



RadioShack®

ServiceManual

20-106

PRO-106

Digital Trunking Hand Held Scanner

Catalog Number: 20-106

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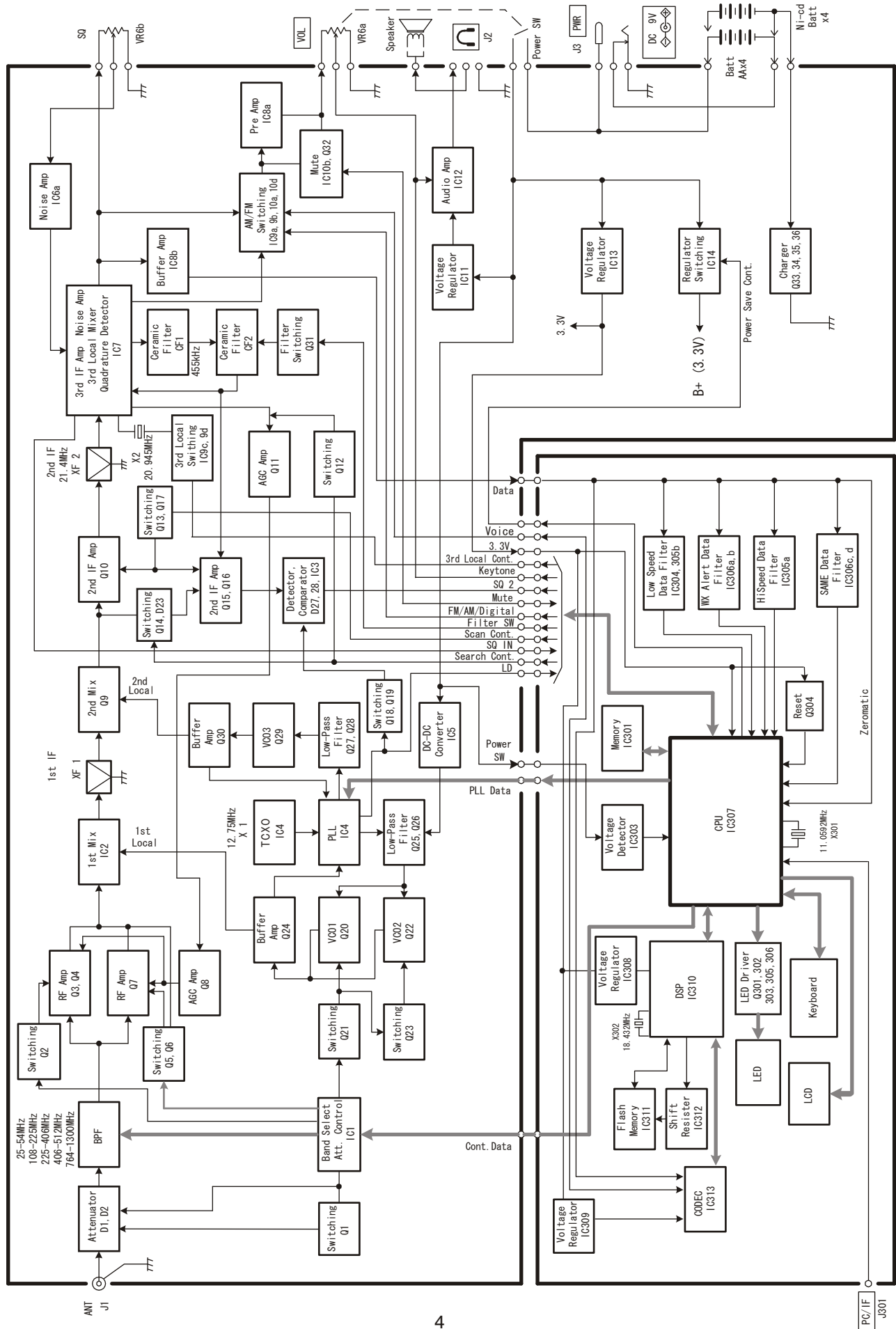
SPECIFICATIONS

