

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

POCKET TELEVISION

TV-5100B

AUGUST 1994

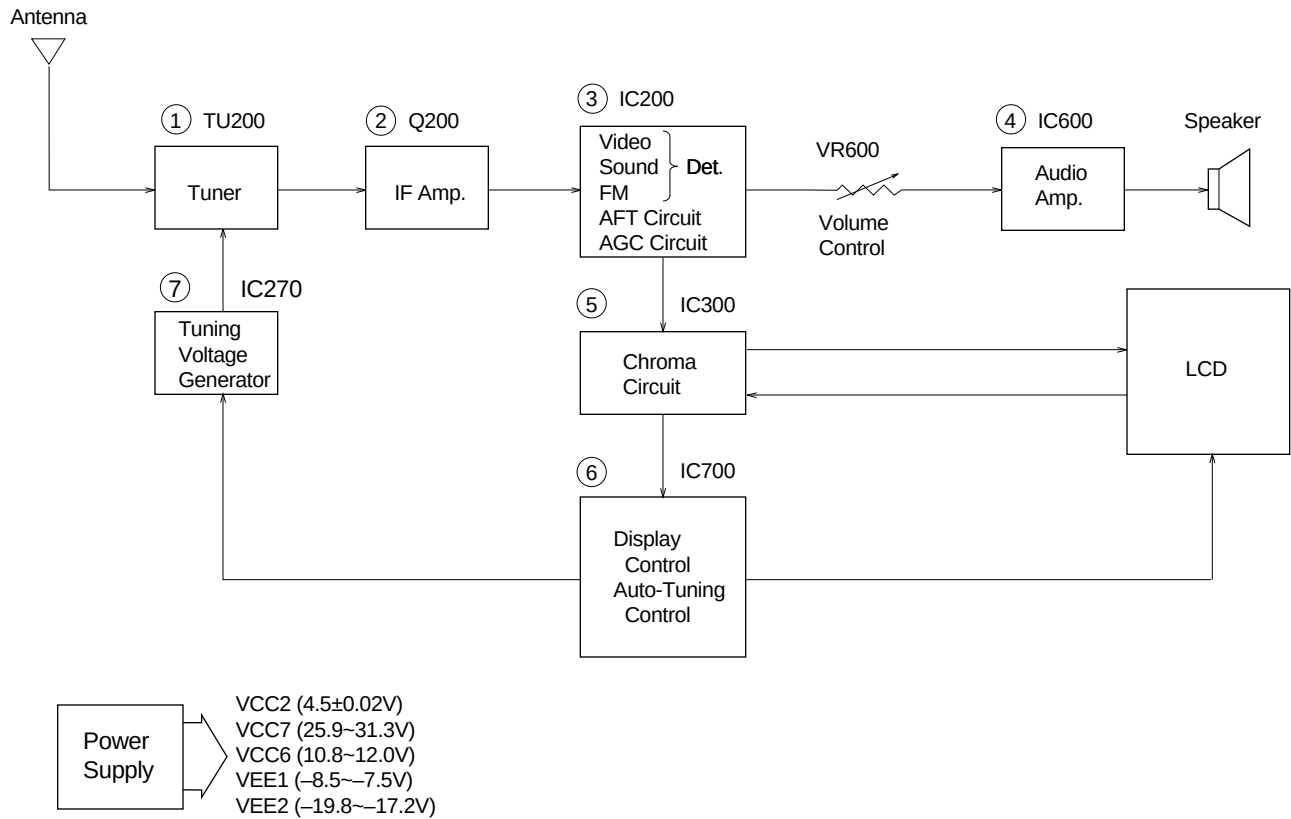
	Page
Specifications.....	1
Block Diagram	2
Adjustment	
Linear PCB.....	3
Printed Circuit Boards	8
Wiring Diagram	10
Electrical Parts List	11
Mechanical Parts List.....	18
Exploded View / Disassembly	19
IC and Transistor Lead Identification and Internal Circuitry	20
Schematic Diagrams and Waveforms	23

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. 3.0 W
4. Current consumption	Approx. 500 mA
5. Battery life (with alkaline batteries)	Approx. 2.0 hours
6. Power supply	Batteries : 4 AA size batteries Car adaptor : CA-K65 AC adaptor : AD-K65, 64
7. Connection terminals	Earphone jack : 3.5ø mini External power jack : 6.0 V DC IN External antenna jack : 3.5ø mini Audio / Video jack : 3.5ø
8. Screen size	1.8 inches
9. No. of Picture element	61,380 (220 × 279) dots
10. Dimensions	92 mm (H) × 105 mm (W) × 80 mm (D) 3-11/16" (H) × 4-1/5" (W) × 3-1/5" (D)
11. Weight	290 g excepting batteries 10.2 oz excepting batteries
12. Standard accessories	Test batteries (R6 x 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 2SC4670
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 IR3P90B
Generates the tricolor (red, green, and blue) from the video signal.
- ⑥ — Display Control/ Auto-Tuning Control : IC700 MSM6770GS
Controls the display.
- ⑦ — Tuning Voltage Generator: IC270 BA10358F
Generates the tuning voltage with the tuning pulse (TU) output from ⑥.

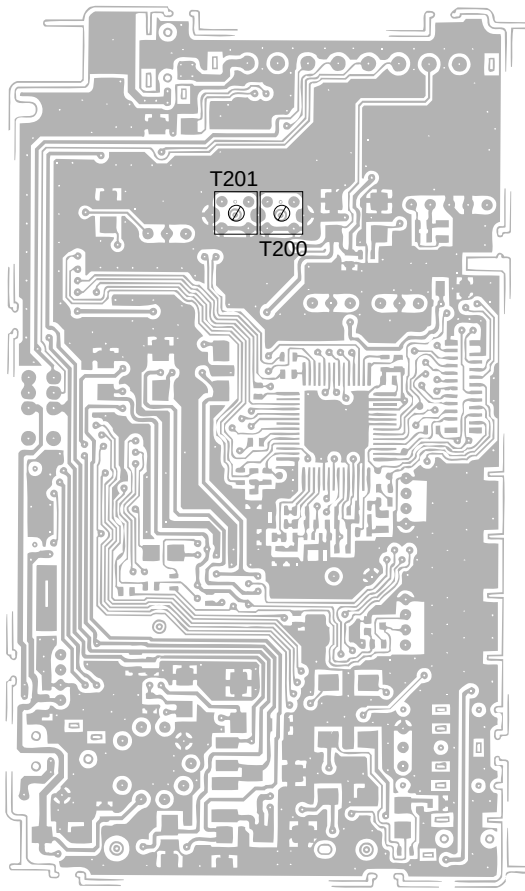
ADJUSTMENT

LINEAR PCB

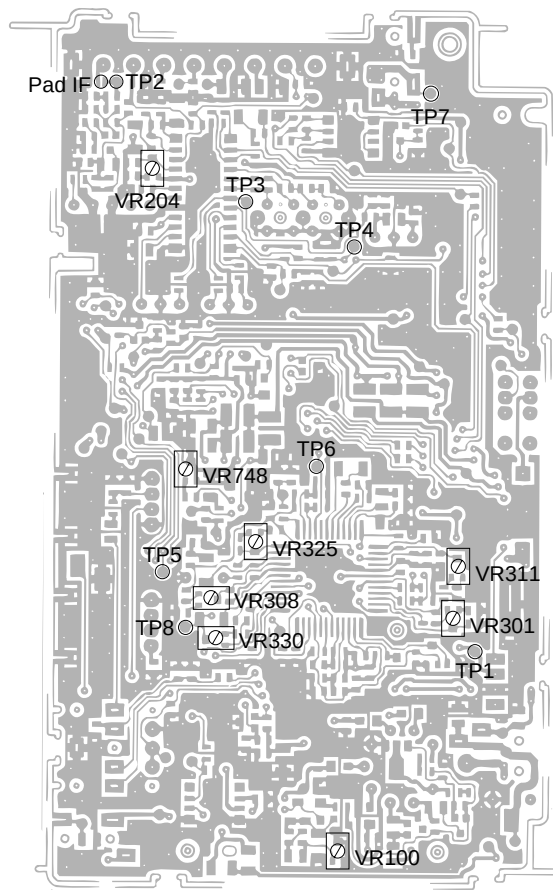
Items To Be Adjusted

Item	Measuring Instrument
VCC2-1 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
Clock adjustment	Voltmeter

Adjustment And Test Point Locations

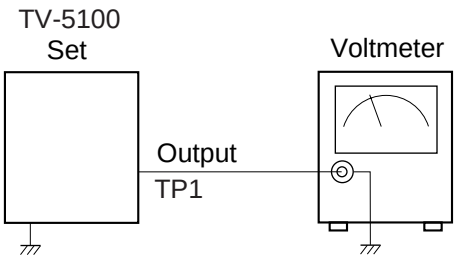


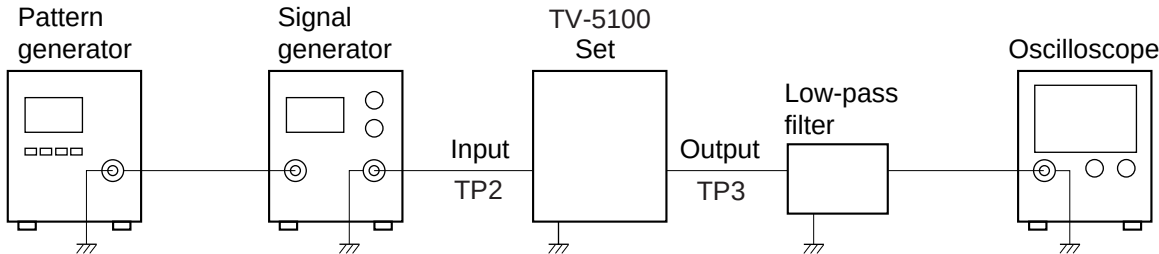
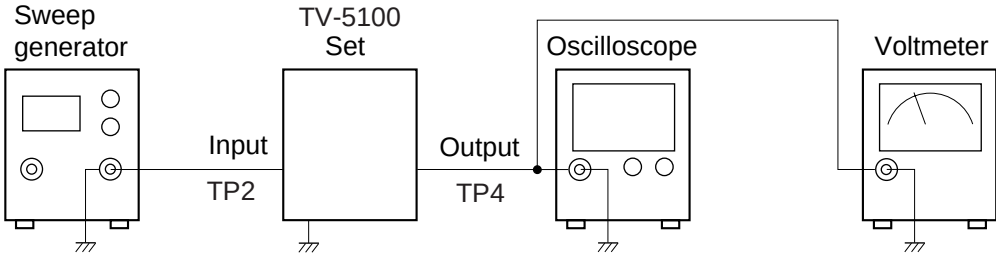
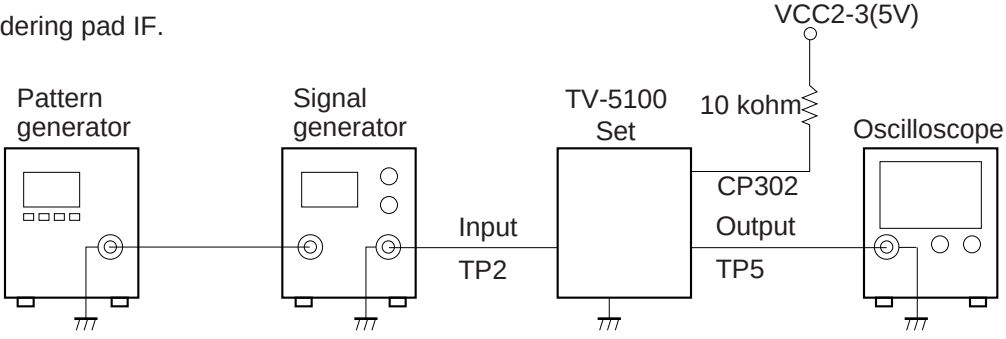
Top View

