

SERVICE MANUAL **& PARTS LIST** (with price)

POCKET TELEVISION

TV-600B

DECEMBER 1994

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CASIO[®]

CIRCUIT DESCRIPTION

TUNING VOLTAGE GENERATOR

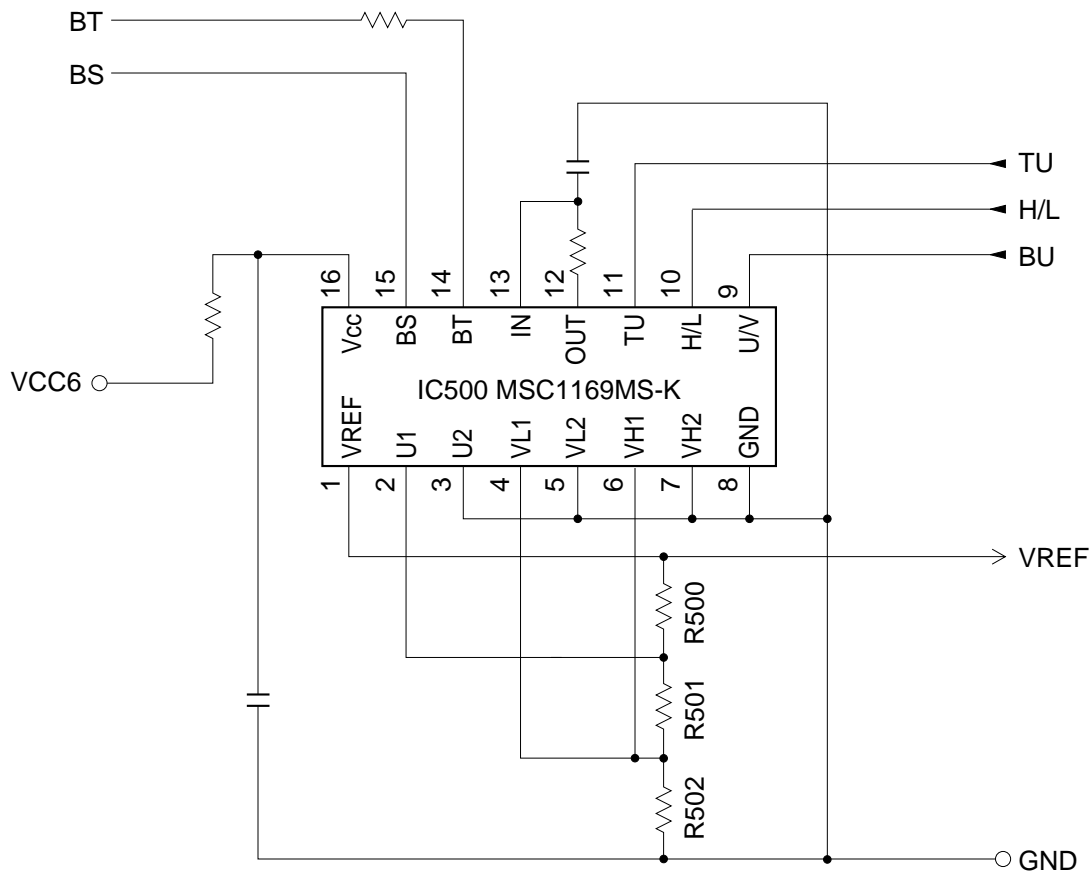


Figure 1

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.

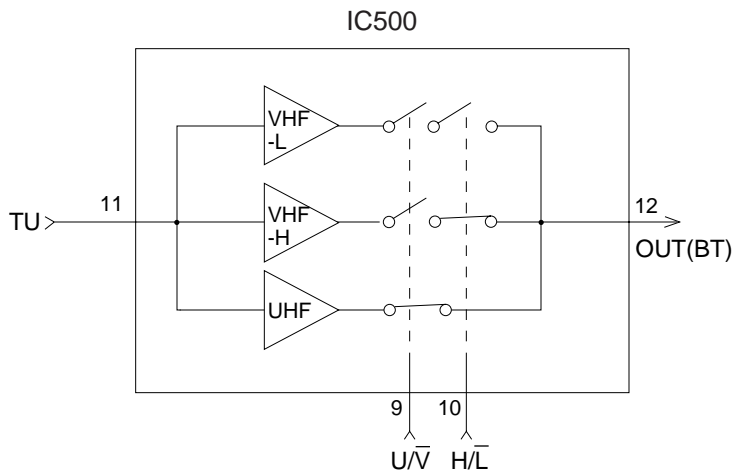


Figure 2

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

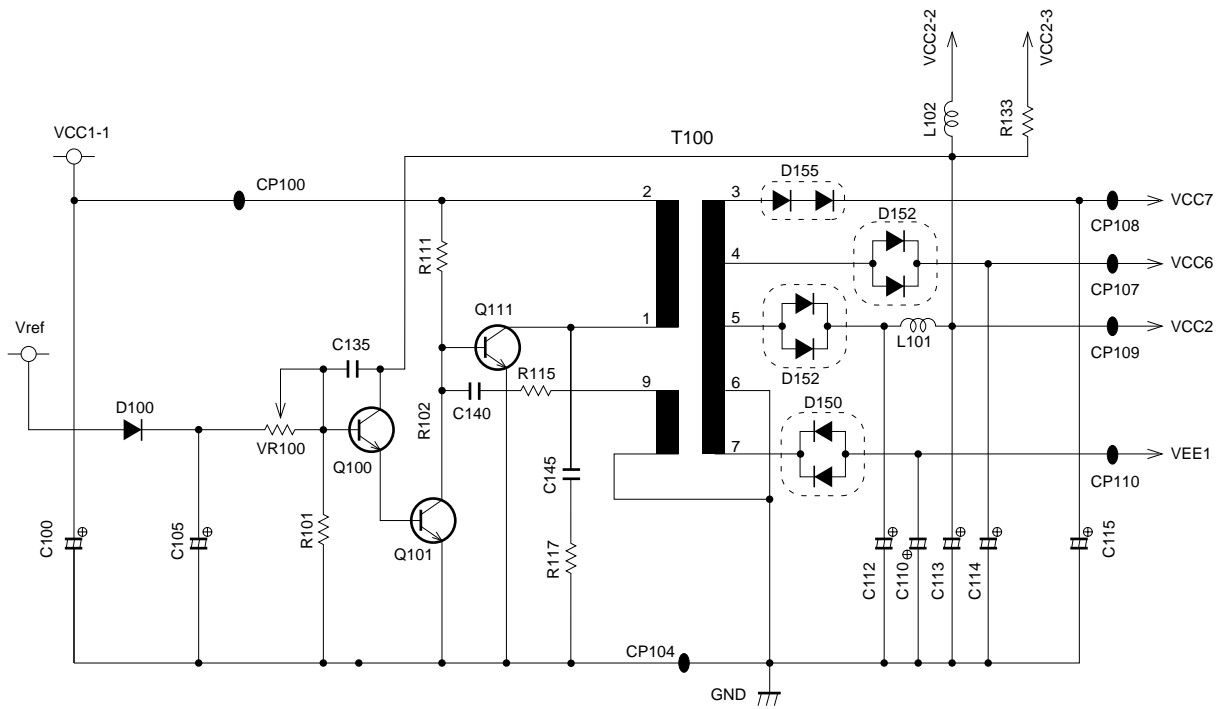


Figure 3

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 ± 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