Frequency Coverage	25.000-26.960 MHz	10 kHz steps (AM)		
	26.965-27.405 MHz	10 kHz steps (AM)		
	27.410-29.505 MHz	5 kHz steps (AM)		
	29.510-29.700 MHz	5 kHz steps (FM)		
	29.710-49.830 MHz	10 kHz steps (FM)		
	49.835-54.000 MHz	5 kHz steps (FM)		
	108.000-136.99166 MHz	8.33 kHz steps (AM)		
	137.000-137.995 MHz	5 kHz steps (FM)		
	138.000-143.9875 MHz	12.5 kHz steps (FM)		
	144.000-147.995 MHz	5 kHz steps (FM)		
	148.000-150.7875 MHz	12.5 kHz steps (FM)		
	150.800-150.845 MHz	5 kHz steps (FM)		
	150.8525-154.4975 MHz	7.5 kHz steps (FM)		
	154.515-154.640 MHz	5 kHz steps (FM)		
	154.650-156.255 MHz	7.5 kHz steps (FM)		
	156.275-157.450 MHz	25 kHz steps (FM)		
	157.470-161.5725 MHz	7.5 kHz steps (FM)		
	161.600-161.975 MHz	5 kHz steps (FM)		
	162.000-174.000 MHz	12.5 kHz steps (FM)		
	216.0025-219.9975 MHz	5 kHz steps (FM)		
	220.000-224.995 MHz	5 kHz steps (FM)		
	225.000-379.99375 MHz	6.25 kHz steps (AM)		
	380.000-419.9875 MHz	12.5 kHz steps (FM)		
	420.000-450.000 MHz	5 kHz steps (FM)		
	450.00625-469.99375 MHz	6.25 kHz steps (FM)		
	470.000-512.000 MHz	12.5 kHz steps (FM)		
	764.000-805.996875 MHz	3.125 kHz steps (FM)		
	806.000-823.9875 MHz	12.5 kHz steps (FM)		
	849.000-868.9875 MHz	12.5 kHz steps (FM)		
	894.000-939.9875 MHz	12.5 kHz steps (FM)		
	940.000-960.000 MHz	6.25 kHz steps (FM)		
	1240.000-1300.000 MHz	6.25 kHz steps (FM)		
		Unit	Nominal Limit	
Signal to noise ratio (FM and AM)				
RF input: 100 µV	25-54 MHz	dB	40	30
Dev. 3 kHz at 1 kHz	108-136.99166 MHz	dB	40	30
Mod.: 60% at 1 kHz	137-174 MHz	dB	40	30
	216.0025-299.99375 MHz	dB	40	30
	300-512 MHz	dB	35	25
	764-960 MHz	dB	35	25
	1240-1300 MHz	dB	35	25
Squelch sensitivity				
at threshold	(AM/FM)	µV	0.5	2
at tight (FM)		dB	25	15
at tight (AM)		dB	20	10
Data decode sensitivity				
WX Alert 1050 Hz tone	3 kHz Dev. at 162.4 MHz	µV	0.3	1

		Unit	Nominal Limit	
Spectrum sweeper sensitivity at 450 MHz		dBm	-60	-50
Sensitivity				
FM: (S+N)/N=20 dB	25-54 MHz	μV	0.3	1
Dev.: 3 kHz at 1 kHz	108-136.99166 MHz	μV	0.3	1
	137-174 MHz	μV	0.5	2
	216.0025-224.995 MHz	μV	0.5	2
	225-299.99375 MHz	μV	0.5	2
	300-405.9875 MHz	μV	0.8	3
	406-512 MHz	μV	0.5	2
	764-960 MHz	μV	0.7	3
	1240-1300 MHz	μV	0.7	4
AM: (S+N)/N=20 dB	25-54 MHz	μV	1	3
Mod.: 60% at 1 kHz	108-136.99166 MHz	μV	1	3
	137-174 MHz	μV	1.5	5
	216.0025-224.995 MHz	μV	1.5	5
	225-299.99375 MHz	μV	2	6
	300-405.9875 MHz	μV	3	10
	406-512 MHz	μV	2	6
	764-960 MHz	μV	2	6
	1240-1300 MHz	μV	3	12
Selectivity	AM 25-27.995 MHz	-6 dB	kHz	±4
		-50 dB	kHz	±6
	Other frequency	-6 dB	kHz	±7
		-50 dB	kHz	±13
Spurious rejection (Except Primary image) at 154.1 MHz		dB	40	30
Acceptable radio frequency displacement (EIA RS-204D)		kHz	±6	±3
Residual noise	Volume control, set to its minimum, squelched	mV	1	3
Scanning rate	without trunking	channels/sec.	55	45-66
Search rate	at 162.25-167.25 MHz	steps/sec.	90	80-100
Scan delay time		sec.	2	1-3
Audio output power	10% THD	mW	170	140
Current drain (using AC or DC adapter)	Squelched	mA	140	170
Working memory	1,800 programmed object using flexible scannable object system			
Display	Liquid crystal display (16-character x 4-line, plus icon)			
Receiving system	Triple conversion PLL super-heterodyne, 1st IF: 380.8 MHz/2nd IF: 21.4 MHz/3rd IF: 455 kHz			
Power source	6V DC negative ground only 4AA batteries or a suitable adapter			
Jacks	Antenna, earphone, PC/IF, and external power			
Dimensions (HWD)	5 3/4 x 2 9/16 x 1 5/8 inches (145 x 65 x 42 mm)			
Weight	approx. 8.5 oz. (240 g) without antenna and batteries			