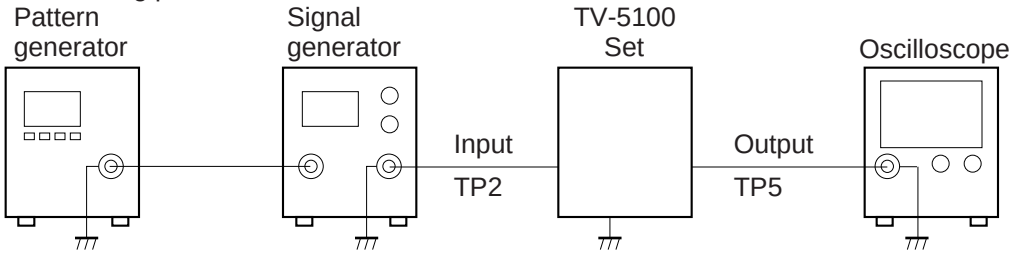
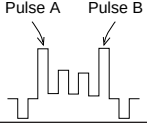
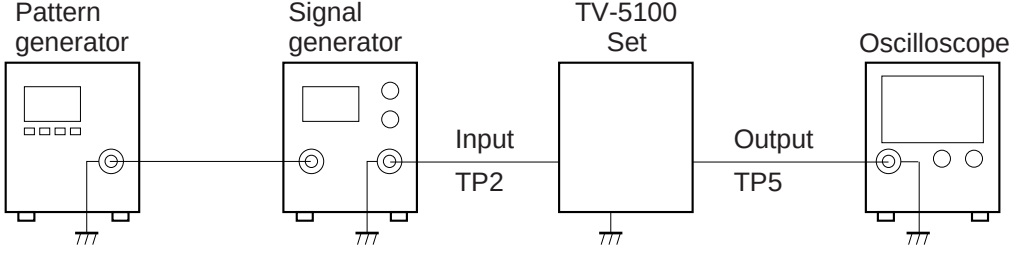
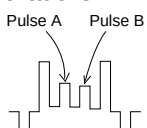
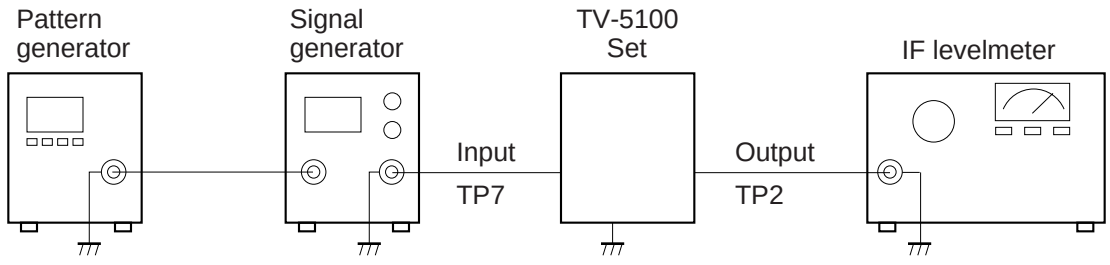


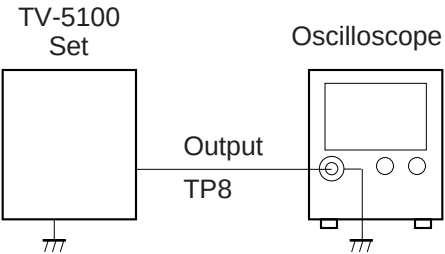
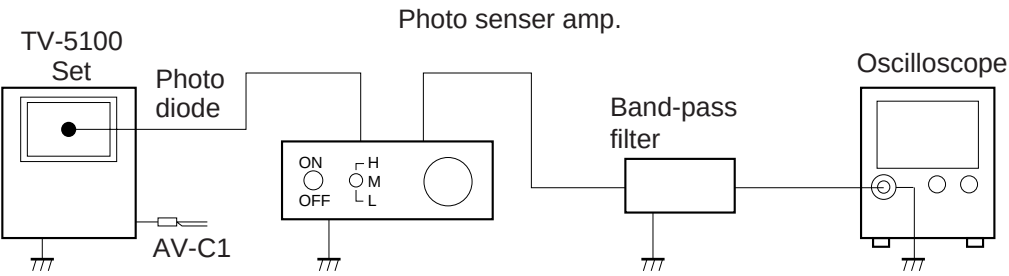
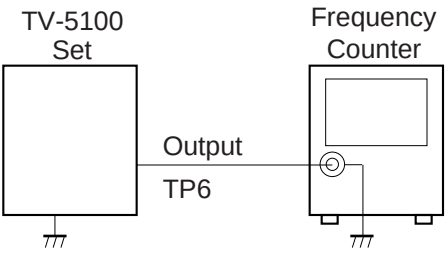
Bottom View

Equipment Connection / Adjustment Procedure

VCC2-1 Voltage Setting						
 The diagram illustrates the connection for voltage setting. A box labeled 'TV-5100 Set' is connected to a box labeled 'Voltmeter'. A line labeled 'Output TP1' connects the TV-5100 Set to the Voltmeter. Both the TV-5100 Set and the Voltmeter are grounded.						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
_____	_____	_____	VR100	Voltmeter	TP1	Adjust for 4.50 ± 0.02 V reading on voltmeter.

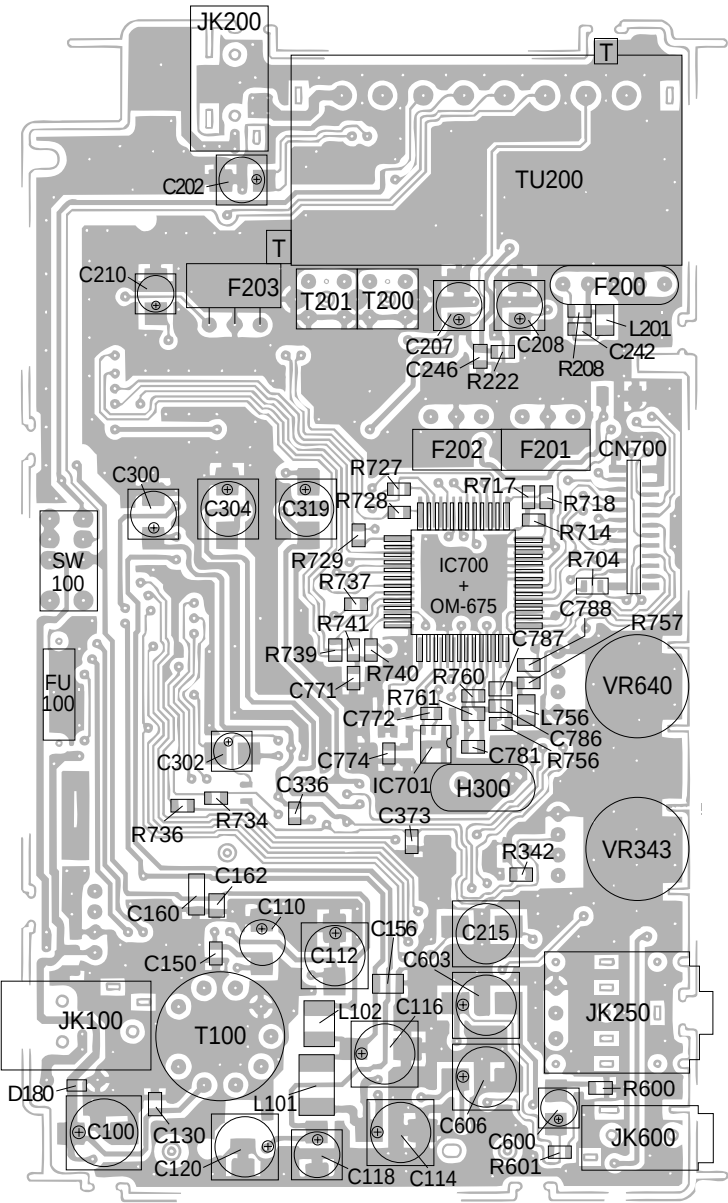
Video Detection Coil Adjustment						
* Open soldering pad IF. 						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
Pattern generator Signal generator	TP2	Color bar 45.75 MHz $45 \pm 3 \text{ dB}\mu$	T200	Low-pass filter Oscilloscope	TP3	Adjust for DC level at mini-
AFT Coil Adjustment						
* Open soldering pad IF. 						
Sweep generator	TP2	45.75 $\pm$ 5 MHz (Sweep) Marker: 45.75 MHz 70 dB μ	T201	Voltmeter Oscilloscope	TP4	Adjust for 1.4 $\pm$ 0.2 V reading on voltmeter. Confirm that the marker is at the middle of S-curve on oscilloscope.
Contrast Adjustment						
* Open soldering pad IF. 						
Pattern generator Signal generator	TP2	Color bar 45.75 MHz 70 dB μ	VR301	Oscilloscope	TP5	Adjust step form wave to read 2.5 $\pm$ 0.1 Vp-p.

Color Adjustment						
* Open soldering pad IF. 						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
Pattern generator Signal generator	TP2	Color bar 45.75 MHz 70 dBμ	VR311	Oscilloscope	TP5	Adjust VR311 so that the difference between pulse A and B is less than 0.1V. 
Tint Adjustment						
* Open soldering pad IF. 						
Pattern generator Signal generator	TP2	Color bar 45.75 MHz 70 dBμ	VR325	Oscilloscope	TP5	Adjust VR325 so that the difference between pulse A and B is less than 0.1V. 
AGC Adjustment						
						
Pattern generator TV Signal generator	TP7	Color bar 65 ± 5 dBμ	VR204	IF levelmeter	TP2	Adjust for 84 ± 1 dBμ reading on the IF levelmeter

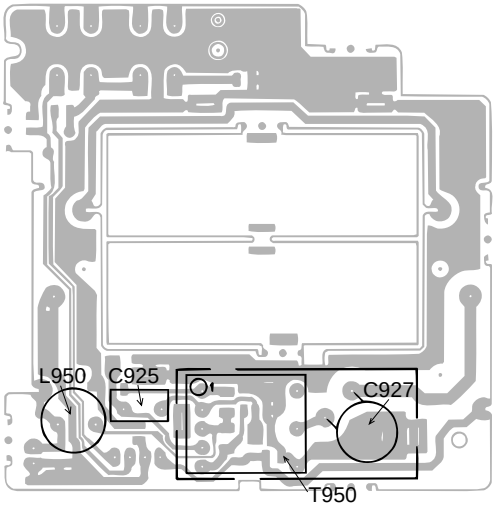
Vcom Adjustment						
						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Result
_____	_____	_____	VR328 VR330	Oscilloscope	TP8	Adjust VR328 so that square-wave to read $6.0 \pm 0.1V$. Adjust VR330 so that high level of the square-wave is at $0.0 \pm 0.25V$.
* Place a photo diode on the middle of the display plate. 						
_____	_____	_____	VR330	Photo sensor amp. Band pass filter Oscilloscope	_____	Adjust for ripple at minimum.
Free-running Frequency Adjustment						
						