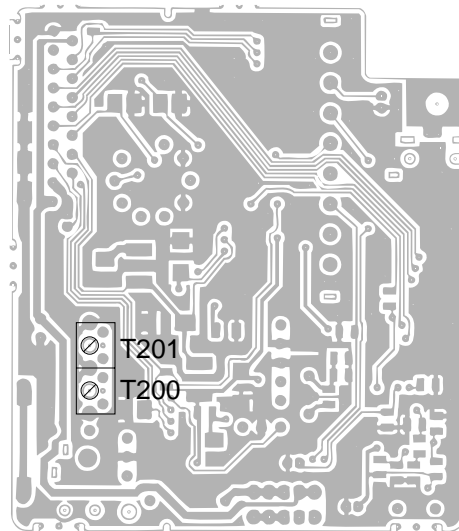
ADJUSTMENT

LINEAR PCB

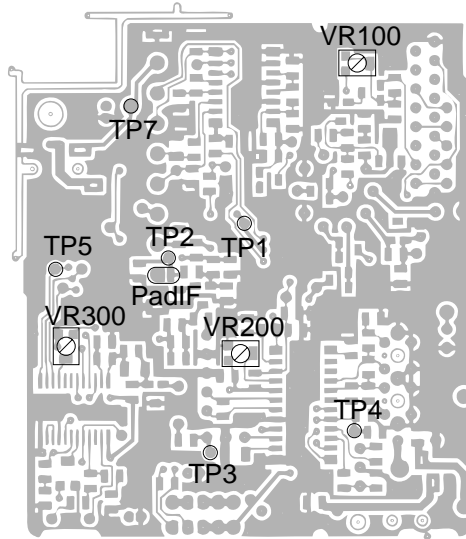
Items To Be Adjusted

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 and has an Output terminal connected to TP1. A Voltmeter is also connected to ground and has its positive terminal connected to TP1.</p>						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
—————	—————	—————	VR100	Voltmeter	TP1	Adjust for 3.95 ± 0.02 V reading on voltmeter.