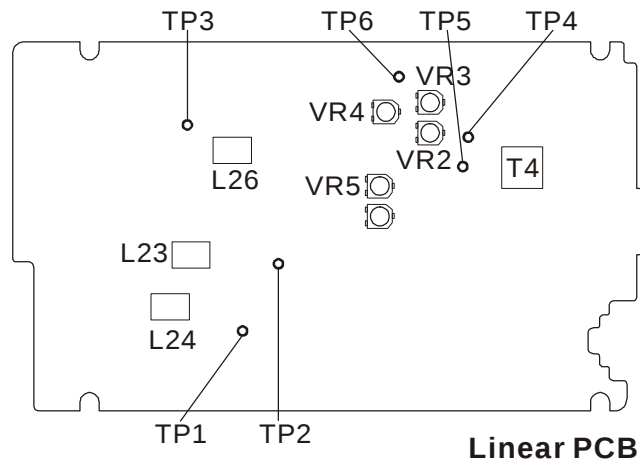
Note: Nominal specs represent the design specs. All units should be able to approximate these specifications. Some units will exceed while some may drop below these specs. Limit specs represent the absolute worst condition still considered acceptable. A unit should NEVER fail to meet limit specs.

BLOCK DIAGRAM



ALIGNMENT AND ADJUSTMENT

ALIGNMENT AND TEST POINT



ALIGNMENT PREPARATION

Test Equipment Required

- Oscilloscope
- DC SSVM
- FM signal generator
- Frequency counter (800 MHz)

Notes:

- Use non-metallic tuning tools.
- The test equipment and receiver should be warmed up for at least 10 minutes before proceeding with alignment.
- The signal level from the generator should be kept as low as possible to obtain a usable output.
- To tune the frequency, press **TUNE**, frequency number including decimal point, then press **ENT**.
If you make a mistake, press **CL** to delete a single digit or hold **CL** about 2 seconds to start over.

ALIGNMENT PROCEDURES

PLL2 VCO Alignment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: Fully counterclockwise (CCW). Tune to 512 MHz.	Connect DC SSVM to TP3. See Figure 1.	L26	Adjust L26 to 2.0 volts on the DC SSVM. See Tables 1 and 2.

PLL1 VCO1 Alignment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 960 MHz and 764 MHz.	Connect DC SSVM to TP2. See Figure 2.	L23	1. Tune to 960 MHz and adjust L23 to 18.0 volts on the DC SSVM. 2. Tune to 764 MHz and be sure the DC SSVM reads 2.0-4.0 volts. (No adjustments are necessary for the coil.) See Table 1.

PLL1 VCO2 Alignment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 1300 MHz and 210.0025 MHz.	Connect DC SSVM to TP2. See Figure 2.	L24	1. Tune to 1300 MHz and adjust L24 to 20.0 volts on the DC SSVM. 2. Tune to 210.0025 MHz and be sure the DC SSVM reads 2.0-5.0 volts. (No adjustments are necessary for the coil.) See Table 1.