_____	_____	_____	VR748	Frequency Counter	TP6	Adjust for a reading of 15.73 ± 0.01 KHz.

PRINTED CIRCUIT BOARDS

TOP VIEWS
Linear

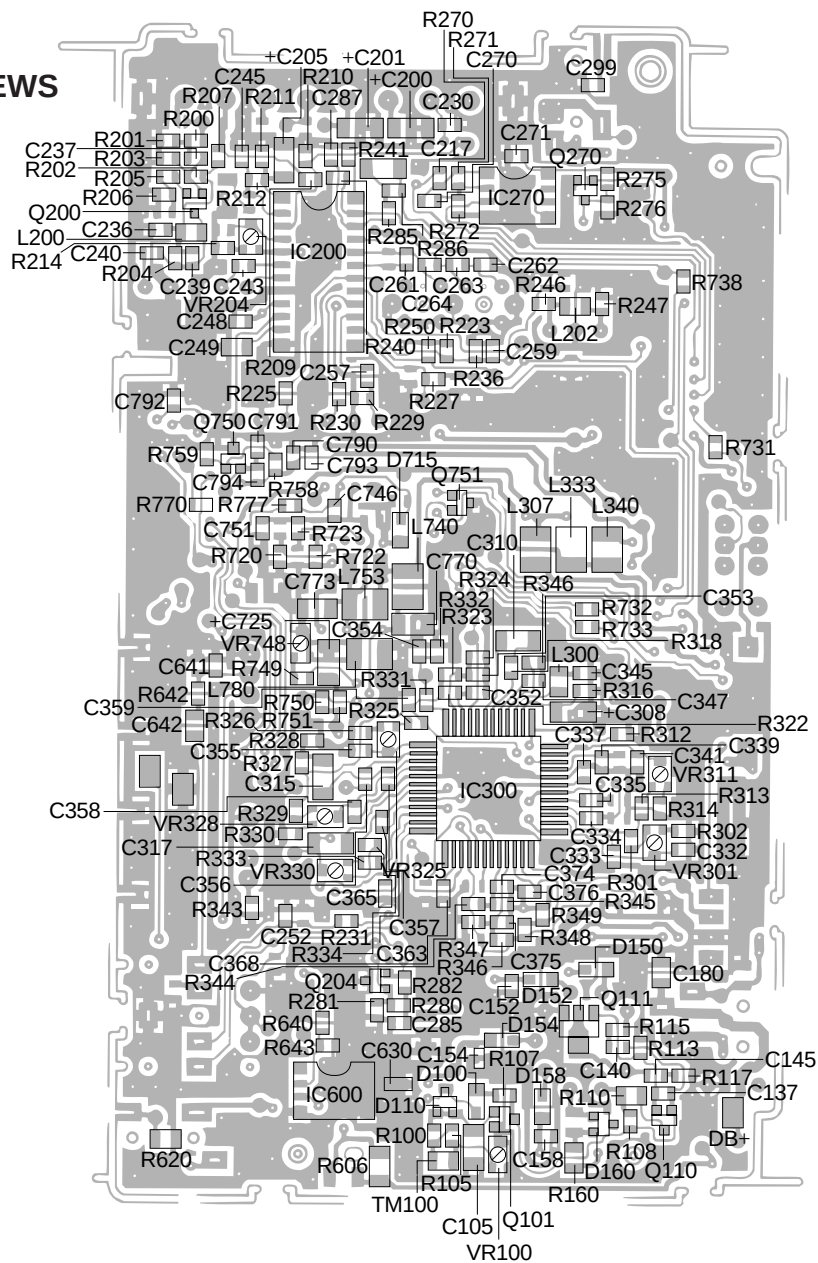


BL

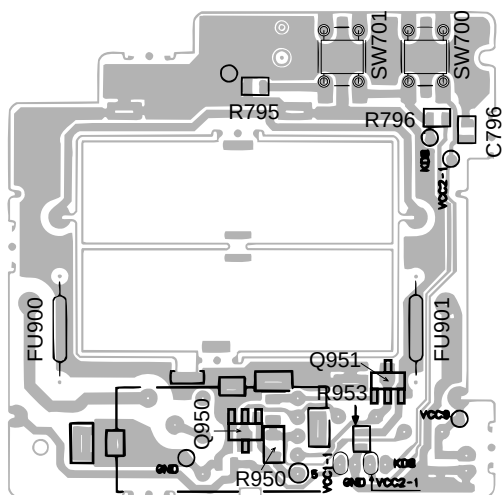


BOTTOM VIEWS

Linear



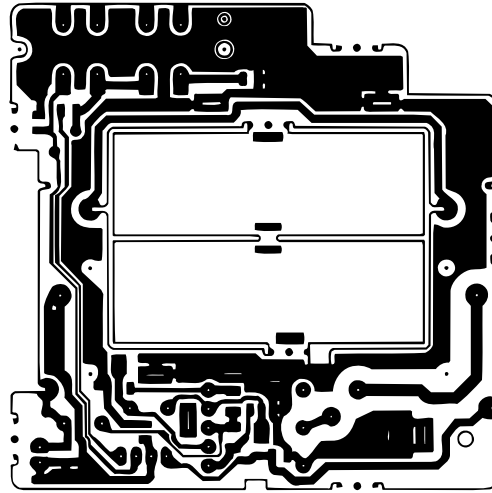
BL



WIRING DIAGRAM

TOP VIEWS

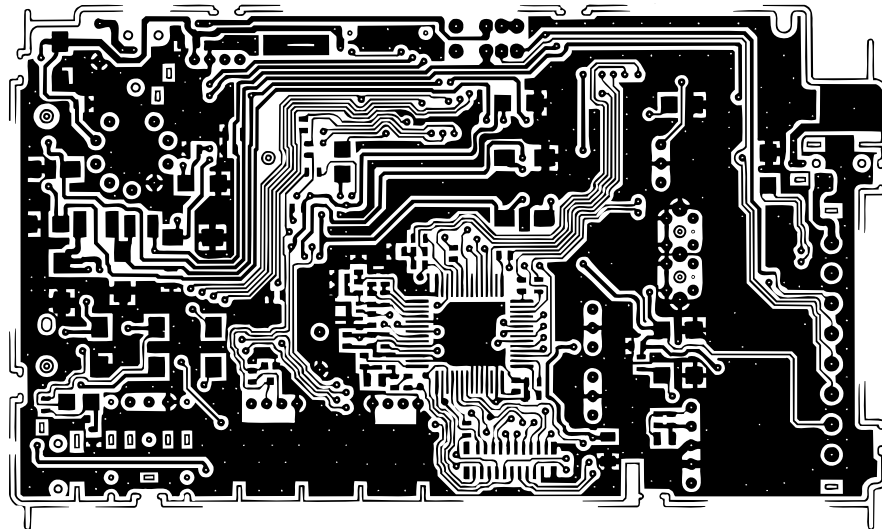
BL PCB



4 1

4 1

Linear PCB



ELECTRICAL PARTS LIST

Linear PCB No. 1

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
Capacitors							
N	C100	2807 6595	Electrolytic	ECE-V0JV101Z-P	10	33	C
N	C105	2895 0728	Tantalum	SK-0J225M-R	20	22	C
N	C110	2803 7345	Electrolytic	25RV2-10-T	20	20	C
N	C112	2807 6896	Electrolytic	ECE-V1CA470S-P	20	23	C
	C114	2807 6595	Electrolytic	ECE-V0JV101Z-P	10	33	C
	C116	2807 6595	Electrolytic	ECE-V0JV101Z-P	10	33	C
N	C118	2803 6421	Electrolytic	ECE-V1CA220SR	20	20	C
N	C120	2807 7169	Electrolytic	ECE-V1VA220S-P	20	23	C
	C130	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C137	2897 2135	Ceramic	UMK107B682K-T	20	4	C
	C140	7103 5861	Ceramic	GR39CH471J50PT	10	10	C
N	C145	2845 4053	Ceramic	10N1HB152K-T1	20	3	C
	C150	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C152	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C154	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C156	2892 0059	Ceramic	GR40Y5V103Z50PT	10	9	C
	C158	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C160	2892 0059	Ceramic	GR40Y5V103Z50PT	10	9	C
N	C180	2845 4473	Ceramic	UMK212F104Z-T	20	4	C
N	C200	2895 0630	Tantalum	SK-1V104M-R	20	22	C
N	C201	2895 0630	Tantalum	SK-1V104M-R	20	22	C
N	C202	2807 6791	Electrolytic	ECE-V0JA470S-R	20	20	C
	C205	2895 1589	Tantalum	ECST1CY335R	10	27	C
N	C207	2807 6791	Electrolytic	ECE-V0JA470S-R	20	20	C
N	C208	2807 6791	Electrolytic	ECE-V0JA470S-R	20	20	C
	C210	2807 6609	Electrolytic	ECE-V1CA100S-R	10	19	C
N	C215	2807 6840	Electrolytic	ECE-V0JA470N-P	10	37	C
N	C217	2895 0721	Tantalum	SK-1E474M-R	20	22	C
	C230	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C236	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C237	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C239	2845 4914	Ceramic	10N1HCH050C-T1	20	3	C
	C240	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C242	2845 4074	Ceramic	10N1HCH150J-T1	20	3	C
	C243	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C245	2897 1134	Ceramic	GR39W5R103K50PT	10	5	C
	C246	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C248	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C249	2897 1057	Ceramic	GR40Y5V474Z16PT	10	16	C
N	C252	2897 2142	Ceramic	UMK107B822K-T	20	4	C
N	C257	2845 4081	Ceramic	10N1HCH270J-T1	20	3	C
	C259	2897 1134	Ceramic	GR39W5R103K50PT	10	5	C
N	C261	2897 2065	Ceramic	GR39PH560G50PT	20	9	C
	C262	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C263	2897 2065	Ceramic	GR39PH560G50PT	20	9	C
N	C264	2845 4165	Ceramic	10N1HCH0R5C-T1	20	3	C
	C270	2897 1134	Ceramic	GR39W5R103K50PT	10	5	C
	C271	2897 1365	Ceramic	GR39Y5V473Z50PT	10	5	C
	C285	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C287	2845 4935	Ceramic	10N1HB332K-T1	20	3	C
	C299	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C

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

Linear PCB No. 2

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
N	C300	2807 6791	Electrolytic	ECE-V0JA470S-R	20	20	C
	C302	2807 6609	Electrolytic	ECE-V1CA100S-R	10	19	C
N	C304	2807 6896	Electrolytic	ECE-V1CA470S-P	20	23	C
N	C308	2895 0714	Tantalum	SK-1C105M-R	20	22	C
N	C310	2895 0714	Tantalum	SK-1C105M-R	20	22	C
N	C315	2895 0721	Tantalum	SK-1E474M-R	20	22	C
N	C317	2895 1589	Tantalum	ECST1CY335R	20	22	C
N	C319	2807 6896	Electrolytic	ECE-V1CA470S-P	20	23	C
	C332	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C333	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C334	2897 1792	Ceramic	TMK107F104Z-T	10	4	C
N	C335	2897 1792	Ceramic	TMK107F104Z-T	10	4	C
	C336	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C337	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C339	2897 1792	Ceramic	TMK107F104Z-T	10	4	C
	C341	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C345	2845 2674	Ceramic	10N1HCH560J-T1	10	4	C
N	C346	2845 3794	Ceramic	10N1HB222K-T1	20	3	C
N	C347	2897 2121	Ceramic	TMK107B153K-T	20	6	C
N	C352	2845 4928	Ceramic	10N1HCH151J-T1	20	4	C
	C353	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C354	2897 1960	Ceramic	EMK107B473K-T	20	6	C
	C355	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C356	2845 4921	Ceramic	10N1HCH160J-T1	20	3	C
	C357	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C358	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C359	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C363	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C365	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C368	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C373	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C374	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C375	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C376	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C600	2807 6602	Electrolytic	ECE-V0JA220S-R	10	19	C
N	C603	2807 6742	Electrolytic	ECE-V0JA101S-P	20	23	C
N	C606	2807 6742	Electrolytic	ECE-V0JA101S-P	20	23	C
	C630	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
	C641	2897 1120	Ceramic	GR39W5R102K50PT	10	4	C
N	C642	2897 2128	Ceramic	TMK212B104K-T	20	9	C
N	C725	2895 2023	Tantalum	SK-1V224M-R	20	22	C
N	C746	2897 1792	Ceramic	TMK107F104Z-T	20	4	C
	C751	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C770	2845 4802	Ceramic	EMK316F225Z-T	20	16	C
N	C771	2845 3794	Ceramic	10N1HB222K-T1	20	3	C
	C772	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C773	2845 4802	Ceramic	EMK316F225Z-T	20	16	C
	C774	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C781	2897 1722	Ceramic	UMK107B562K-T	20	4	C
N	C786	2845 4081	Ceramic	10N1HCH270J-T1	20	3	C
N	C787	2845 4081	Ceramic	10N1HCH270J-T1	20	3	C
	C788	2897 1099	Ceramic	GR39Y5V103Z50PT	10	4	C
N	C790	2897 1792	Ceramic	TMK107F104Z-T	20	4	C
N	C791	2897 1792	Ceramic	TMK107F104Z-T	20	4	C