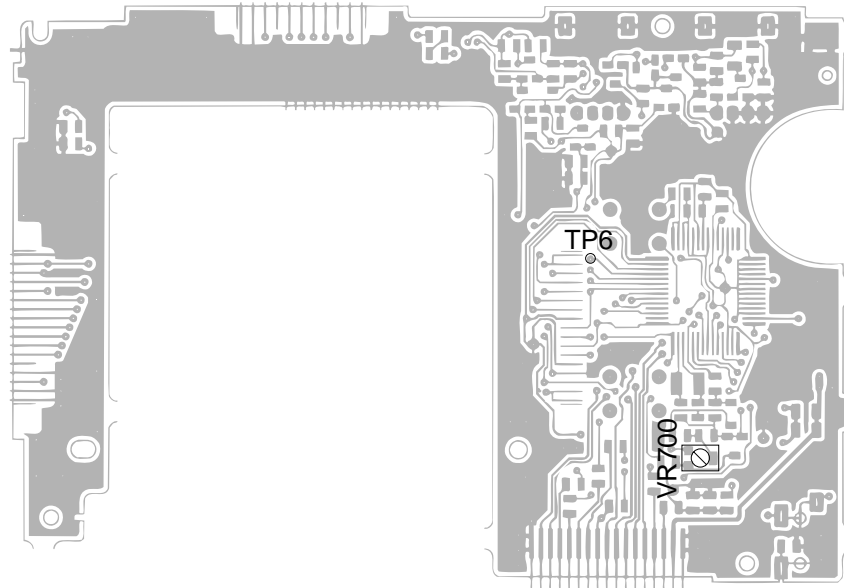
A/D PCB

Item to Be Adjusted

Item	Measuring Instrument
Clock adjustment	Voltmeter

Adjustment And Test Point Locations

TOP VIEW



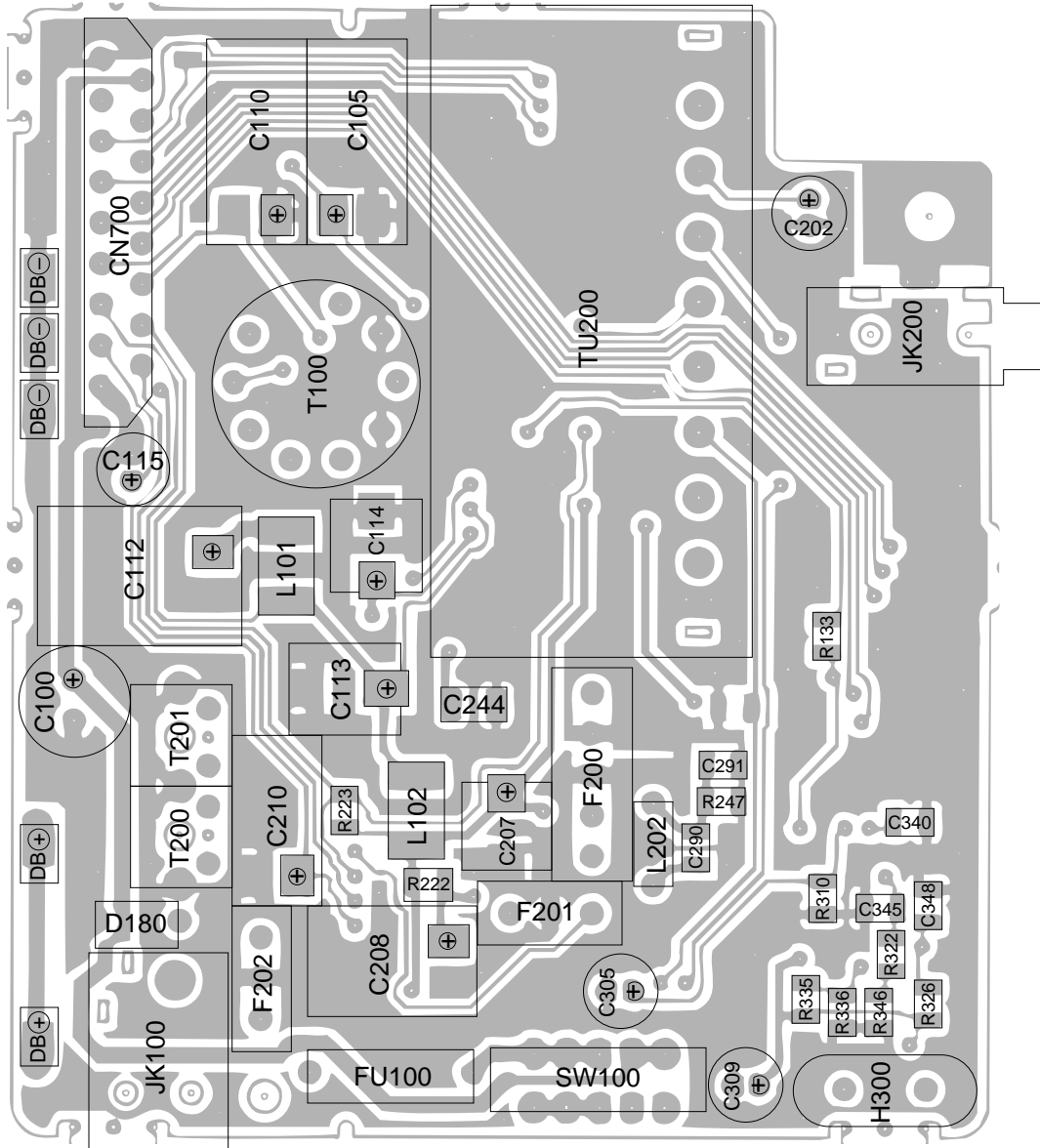
Equipment Connection / Procedure

Clock Adjustment						
<p>The diagram shows a box labeled 'TV-600 Set' with a ground symbol below it. A line labeled 'Output TP6' connects the set to a box labeled 'Voltmeter' which also has a ground symbol below it. The voltmeter is represented by a square with a semi-circular scale inside.</p>						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
_____	_____	_____	VR700	Voltmeter	TP6	Adjust for 2.05 ± 0.05 V reading on voltmeter.