Frequency	Voltage
960.000 MHz	17.0-19.0 volts at TP2
764.000 MHz	2.0-4.0 volts at TP2
1300.000 MHz	19.0-21.0 volts at TP2
216.0025 MHz	2.0-5.0 volts at TP2
512.000 MHz	1.8-2.2 volts at TP3

Table 1

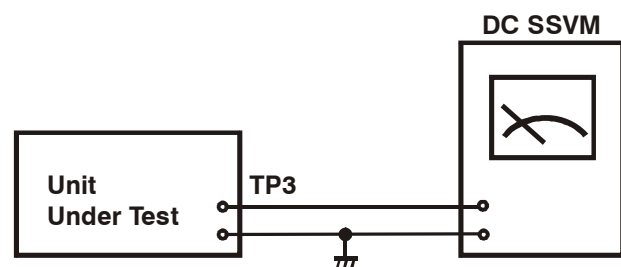


Figure 1

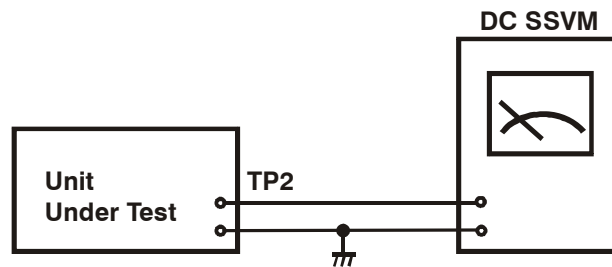


Figure 2

Adjustment of Coils L23, L24, and L26

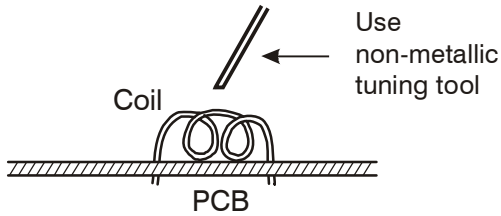


Figure 3

Notes:

- Be very careful when doing coil pitch adjustment because it greatly affects the frequency.
- Secure the coil with glue after alignment. Be sure the glue is dry and the coil is secured. Also, be sure that the environmental temperature is normal. Then, repeat VCO (PLL2 and PLL1) alignments on Page 6.

Each coil should be adjusted carefully by changing the pitch of the coil little by little using a non-metallic tuning tool as shown in Figure 3.

Increase the pitch of the coil when the measured voltage at TP2 or TP3 is higher than the voltage listed in Table 2 for the PLL2 VCO alignment, PLL1 VCO1 alignment, and PLL1 VCO2 alignment.

Decrease the pitch of the coil when the measured voltage at TP2 or TP3 is lower than the voltage listed in Table 2 for the PLL2 VCO alignment, PLL1 VCO1 alignment, and PLL1 VCO2 alignment.

Table 2

Reference Frequency Osc. Confirmation

Control Setting	Test Instrument Connection	Adjust	Confirmation
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 174 MHz.	Connect the frequency counter to TP1. See Figure 4.	---	Confirm the frequency counter reads 554.775 MHz +/-1 kHz.

Note: Care should be taken not to make any contact between TP1 and the shield case.

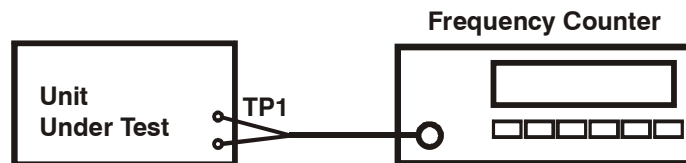


Figure 4

455 kHz FM Discriminator Coil Alignment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 174 MHz, 860 MHz, and 450 MHz.	Connect the signal generator to the ANT jack and the DC SSVM to TP4. See Figure 5.	T4	1. Tune to 174 MHz. Set the signal generator frequency to 174 MHz, 100 uV output (no mod.) and adjust T4 for 1.3+/-0.05 volts on the DC SSVM.

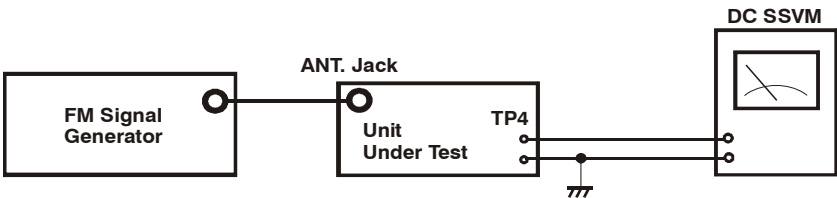


Figure 5

3rd Local Alignment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 154.650, 173.4125, and 216.0025 MHz.	Connect the signal generator to the ANT jack and frequency counter to TP5. See Figure 6.	VR2 VR3 VR4	1. Set the signal generator frequency to 154.650 MHz (No modulation). Tune to 154.650 MHz and adjust VR4 so the frequency is 455 kHz +/- 10 Hz. 2. Set the signal generator frequency to 173.4125 MHz (No modulation). Tune to 173.4125 MHz and adjust VR2 so the frequency is 455 kHz +/- 10 Hz. 3. Set the signal generator frequency to 216.0025 MHz (No modulation). STune to 216.0025 MHz and adjust VR3 so the frequency is 455 kHz +/- 10 Hz.