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

Linear PCB No. 3

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
N	C792	2897 1792	Ceramic	TMK107F104Z-T	20	4	C
N	C793	2897 1792	Ceramic	TMK107F104Z-T	20	4	C
N	C794	2897 1792	Ceramic	TMK107F104Z-T	20	4	C
Connector							
N	CN700	3501 8316	Connector	52559-2090	5	70	C
Diodes							
	D100	7101 1194	Chip	MA111(TX)	10	18	C
	D110	2315 0158	Chip, Zener	MA3051-L(TX)	10	30	C
	D150	7101 1194	Chip	MA111(TX)	10	18	C
	D152	2390 1379	Chip, Schottoky	MA729-(TX)	10	30	C
	D154	2390 1379	Chip, Schottoky	MA729-(TX)	10	30	C
	D158	7101 1194	Chip	MA111(TX)	10	18	C
	D160	2390 1470	Chip	MA143A-(TX)	10	16	C
	D180	2390 1190	Chip	ERA15-01Y	10	9	C
	D715	2390 1379	Chip, Schottoky	MA729-(TX)	10	30	C
Filters and Traps							
	F200	3025 0182	SAW Filter	SAF45MA60Z	1	140	C
	F201	3025 0714	SIF Filter	SFSL4.5MDB12	1	33	C
	F202	3851 1057	Ceramic Discriminator	CDSL4.5MC30C12	1	42	C
	F203	3850 1259	SIF Trap	TPS4.5MB	1	50	C
Fuse							
N	FU100	3632 0469	Fuse	PI-251001(F10)1A	5	52	B
Oscillator							
	H300	2590 1239	Crystal	HC-49	1	110	C
ICs							
	IC200	2114 1827	Linear	M51348FP-T1	1	190	B
	IC270	2116 0119	OP AMP	BA10358F-T1	10	39	B
	IC300	2114 2709	Linear	IR3P90B-1	1	670	B
	IC600	2114 2464	Linear	NJM2070M-T1	1	65	B
	IC700	2011 7784	LSI	MSM6770GS-VK-675	1	300	B
	IC701	2114 3458	IC	S-81230SG-QB-T1	1	50	B
Jacks							
N	JK100	3501 8281	Jack	HEC0811-010010	10	43	C
	JK200	3501 5439	Jack	HSJ1456-01-210	1	27	C
	JK250	3501 3773	Jack	HSJ6063-01-410	1	88	C
	JK600	3501 5439	Jack	HSJ1456-01-210	1	27	C
Inductors							
N	L101	3013 1022	Chip	NLC453232-101K-TP	1	28	C
	L102	3013 1624	Chip	NLC322522-331K-TP	20	27	C
	L200	3013 1393	Chip	LK2125-R82K-TP	1	26	C
	L201	3013 1393	Chip	LK2125-R82K-TP	1	26	C
	L202	3013 0728	Chip	MLF2012C180K-TP	1	30	C
	L300	3013 1204	Chip	MLF2012C330K-TP	1	29	C
	L307	3013 1043	Chip	NLC322522-101K-TP	1	28	C
	L333	3013 1043	Chip	NLC322522-101K-TP	1	28	C
	L340	3013 1043	Chip	NLC322522-101K-TP	1	28	C
	L740	3013 1043	Chip	NLC322522-101K-TP	1	28	C
	L753	3013 1043	Chip	NLC322522-101K-TP	1	28	C
	L756	3013 1204	Chip	MLF2012C330K-TP	1	29	C
	L780	3013 1043	Chip	NLC322522-101K-TP	1	28	C
Transistors							
	Q101	2253 0133	Chip	2SD1819A-R	10	12	B
	Q110	2253 0133	Chip	2SD1819A-R	10	12	B
	Q111	2253 0308	Chip	2SD1119-R(TX)	10	37	B

Notes: N – New parts

M – Minimum order/supply quantity

R – Rank

Linear PCB No. 4

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
	Q200	2252 0994	Chip	2SC4670-(TX)	10	23	C
	Q204	2251 0189	Chip	2SB1218A-R(TX)	10	10	C
	Q270	2259 1435	Chip	DTC144EUWT106	10	9	C
	Q750	2251 0189	Chip	2SB1218A-R(TX)	10	10	C
	Q751	2259 1834	Chip	DTA143TUWT106	10	15	C
Resistors							
N	R100	2795 3360	Chip, Jumper	MCR03EZJH000	20	2	C
	R105	2797 1995	Chip resistor	ERJ-3GEYJ332V	20	10	C
	R107	2797 1827	Chip resistor	ERJ-3GEYJ333V	20	2	C
	R108	2797 2464	Chip resistor	ERJ-3GEYJ274V	20	2	C
	R110	2791 1131	Chip resistor	ERJ-6GEYJ271V	20	3	C
	R113	2797 2044	Chip resistor	ERJ-3GEYJ222V	20	2	C
	R115	2797 1813	Chip resistor	ERJ-3GEYJ101V	20	2	C
	R117	2795 3360	Chip resistor	MCR03EZJH000	20	2	C
	R160	2791 1692	Chip resistor	ERJ-6GEYJ680V	20	3	C
	R200	2797 3689	Chip resistor	ERJ-3GEYJ220V	20	2	C
N	R201	2797 1813	Chip resistor	ERJ-3GEYJ101V	20	2	C
	R202	2797 2247	Chip resistor	ERJ-3GEYJ822V	20	2	C
	R203	2797 2429	Chip resistor	ERJ-3GEYJ392V	20	2	C
	R204	2797 2394	Chip resistor	ERJ-3GEYJ561V	20	2	C
	R205	2797 3689	Chip resistor	ERJ-3GEYJ220V	20	2	C
	R206	2795 3360	Chip jumper	MCR03EZJH000	20	2	C
	R207	2797 2387	Chip resistor	ERJ-3GEYJ391V	20	2	C
	R208	2797 1869	Chip resistor	ERJ-3GEYJ182V	20	2	C
	R209	2797 2303	Chip resistor	ERJ-3GEYJ103V	20	2	C
	R210	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
N	R211	2797 1764	Chip resistor	MCR03EZJH104	20	2	C
	R212	2797 2044	Chip resistor	ERJ-3GEYJ222V	20	2	C
	R214	2797 1862	Chip resistor	ERJ-3GEYJ473V	20	2	C
	R222	2797 2373	Chip resistor	ERJ-3GEYJ470V	20	2	C
	R223	7102 2193	Chip resistor	ERJ-3GEYJ184V	20	2	C
	R225	2795 3360	Chip jumper	MCR03EZJH000	20	2	C
	R227	2795 3360	Chip jumper	MCR03EZJH000	20	2	C
	R229	2797 1869	Chip resistor	ERJ-3GEYJ182V	20	2	C
	R230	2797 2394	Chip resistor	ERJ-3GEYJ561V	20	2	C
	R231	2797 2450	Chip resistor	ERJ-3GEYJ153V	20	2	C
	R236	2797 2464	Chip resistor	ERJ-3GEYJ274V	20	2	C
	R240	2797 2303	Chip resistor	ERJ-3GEYJ103V	20	2	C
	R241	2797 2457	Chip resistor	ERJ-3GEYJ124V	20	2	C
	R246	2797 2380	Chip resistor	ERJ-3GEYJ331V	20	2	C
	R247	2797 2044	Chip resistor	ERJ-3GEYJ222V	20	2	C
	R250	2797 2303	Chip resistor	ERJ-3GEYJ103V	20	2	C
	R270	2797 1827	Chip resistor	ERJ-3GEYJ333V	20	2	C
	R271	2797 2898	Chip resistor	ERJ3GEYF473V	20	3	C
	R272	2797 3668	Chip resistor	ERJ3GEYF512V	20	3	C
	R275	2797 2030	Chip resistor	ERJ-3GEYJ223V	20	2	C
	R276	2797 1862	Chip resistor	ERJ-3GEYJ473V	20	2	C
	R280	2797 2030	Chip resistor	ERJ-3GEYJ223V	20	2	C
	R281	2797 2436	Chip resistor	ERJ-3GEYJ562V	20	2	C
	R282	2797 2394	Chip resistor	ERJ-3GEYJ561V	20	2	C
	R285	2797 2093	Chip resistor	ERJ-3GEYJ271V	10	10	C
	R286	2797 1764	Chip resistor	MCR03EZJH104	20	2	C
	R301	2797 1862	Chip resistor	ERJ-3GEYJ473V	20	2	C
	R302	2797 2681	Chip resistor	ERJ-3GEYJ393V	20	2	C