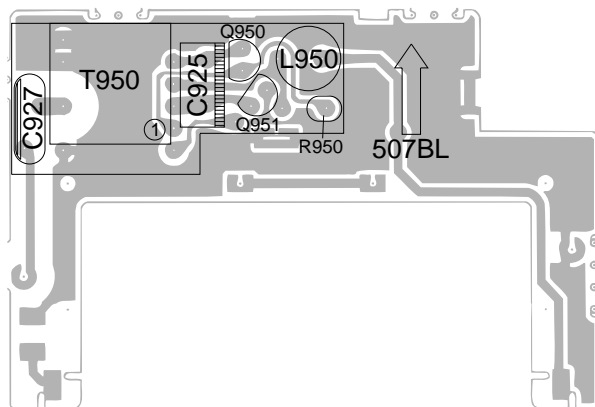
PRINTED CIRCUIT BOARDS

TOP VIEWS

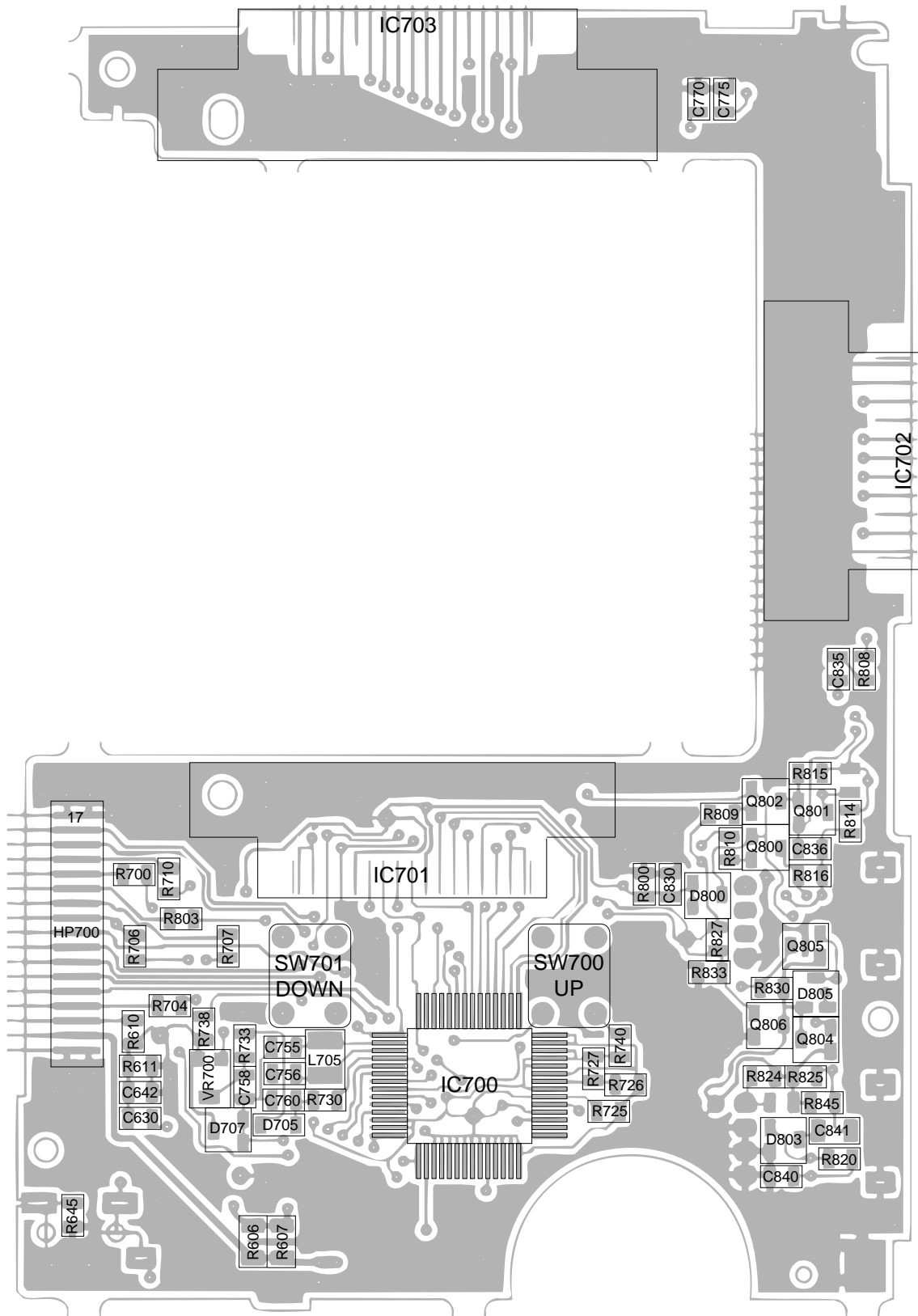
Linear



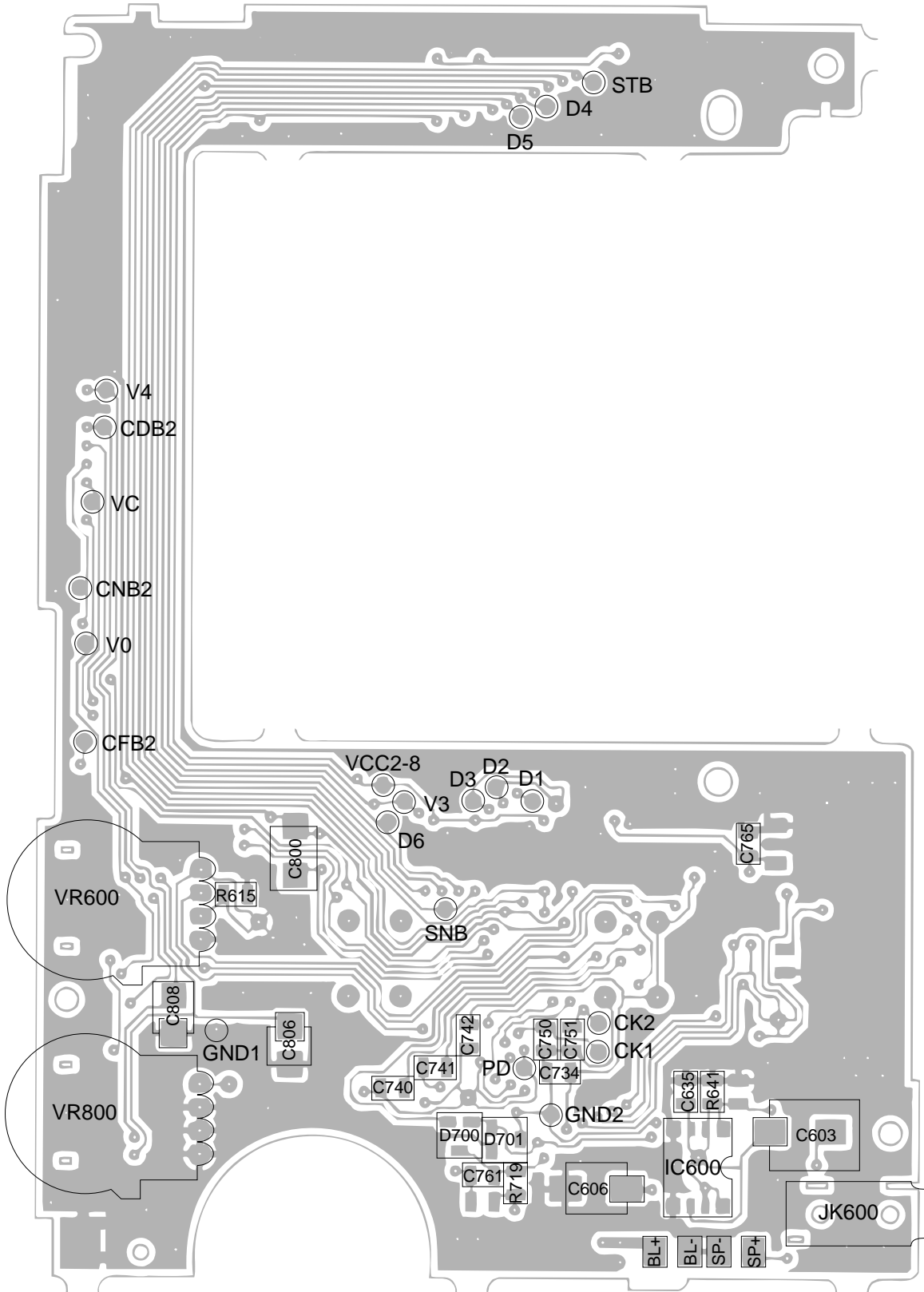
