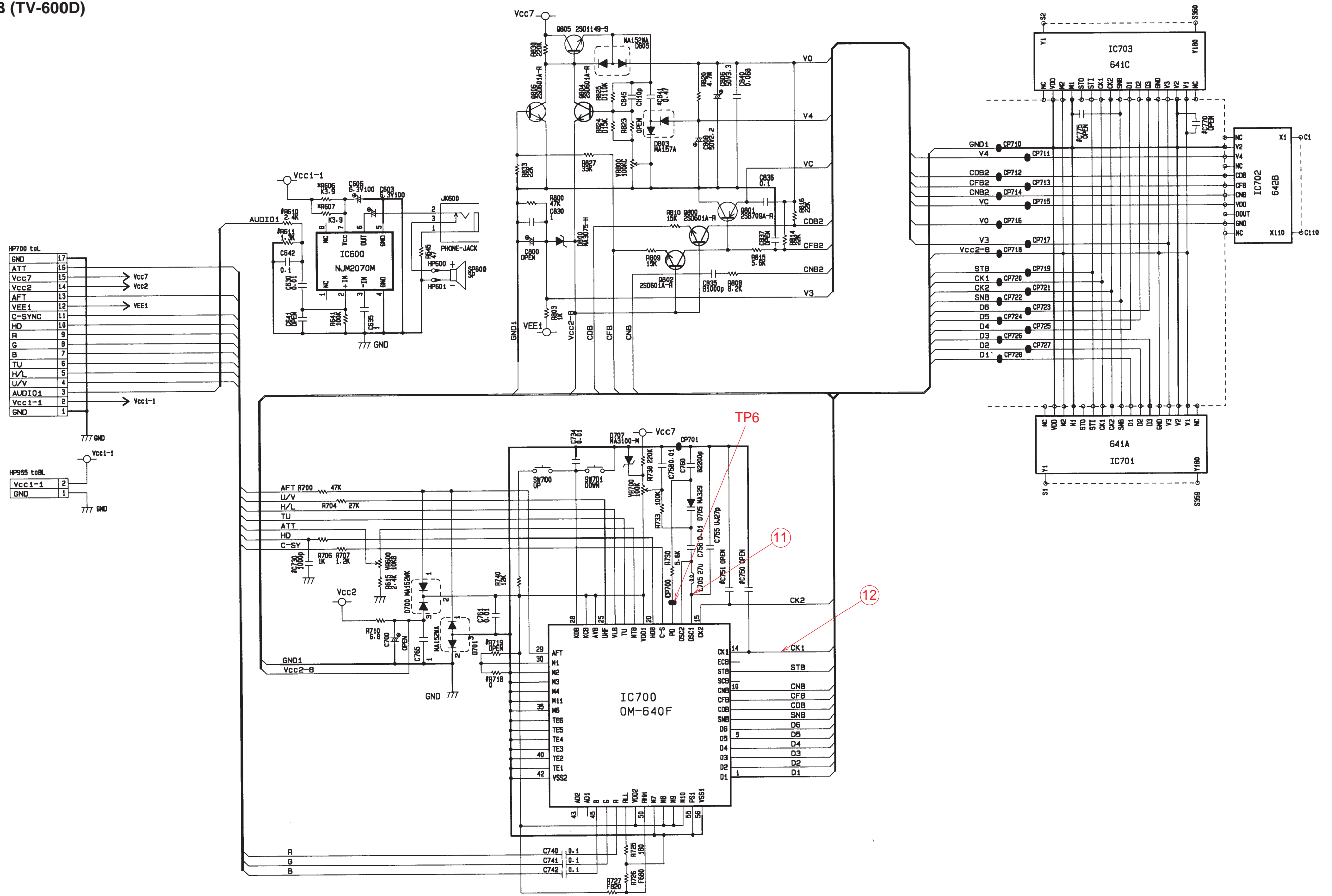
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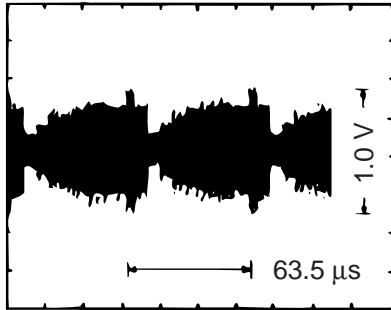
A/D PCB (TV-600C, I, N)



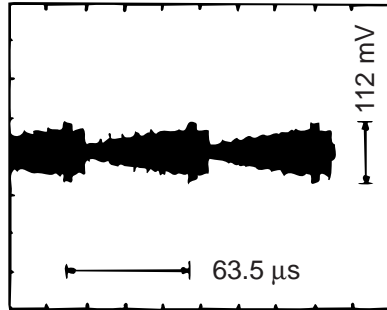
A/D PCB (TV-600D)