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

Linear PCB No. 5

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
N	R312	2797 3339	Chip resistor	ERJ-3GEYF302V	20	3	C
	R313	2797 1827	Chip resistor	ERJ-3GEYJ333V	20	2	C
	R314	2797 2681	Chip resistor	ERJ-3GEYJ393V	20	2	C
	R316	2797 1820	Chip resistor	ERJ-3GEYJ105V	20	2	C
	R318	2797 2093	Chip resistor	ERJ-3GEYJ271V	10	10	C
	R322	2797 1827	Chip resistor	ERJ-3GEYJ333V	20	2	C
	R323	2797 2912	Chip resistor	ERJ-3GEYF563V	20	3	C
	R324	2797 2898	Chip resistor	ERJ-3GEYF473V	20	3	C
	R325	2797 1827	Chip resistor	ERJ-3GEYJ333V	20	2	C
	R326	2797 2226	Chip resistor	ERJ-3GEYJ563V	20	2	C
	R327	2797 2436	Chip resistor	ERJ-3GEYJ562V	20	2	C
	R328	2797 2247	Chip resistor	ERJ-3GEYJ822V	20	2	C
	R329	2797 2226	Chip resistor	ERJ-3GEYJ563V	20	2	C
	R330	2797 2226	Chip resistor	ERJ-3GEYJ563V	20	2	C
	R331	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
N	R332	2797 3780	Chip resistor	ERJ-3GEYJ335V	20	2	C
	R333	2797 2681	Chip resistor	ERJ-3GEYJ393V	20	2	C
	R334	2797 2303	Chip resistor	ERJ-3GEYJ103V	20	2	C
	R342	7103 6792	Chip resistor	ERJ-3GEYJ913V	20	2	C
	R343	2797 2226	Chip resistor	ERJ-3GEYJ563V	20	2	C
	R344	2797 2912	Chip resistor	ERJ-3GEYF563V	20	3	C
	R345	2797 2891	Chip resistor	ERJ-3GEYF363V	20	3	C
	R346	2797 2877	Chip resistor	ERJ-3GEYF243V	20	3	C
	R347	2797 2884	Chip resistor	ERJ-3GEYF333V	20	3	C
	R348	2797 2877	Chip resistor	ERJ-3GEYF243V	20	3	C
	R349	2797 2884	Chip resistor	ERJ3GEYF333V	20	3	C
	R600	2797 2674	Chip resistor	ERJ-3GEYJ151V	10	10	C
	R601	2797 2527	Chip resistor	ERJ-3GEYJ512V	20	2	C
	R606	2795 0294	Chip jumper	MCR18EZHJ000	20	3	C
	R620	2791 0696	Chip resistor	ERJ-6GEYJ470	20	4	C
N	R640	7103 6792	Chip resistor	ERJ-3GEYJ913V	20	2	C
	R642	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R643	7102 2201	Chip resistor	ERJ-3GEYJ244V	20	2	C
	R704	2797 2303	Chip resistor	ERJ-3GEYJ103V	20	2	C
	R714	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R717	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R718	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R720	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R722	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R723	2795 3360	Chip jumper	MCR03EZHJ000	20	2	C
	R727	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R728	2797 3773	Chip resistor	ERJ-3GEYJ511V	20	2	C
	R729	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R731	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R732	2797 1855	Chip resistor	ERJ-3GEYJ102V	20	2	C
N	R733	2797 1855	Chip resistor	ERJ-3GEYJ102V	20	2	C
	R734	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R736	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R737	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R738	2797 2065	Chip resistor	ERJ-3GEYJ472V	20	2	C
	R739	2797 2016	Chip resistor	ERJ-3GEYJ225V	20	2	C
	R740	2797 3766	Chip resistor	ERJ-3GEYF394V	20	3	C
	R741	2797 2527	Chip resistor	ERJ-3GEYJ512V	20	2	C
	R749	2797 2436	Chip resistor	ERJ-3GEYJ562V	20	2	C

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

Linear PCB No. 6

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
N	R750	2797 1988	Chip resistor	ERJ-3GEYJ183V	20	2	C
	R751	2797 2443	Chip resistor	ERJ-3GEYJ682V	20	2	C
	R756	2797 1855	Chip resistor	ERJ-3GEYJ102V	20	2	C
	R757	2797 1855	Chip resistor	ERJ-3GEYJ102V	20	2	C
	R758	2797 3353	Chip resistor	ERJ-3GEYF393V	20	3	C
	R759	2797 2898	Chip resistor	ERJ-3GEYF473V	20	3	C
	R760	2797 1876	Chip resistor	MCR03EZJ224	20	2	C
	R761	2797 1876	Chip resistor	MCR03EZJ224	20	2	C
	R770	2797 1764	Chip resistor	MCR03EZJ104	20	2	C
	R777	2795 3360	Chip jumper	MCR03EZJ104	20	2	C
Switch							
	SW100	3412 0938	Switch	ESD-11V231	1	45	C
Coils and Converter							
N	T100	3065 0497	DC-DC Converter	LC12U-33	5	73	C
N	T200	3841 1211	Coil	S5E-02	5	62	C
N	T201	3841 1204	Coil	S5E-01	5	62	C
Thermister							
	TM100	2775 1085	Chip	157-102-53031-TP	1	26	C
Tuner							
	TU200	1013 5511	Tuner	TEPU5-02	1	760	C
Variable Resistors							
N	VR100	2775 1645	Semi-Fixed Resistor	EVM-1XSX50B23	20	28	C
N	VR204	2775 1484	Semi-Fixed Resistor	EVM-1XSX50B24	20	28	C
N	VR301	2775 1491	Semi-Fixed Resistor	EVM-1XSX50B54	20	28	C
N	VR311	2775 1491	Semi-Fixed Resistor	EVM-1XSX50B54	20	28	C
N	VR325	2775 1491	Semi-Fixed Resistor	EVM-1XSX50B54	20	28	C
N	VR328	2775 1491	Semi-Fixed Resistor	EVM-1XSX50B54	20	28	C
N	VR330	2775 1491	Semi-Fixed Resistor	EVM-1XSX50B54	20	28	C
	VR343	2765 0623	Volume	RK09H11T20KB	5	64	C
	VR640	2765 0462	Volume	RK09H11T50KB	5	80	C
N	VR748	2775 1477	Semi-Fixed Resistor	EVM-1XSX50B14	20	28	C

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

BL PCB

N	Item	Code No.	Parts Name	Specification	M	FOB Japan N.R.Yen Unit Price	R
Capacitors							
N	C796	2892 0059	Chip	GR40Y5V103Z50PT	10	9	C
	C925	2825 0392	TF	ECQ-V1H154JL	10	19	C
	C927	2813 3472	Ceramic	DE0705SL820J2K	20	13	C
Connector							
	CN702	3501 7182	Connector	52287-0411	1	22	C
Fuses							
	FU900	3632 0308	Temperature	EYP-1BF102L	1	27	B
	FU901	3632 0308	Temperature	EYP-1BF102L	1	27	B
Coil							
	L950	3013 0756	Choke	RCH-875-101K	5	55	C
Lamp							
	LA900	3851 1337	Fluorescent	8.61AD1P2-CA4	1	340	B
Transistors							
	Q950	2253 0308	Transistor	2SD1119-R(TX)	10	37	B
	Q951	2253 0308	Transistor	2SD1119-R(TX)	10	37	B
Resistors							
	R795	2791 0305	Chip	ERJ-6GEYJ472V	20	3	C
	R796	2791 0305	Chip	ERJ-6GEYJ472V	20	3	C
	R950	2792 0500	Chip	MCR18EZHJ471	20	2	C
	R953	2792 0110	Chip	ERJ-6GEYOR00V	20	3	C
Switches							
N	SW700	3412 1239	Switch	SKHHAJ	20	12	C
N	SW701	3412 1239	Switch	SKHHAJ	20	12	C
Transformer							
N	T950	3012 1141	Inverter trans	EW12H-01-CU	1	120	B

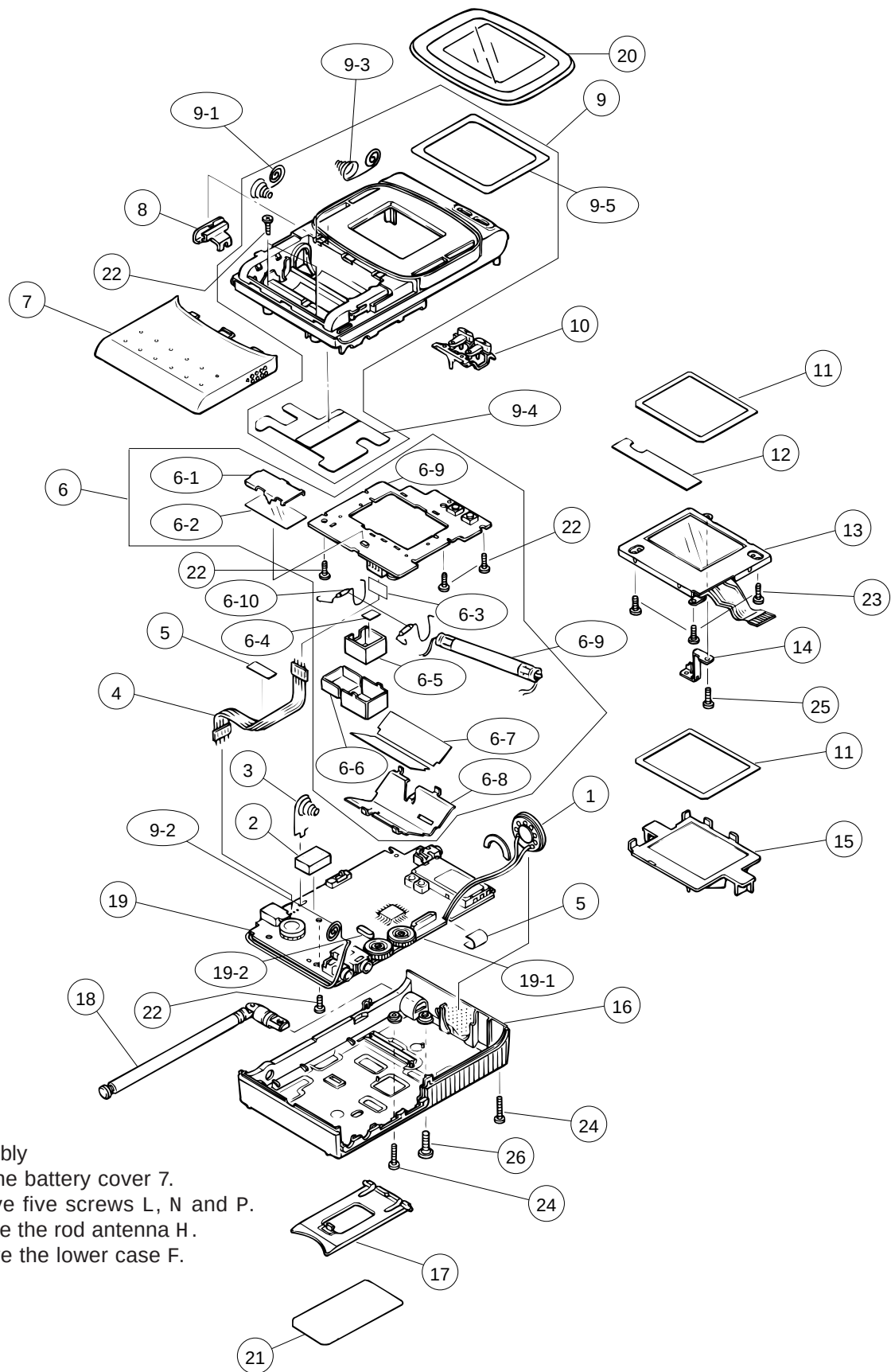
Notes: N – New parts
M – Minimum order/supply quantity
R – Rank