BL



TOP VIEW
A/D

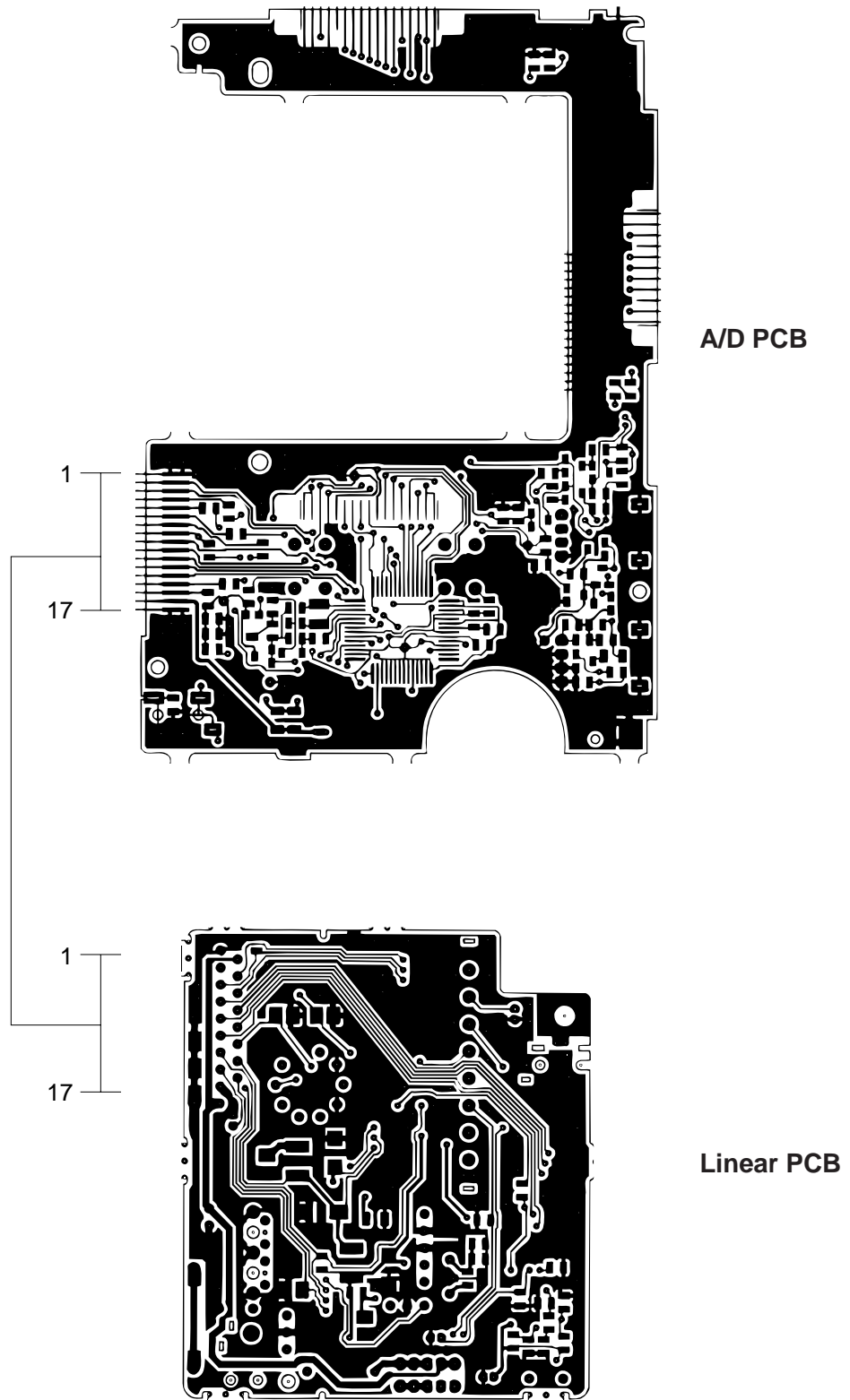


BOTTOM VIEW
A/D

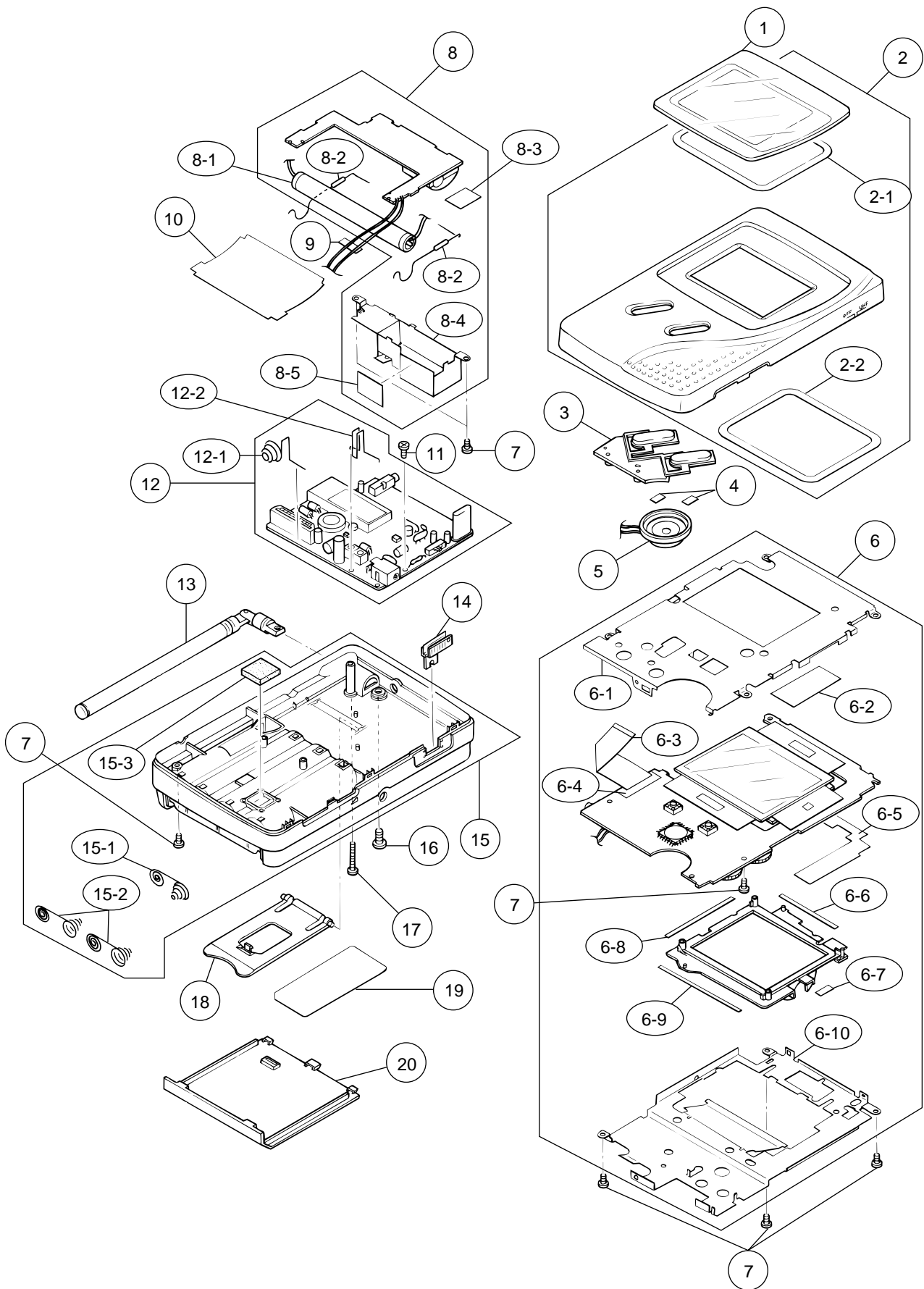


WIRING DIAGRAM

TOP VIEWS