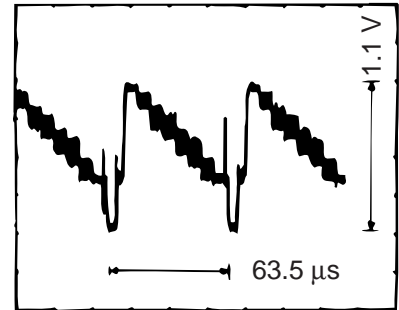
# WAVEFORMS



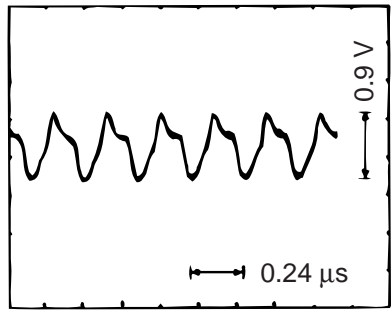
① Q200 Collector



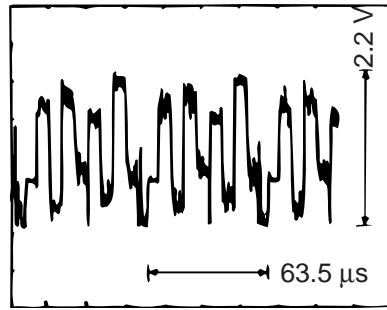
② IC200 Pin 19



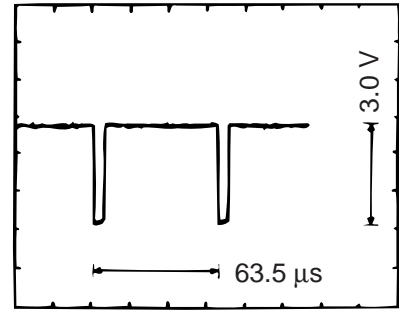
③ IC200 Pin 18



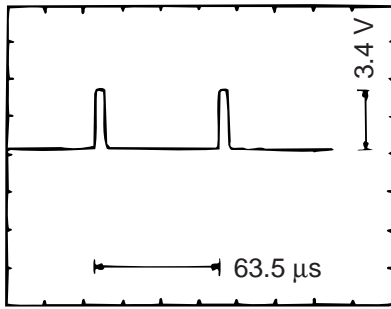
④ IC300 Pin 23



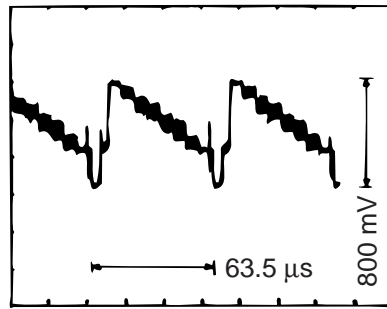
⑤ IC300 Pins 10, 11, 12



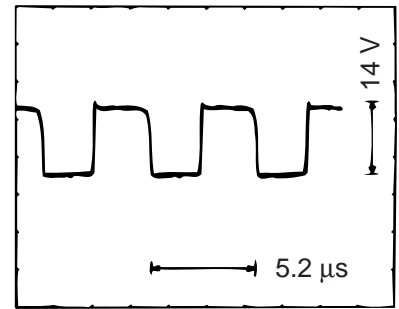
⑥ IC300 Pin 5



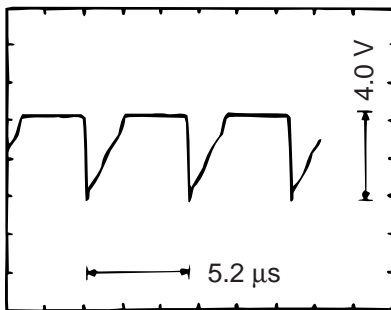
⑦ IC300 Pin 4



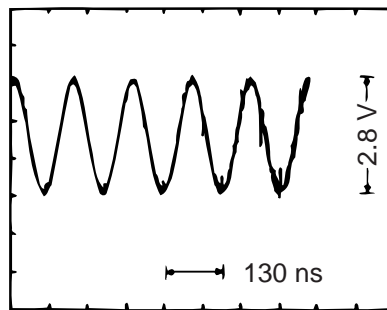
⑧ IC300 Pin 1



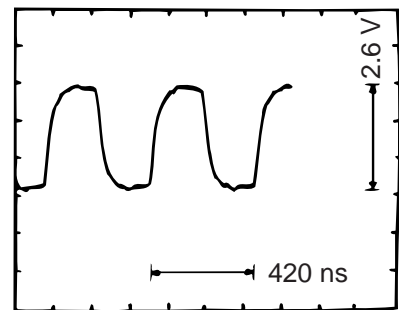
⑨ Q111 Collector



⑩ Q111 Base



⑪ IC700 Pin 16



⑫ IC700 Pin 14

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