MECHANICAL PARTS LIST

N	Item	Code No.	Parts Name	Specification	Q	FOB Japan N.R.Yen Unit Price	R
N	1	6609 2004	Speaker ass'y	K412107*1	1	100	C
	2	6607 4720	Cushion A-K614	K410316-7	1	7	C
N	3	6609 1530	Battery spring A-K610	K412012-1	10	35	C
N	4	6609 1520	Flat cable A-K610	K311586-1	1	29	C
	5	6601 1700	Insulation tape A-K60	K4117-3	2	3	C
N	6	6630 5552	BL unit	K211264*1	1	2,010	B
N	6-1	6609 2070	Shield case E-K610	K311634-1	1	28	C
N	6-2	6609 2080	Insulation plate B-K610	K41212-1	1	6	C
	6-3	6607 0690	Insulation plate D-K508	K410441-3	1	7	C
	6-4	6606 6201	Adhesive tape C-K502	K410903A-3	1	3	C
N	6-5	6609 2240	Shield case F-K610	K311674-1	1	26	C
N	6-6	6609 1330	Shield case C-K610	K311528-1	1	40	C
N	6-7	6609 1350	Reflection tape A-K610	K412014-1	1	13	C
N	6-8	6609 1340	Shield case D-K610	K311529-1	1	43	C
	6-9	3851 1337	Fluorescent lamp	8.61AD1P2-CA4	1	340	B
	6-10	3632 0308	Temperature fuse	EYP-1BF102L	2	27	B
N	7	6630 5683	Battery cover ass'y	K412106*1	1	520	C
	8	6609 1320	Switch knob A-K610	K311527-1	1	20	C
N	9	6630 5684	Upper case ass'y	K211263*1	1	630	C
N	9-1	6020 7658	Battery spring B1 G513	P408A-1	1	25	C
	9-2	6606 4920	Battery spring C-K603	K410883-1	1	14	C
	9-3	6020 7666	Battery spring B2 G513	P409A-1	1	23	C
N	9-4	6609 1400	Blind tape A-K610	K412066-1	1	16	C
N	9-5	6609 1390	Adhesive tape A-K610	K412015-1	1	18	C
	10	6609 1360	Tuning button A-K610	K311521-1	1	20	C
N	11	6609 1480	Adhesive tape B-K610	K412016-1	2	15	C
N	12	6609 1490	Insulation plate A-K610	K412018-1	1	8	C
N	13	2725 0966	Display Unit	TAD18T1001NB	1	4,000	B
N	14	6609 1370	Earth plate A-K610	K412013-1	1	30	C
N	15	6609 1410	Spacer for Display A-K610	K211183-1	1	55	C
N	16	6609 1270	Lower case A-K610	K110739-1	1	120	C
N	17	6606 2130	Stand A-K331	K310518-1	1	36	C
	18	3851 1470	Rod antenna	VR70100GA	1	180	C
N	19	6630 5685	PCB-K610B-L ass'y	K211266*1	1	10,880	B
	19-1	6604 7630	Insulation plate A-K332	K4670-17	1	3	C
N	19-2	6603 7100	Insulation plate B-K420	K4330-16	1	2	C
	20	6609 1280	Display plate BAM-K610	K412011-2	1	160	C
N	21	6609 1300	Rating plate BAM-K610	K412010-2	1	10	C
	22	5112 0868	Tapping screw (+)	BT3, 1.7x5Bk	6	3	X
	23	5860 0301	Tapping screw (+)	BT3, 1.7x5Ni	3	3	X
	24	5860 0805	Tapping screw (+)	BT3,1.7x10Bk	2	3	X
	25	5860 1477	Tapping screw (+)	BT3,1.7x3.5Bk	1	1	X
N	26	6609 1290	Screw A-K610	K412031-1	1	3	X

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

EXPLODED VIEW / DISASSEMBLY

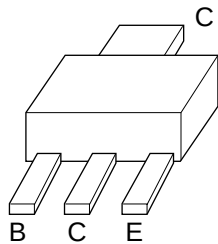


Disassembly

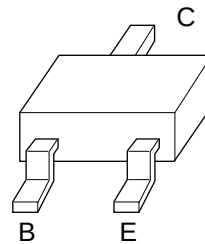
1. Slide the battery cover 7.
2. Remove five screws L, N and P.
3. Remove the rod antenna H.
4. Remove the lower case F.

IC AND TRANSISTOR LEAD IDENTIFICATION AND INTERNAL CIRCUITRY

TRANSISTORS

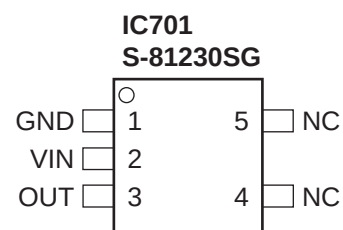
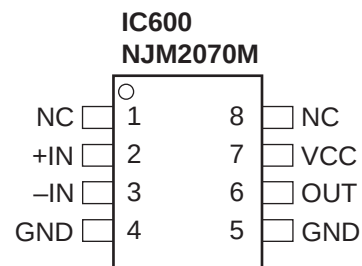
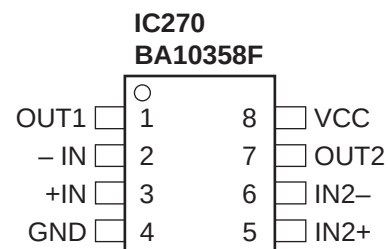
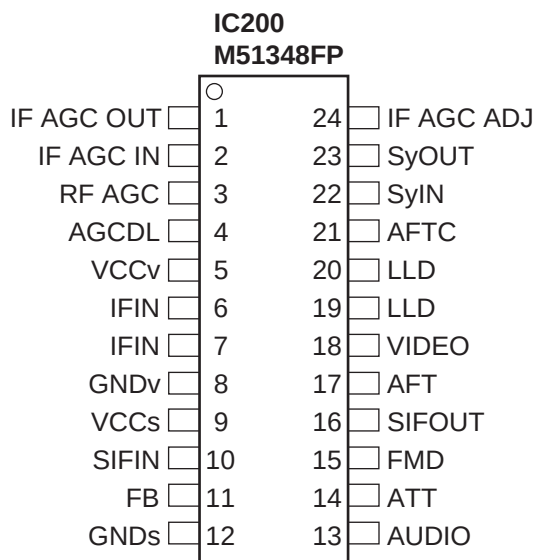


2SD1119

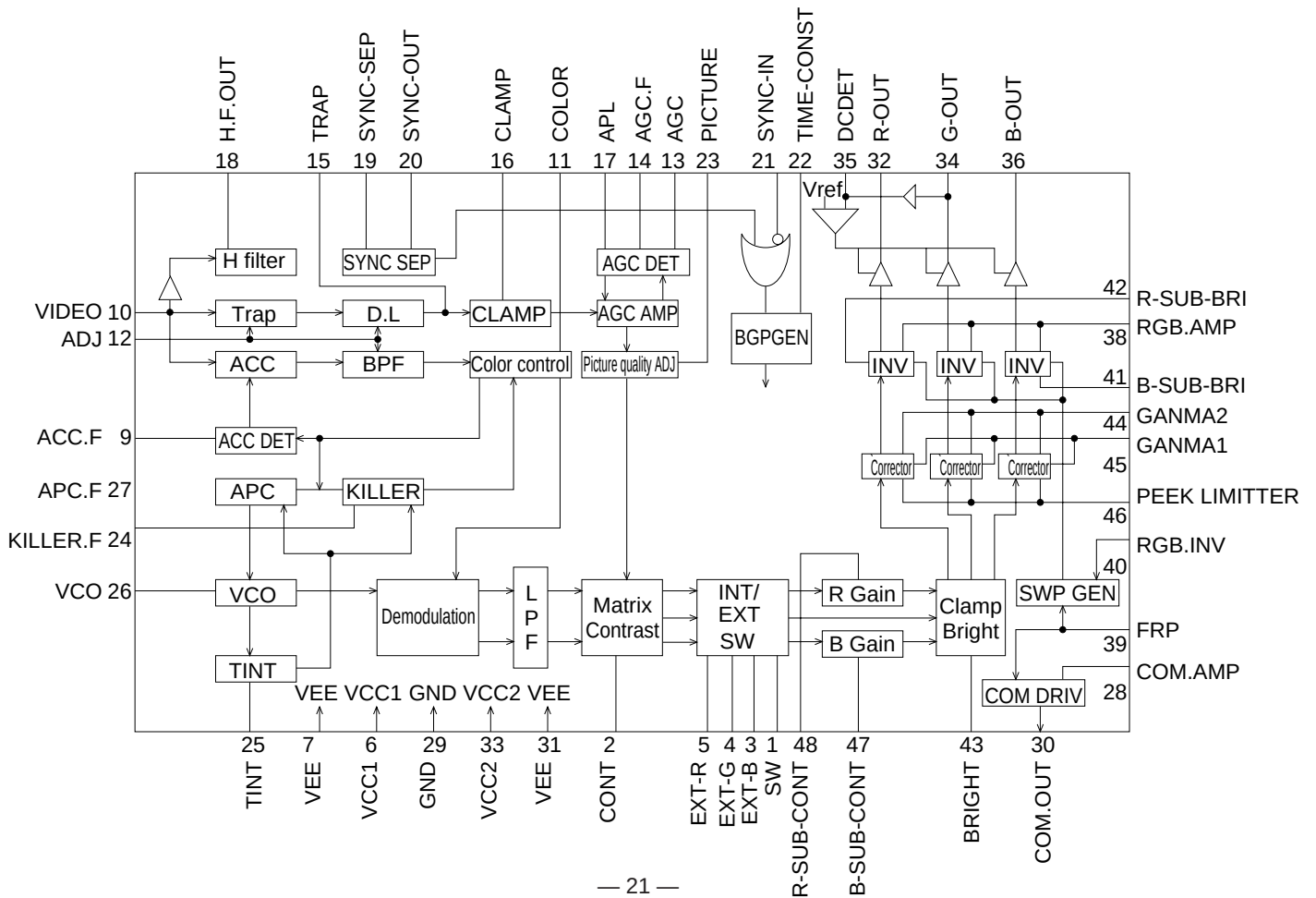
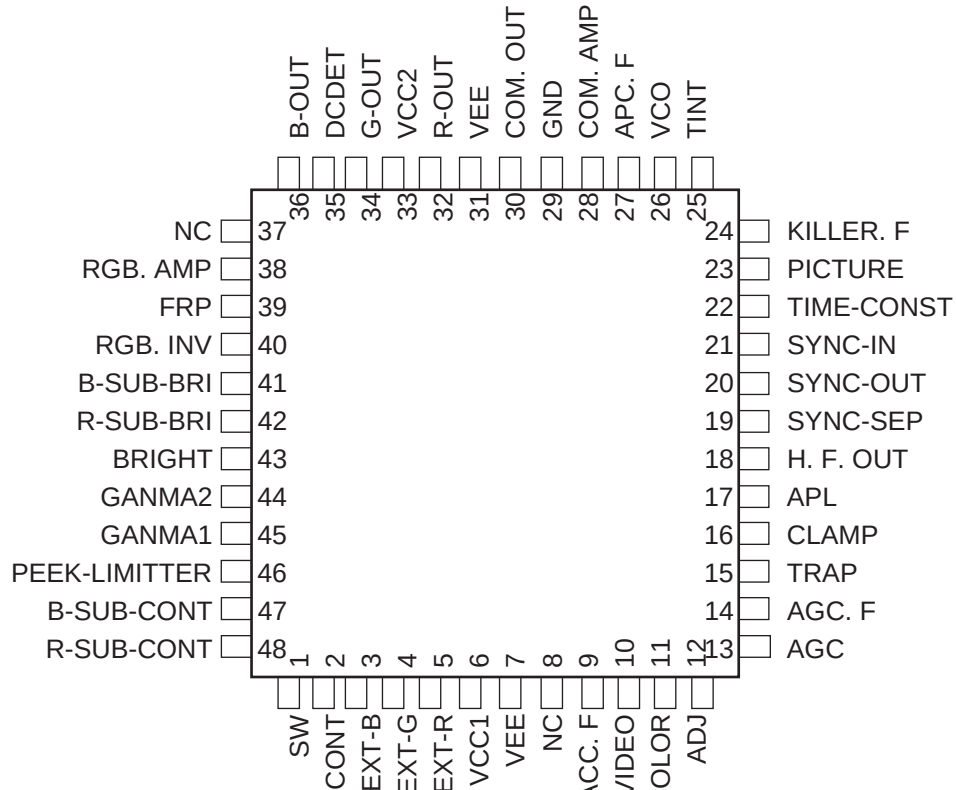