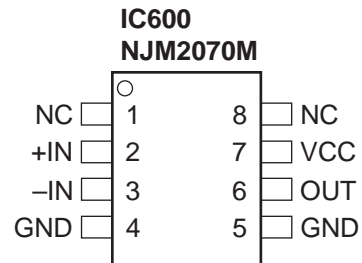
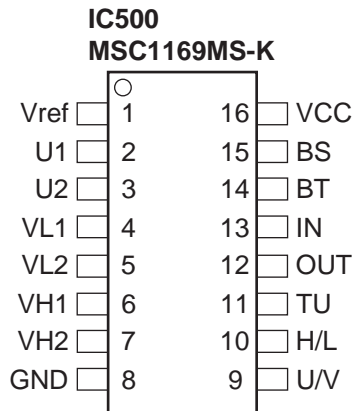
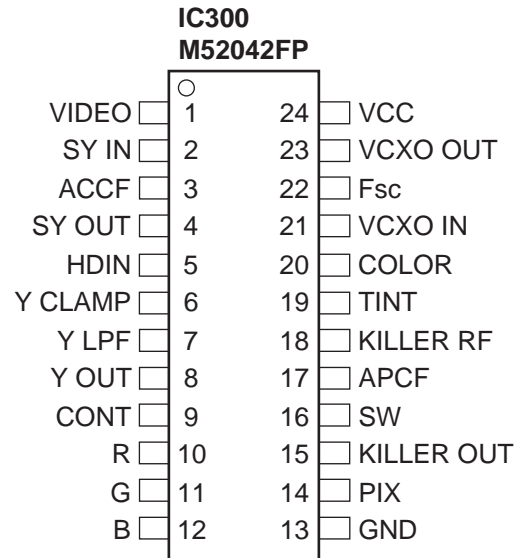
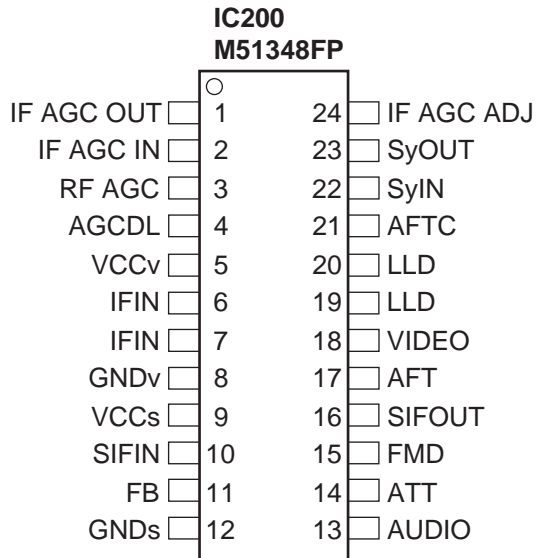


EXPLODED VIEW / DISASSEMBLY

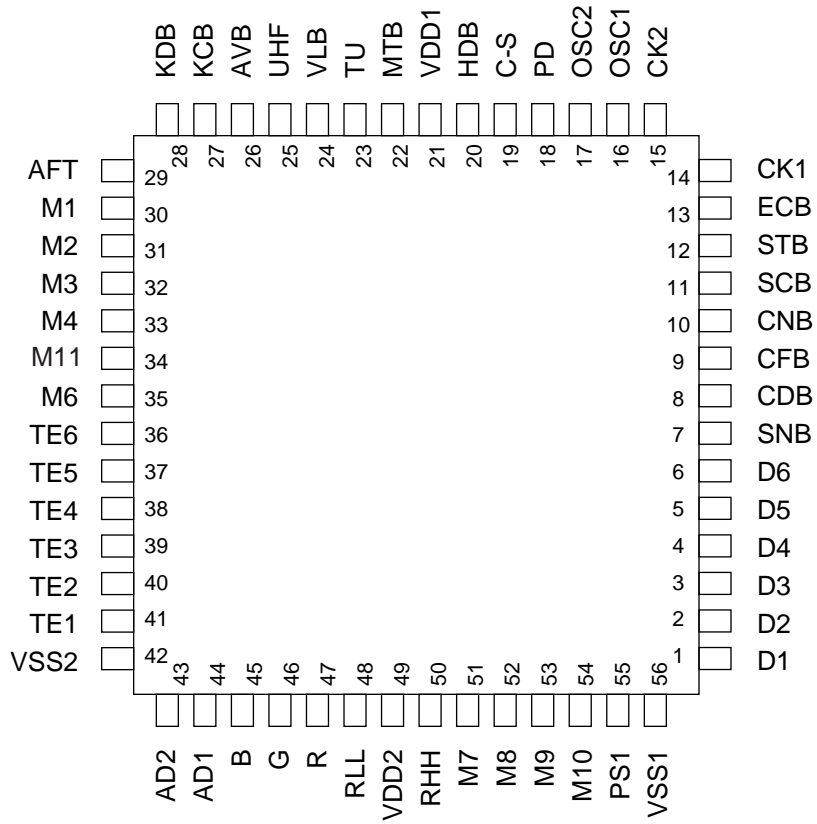


IC AND TRANSISTOR LEAD IDENTIFICATION

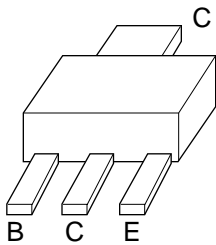
IC/LSI



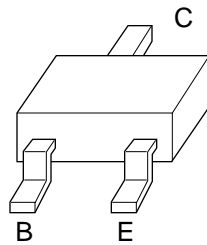
IC700
MSM6625-02GSK-640F



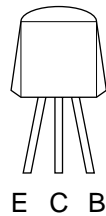
TRANSISTORS



2SD1119



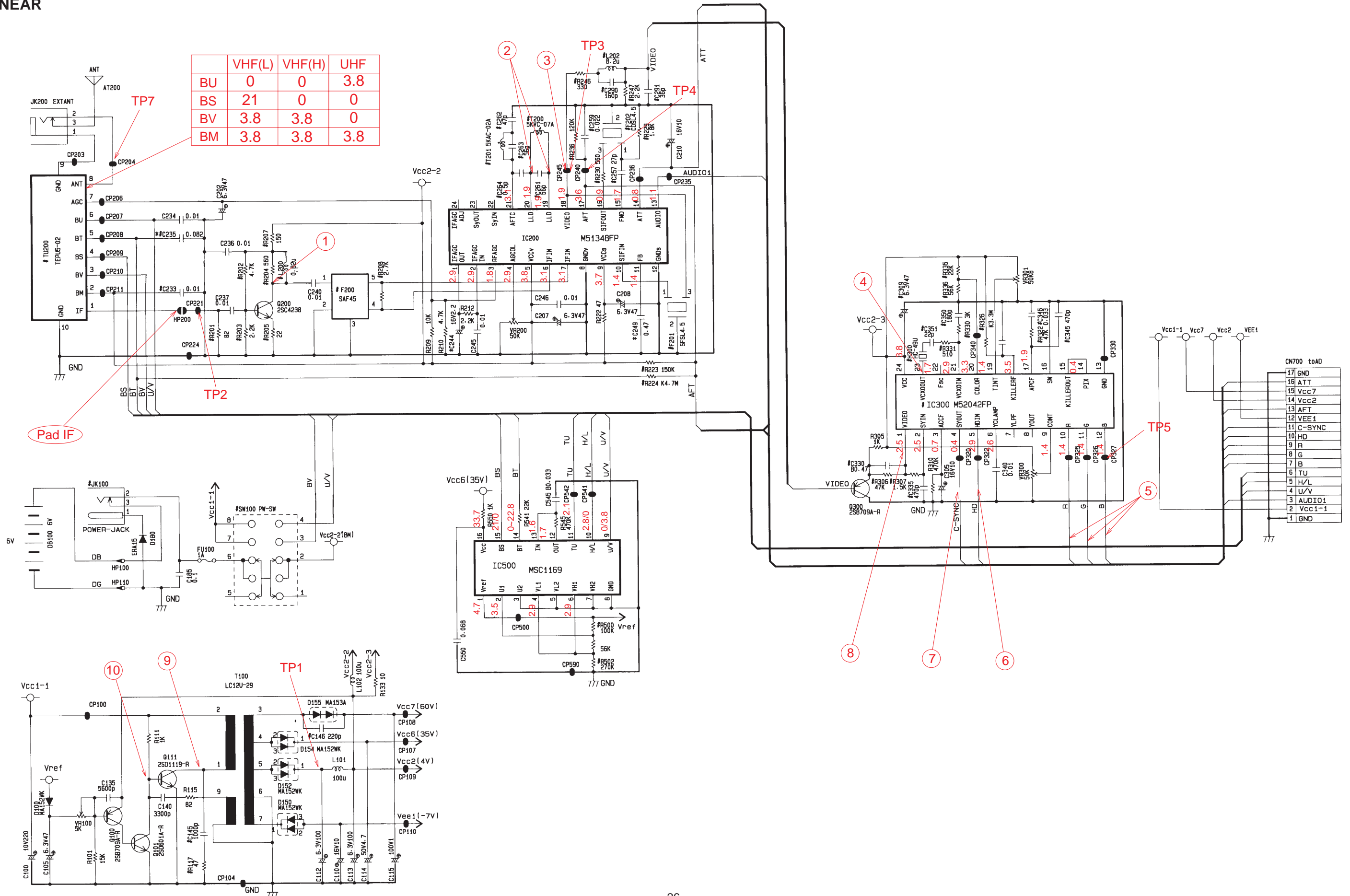
2SB709A 2SD601A
2SC4238 2SD1149-S



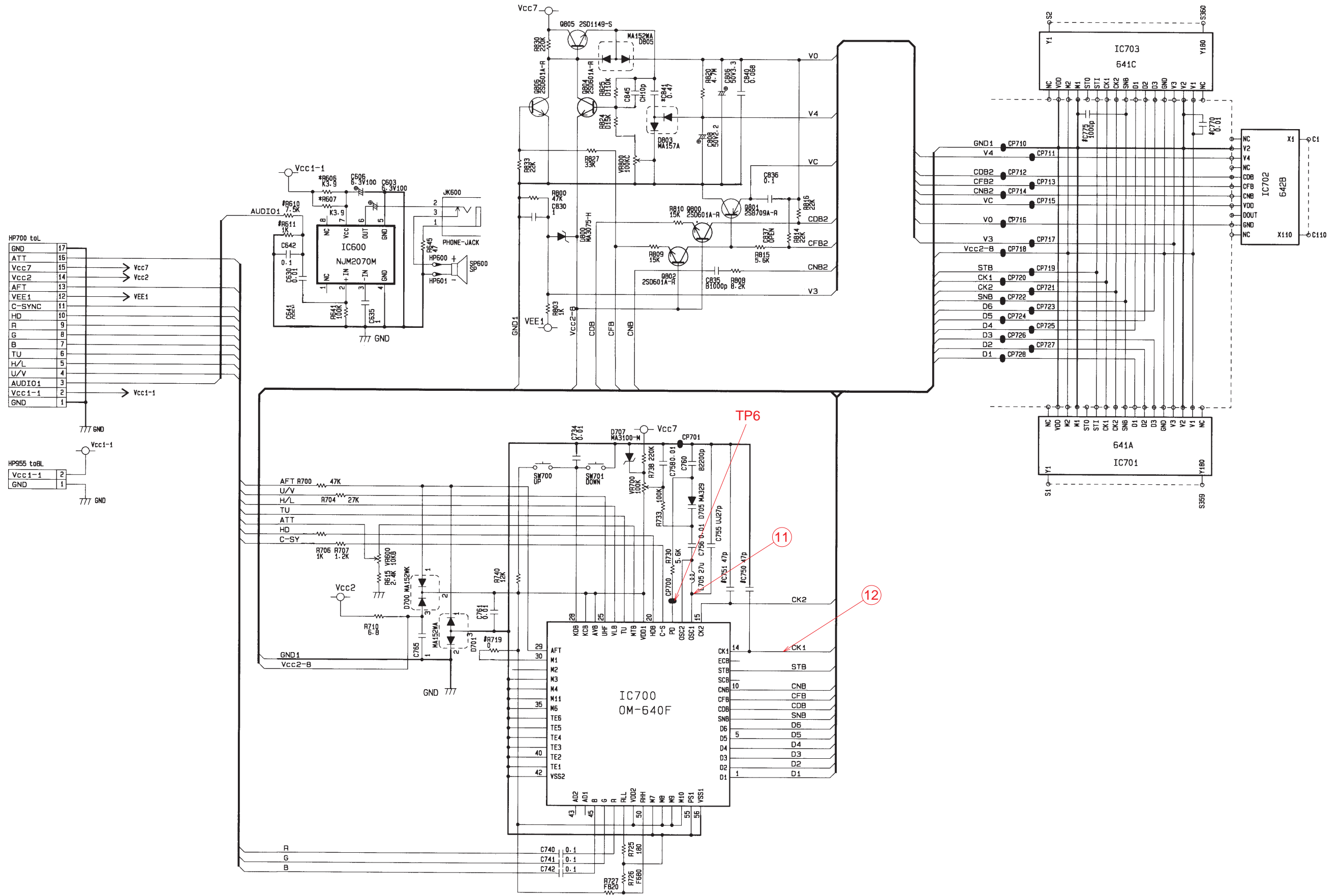
2SD965R

SCHEMATIC DIAGRAMS AND WAVEFORMS

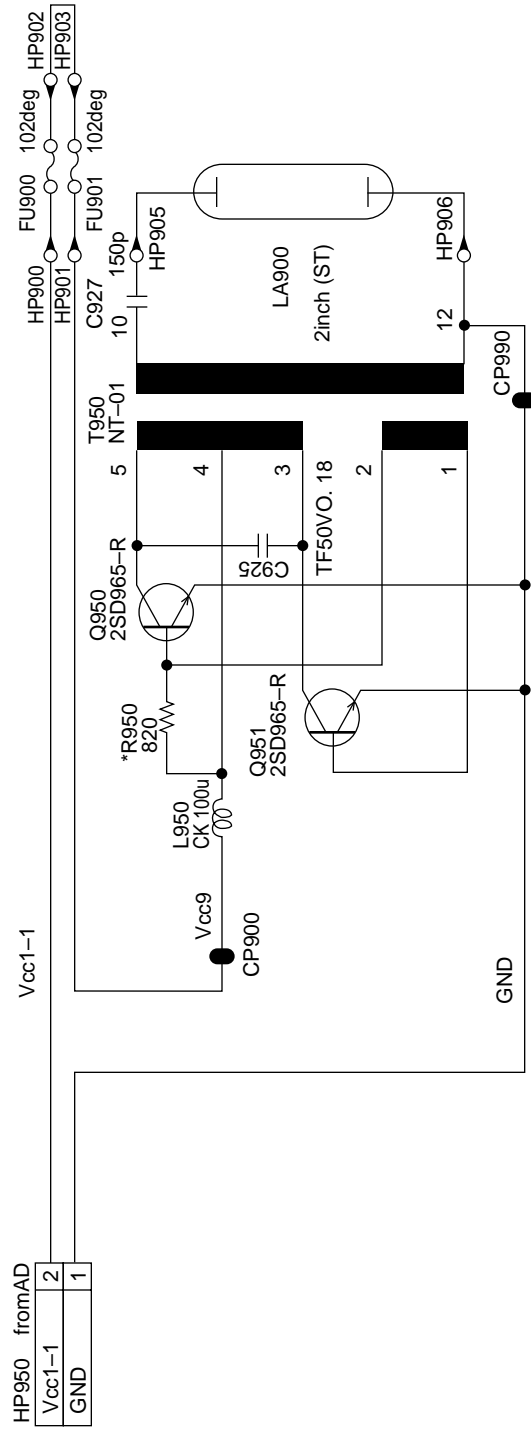
LINEAR



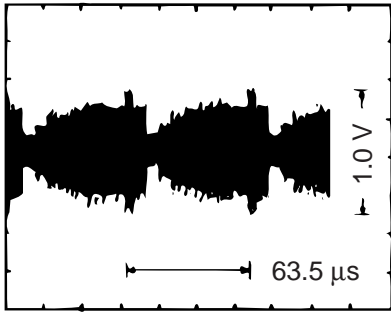
A/D



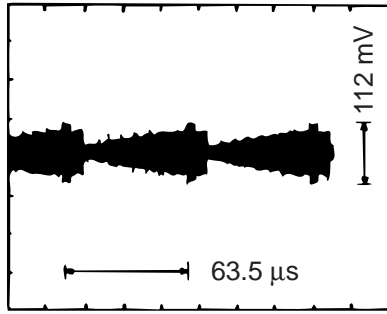
BL