2SB1218A 2SC4760
2SD1819A DTA143TUW
DTC144EUW

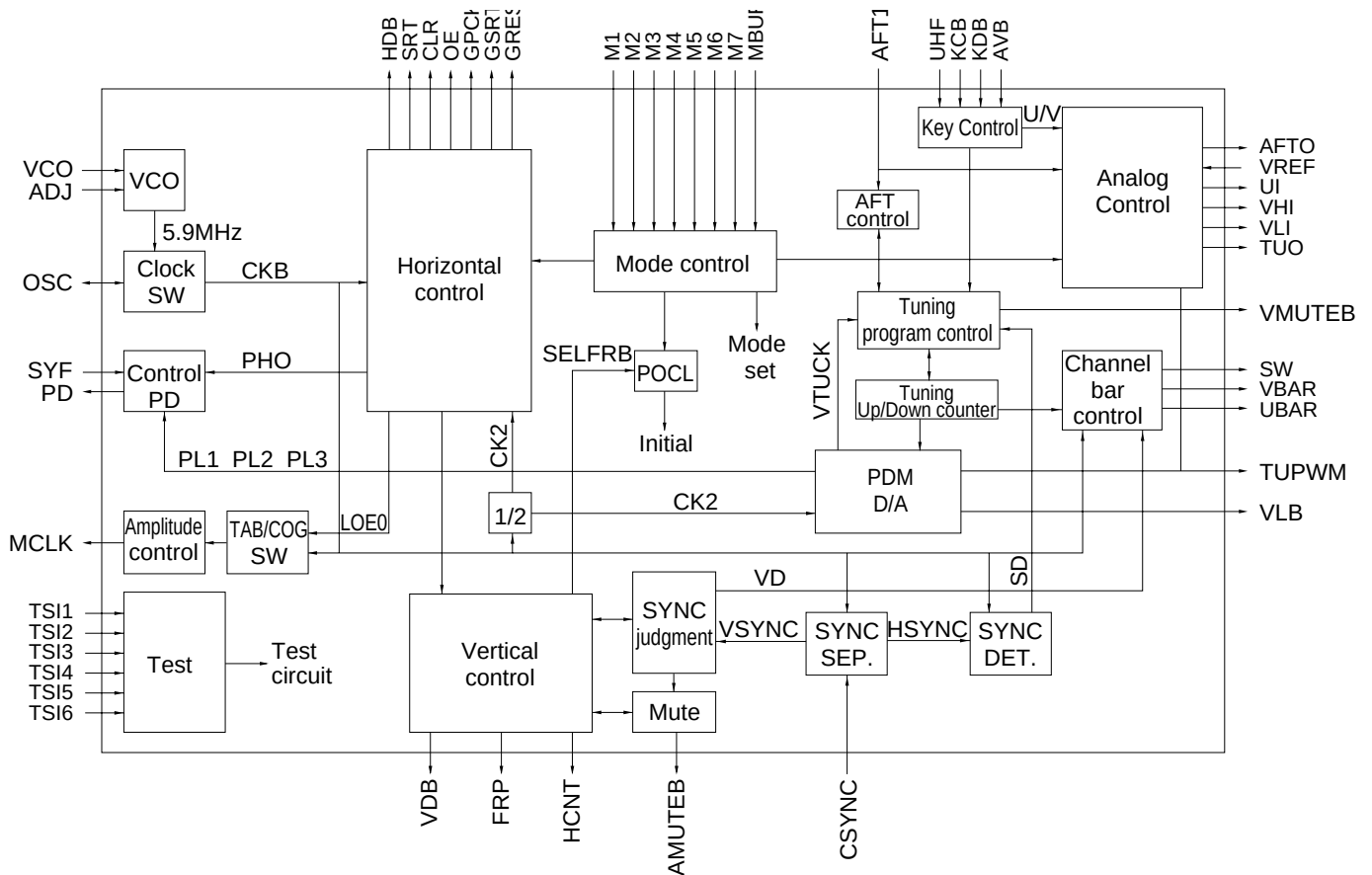
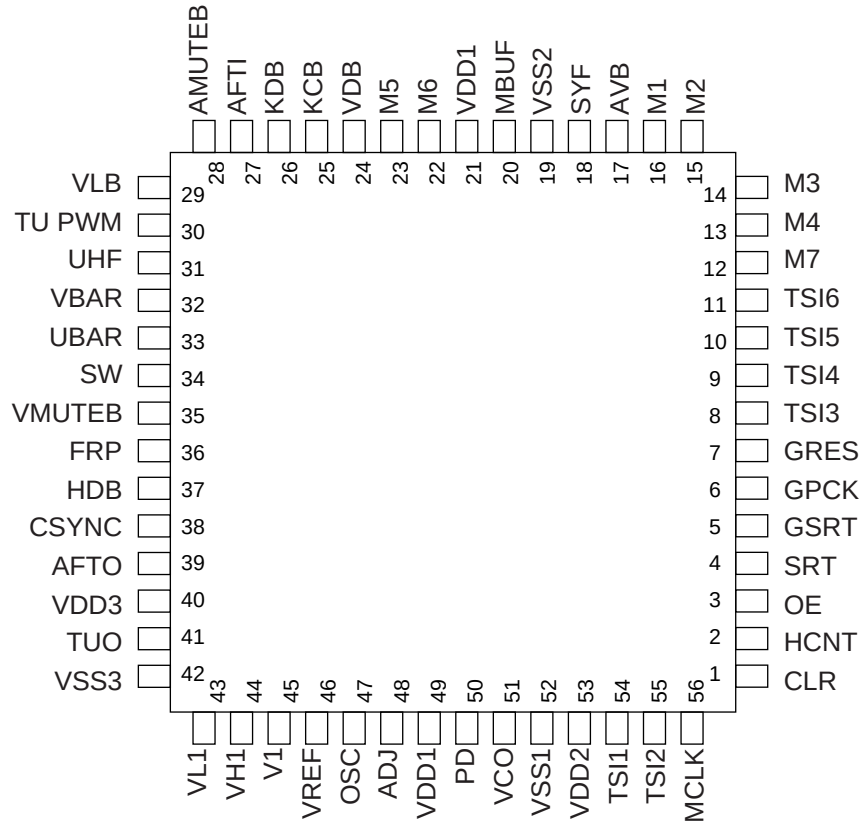
IC/LSI