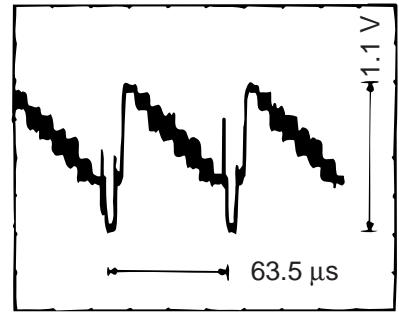
WAVEFORMS



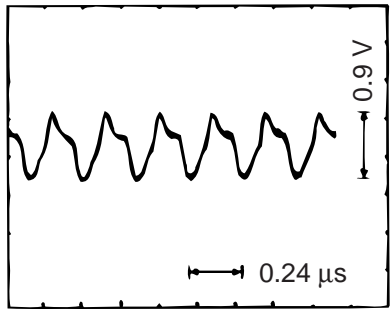
① Q200 Collector



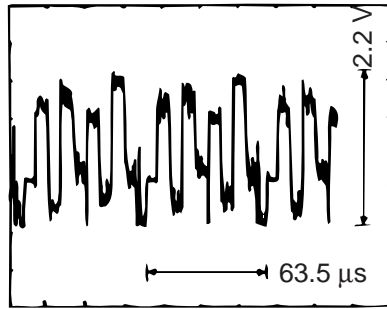
② IC200 Pin 19



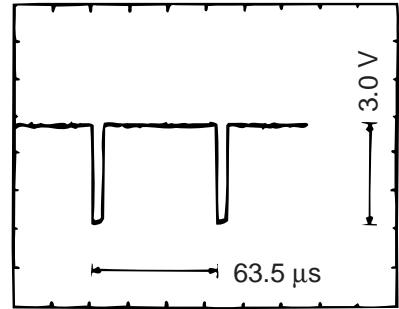
③ IC200 Pin 18



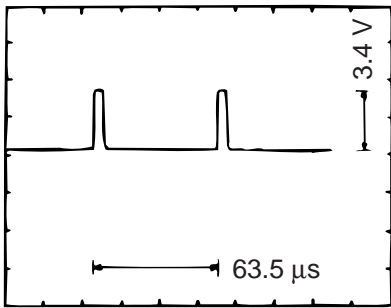
④ IC300 Pin 23



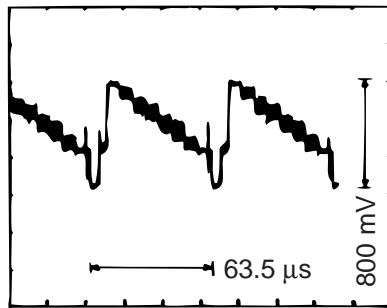
⑤ IC300 Pins 10, 11, 12



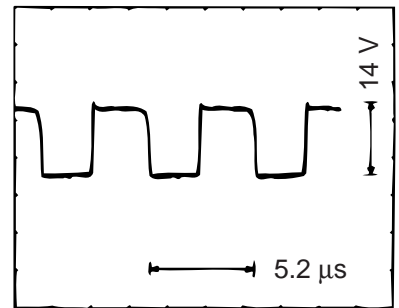
⑥ IC300 Pin 5



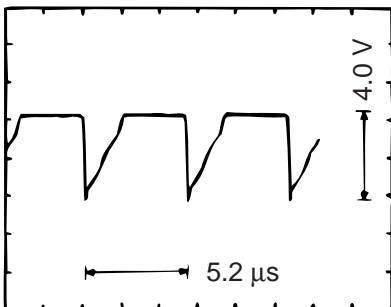
⑦ IC300 Pin 4



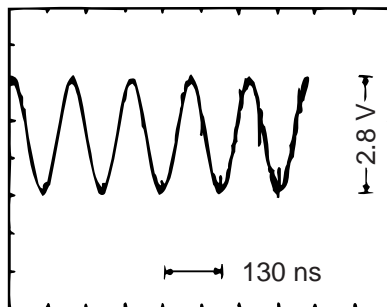
⑧ IC300 Pin 1



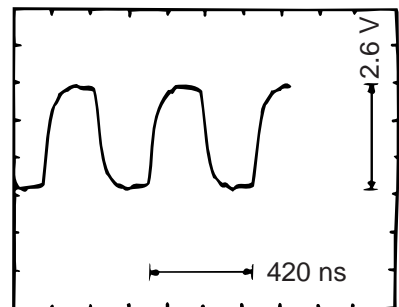
⑨ Q111 Collector



⑩ Q111 Base



⑪ IC700 Pin 16



⑫ IC700 Pin 14