IC300
IR3P90B

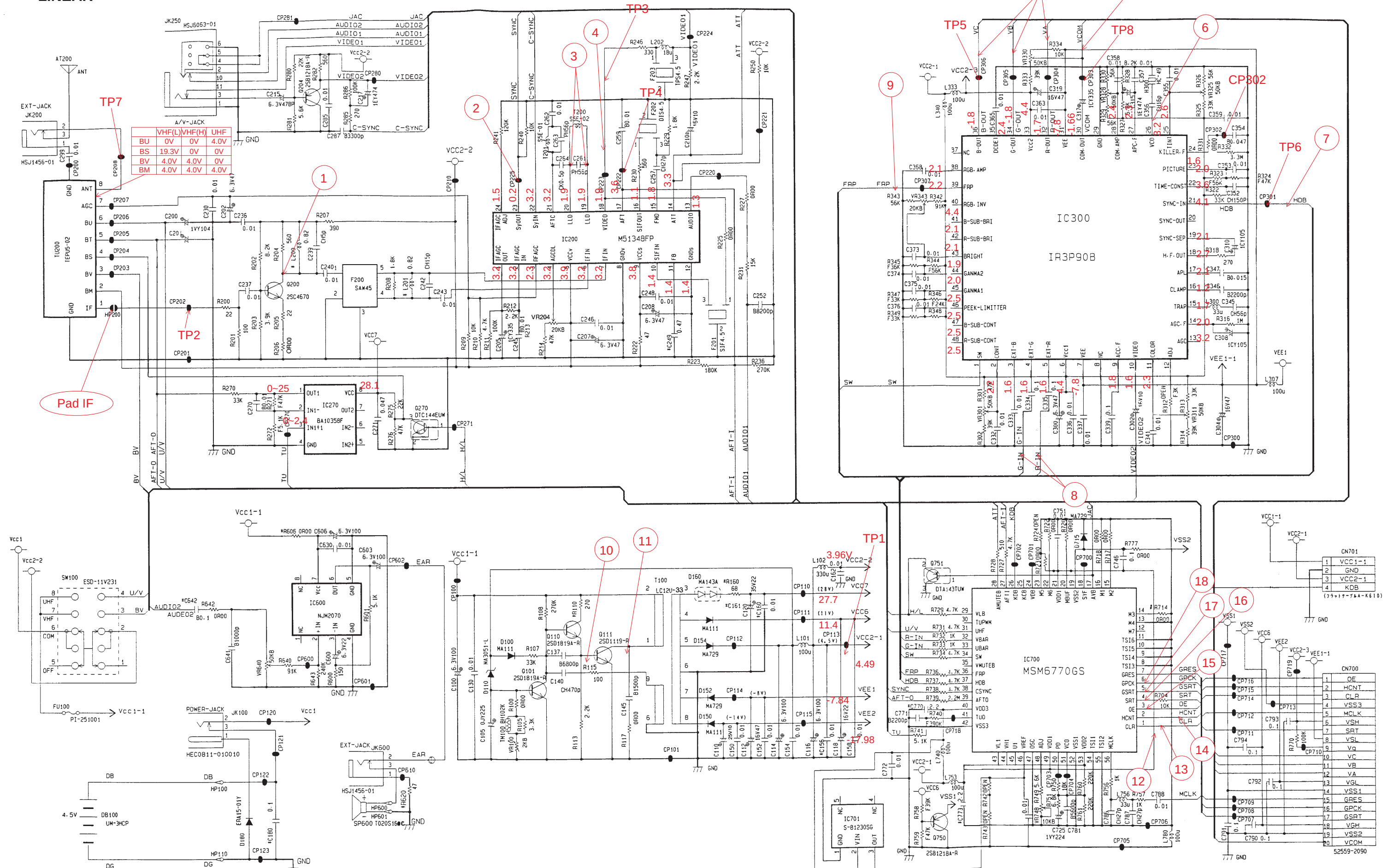


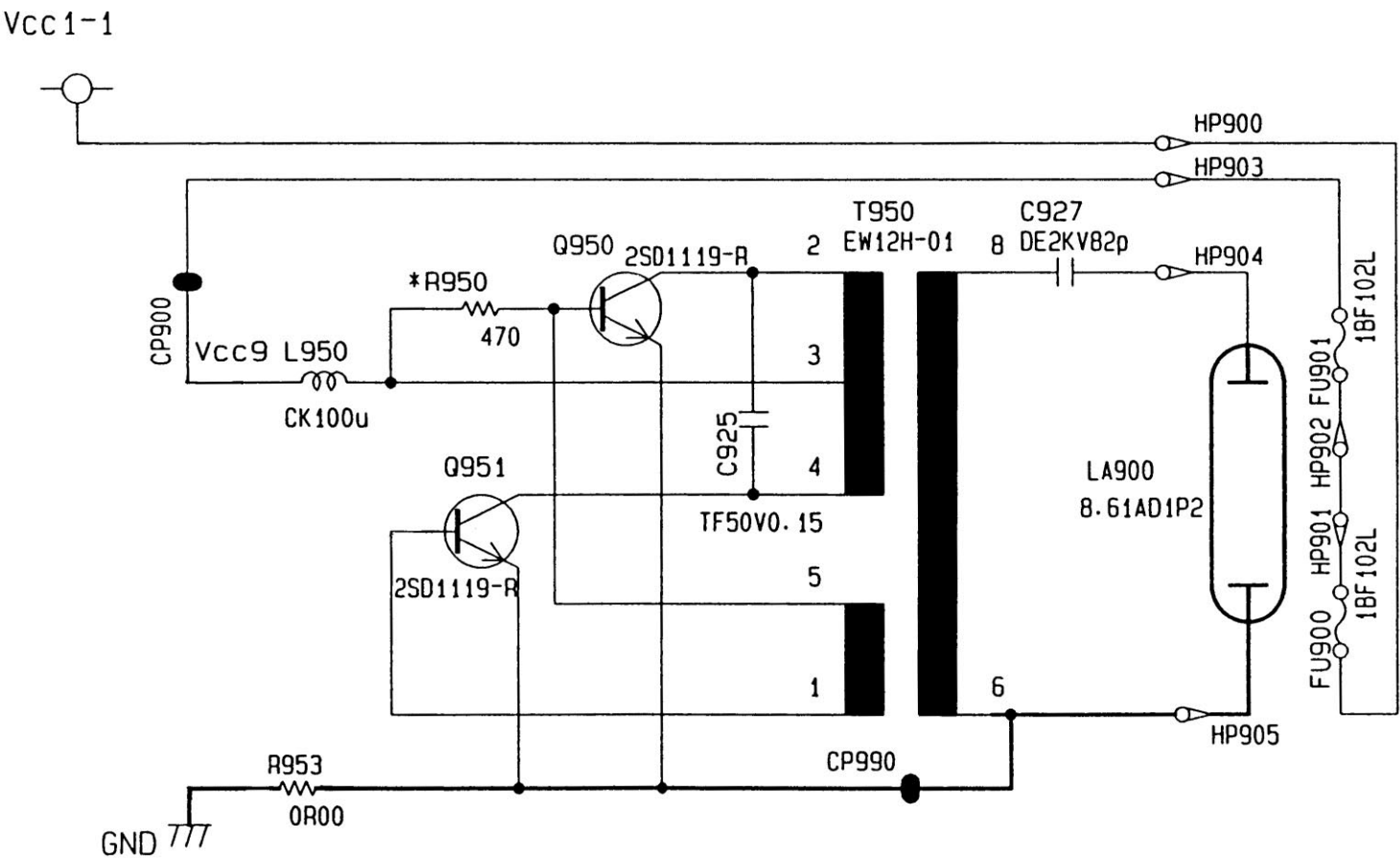
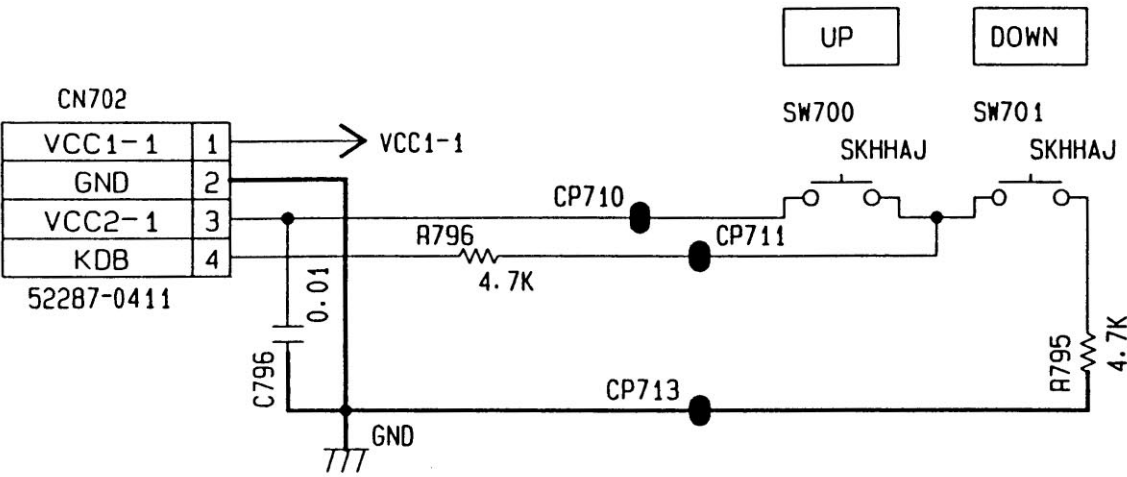
IC700
MSM6770GS



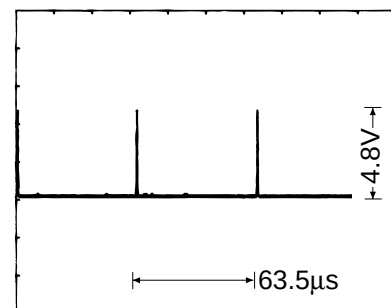
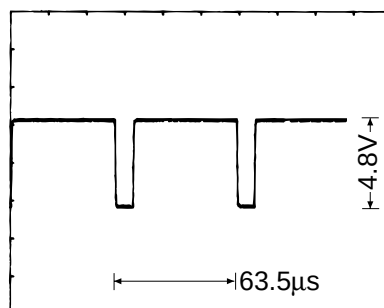
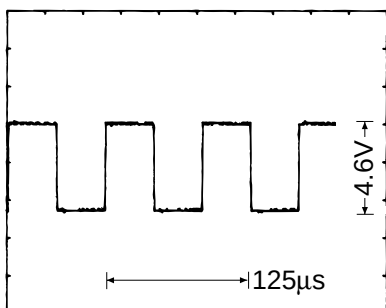
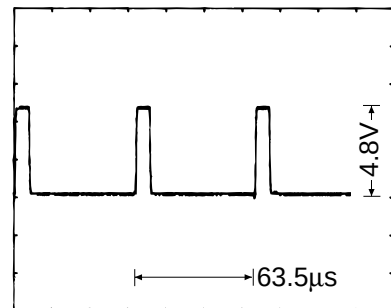
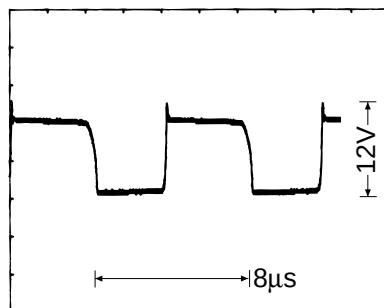
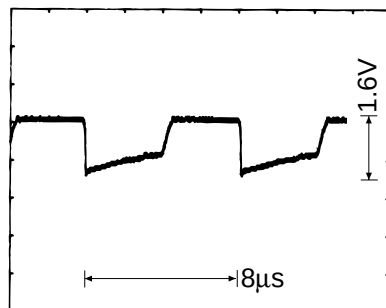
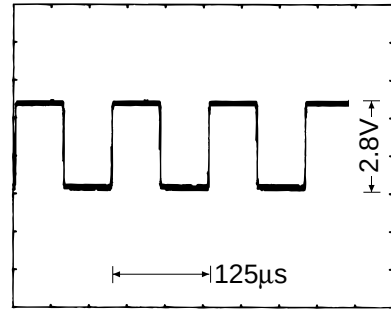
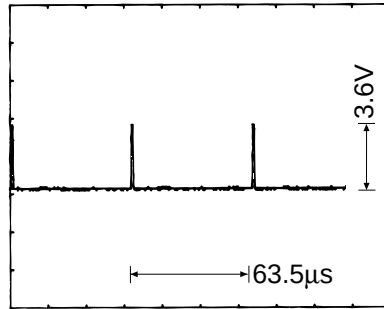
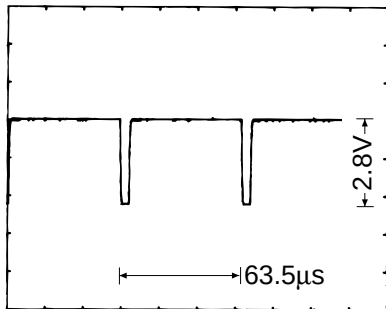
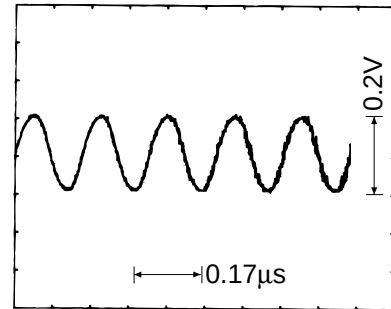
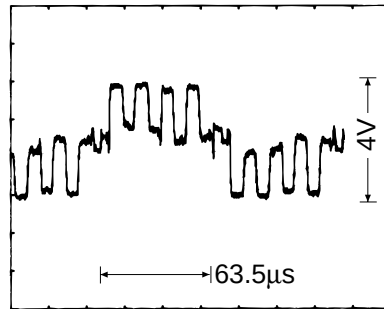
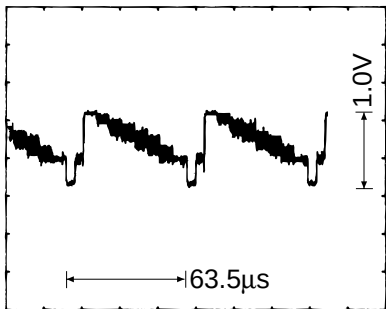
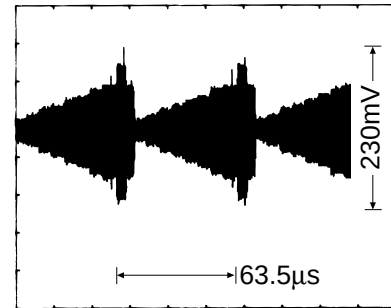
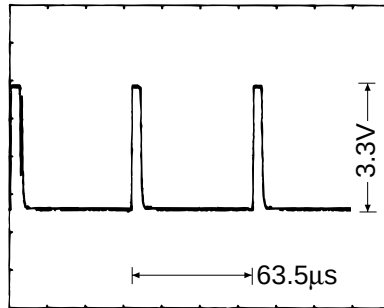
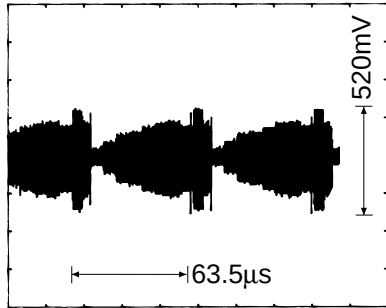
SCHEMATIC DIAGRAMS AND WAVEFORMS

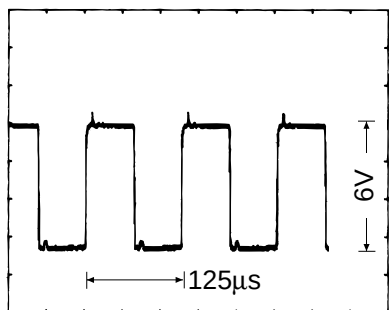
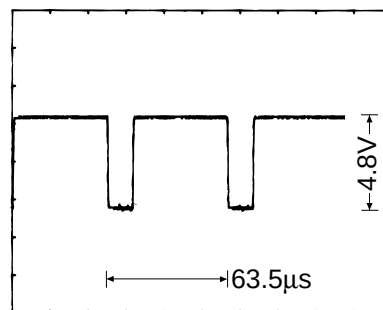
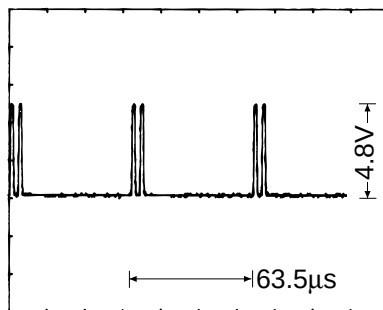
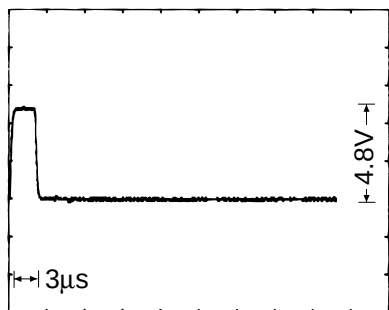
LINEAR





WAVEFORMS





CASIO COMPUTER CO.,LTD.
Service Division

8-11-10, Nishi-Shinjuku
Shinjuku-ku, Tokyo 160, Japan
Telephone: 03-3347-4926