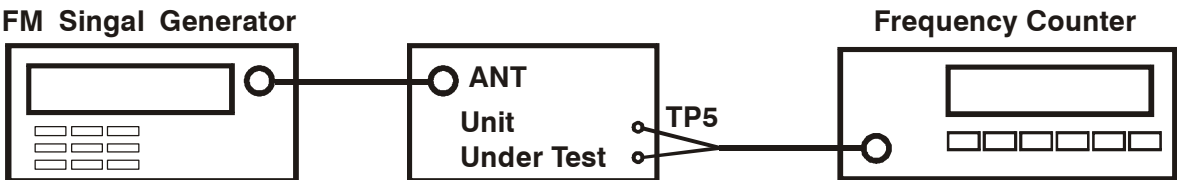


Figure 6

IF (380.8 MHz) Trap Adjustment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 406 MHz.	Connect the signal generator to the ANT jack and oscilloscope to headphone jack across 8-ohm dummy load. See Figure 7.	L18	1. Set the signal generator frequency to 380.750 MHz, FM: 3 kHz deviation at 1 kHz. 2. Adjust L18 to decrease the sensitivity. 3. Set the signal generator frequency to 406.000 MHz, FM: 3 kHz deviation at 1 kHz and check that the scanner receives the signal.

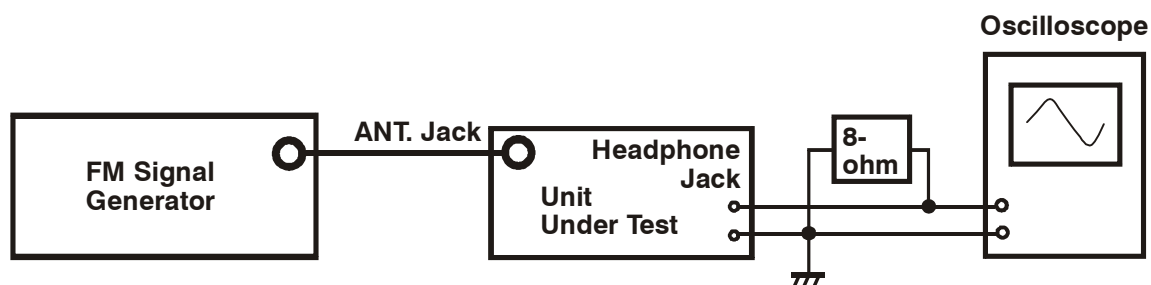


Figure 7

Signal Meter Alignment

Control Setting	Test Instrument Connection	Adjust	Result
OFF/VOLUME control: ON. SQUELCH control: CCW. Tune to 154.100 MHz.	Connect the signal generator to the ANT jack and the DC SSVM to TP5. See Figure 8.	VR5	Set the signal generator frequency to 154.100 MHz, -96 dBm output (no modulation) and adjust VR5 for 2.225 $\pm$ 0.25 volts on the DC SSVM.

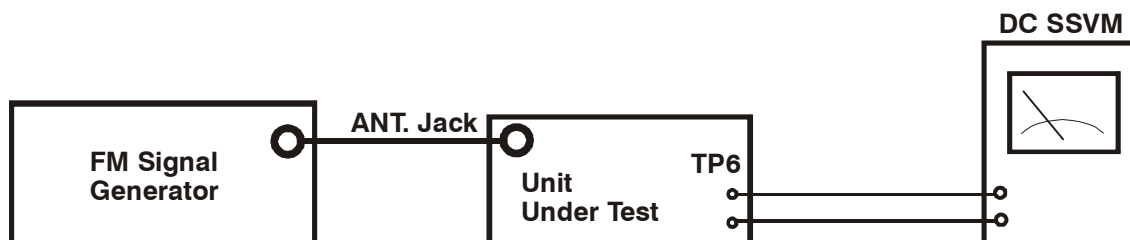
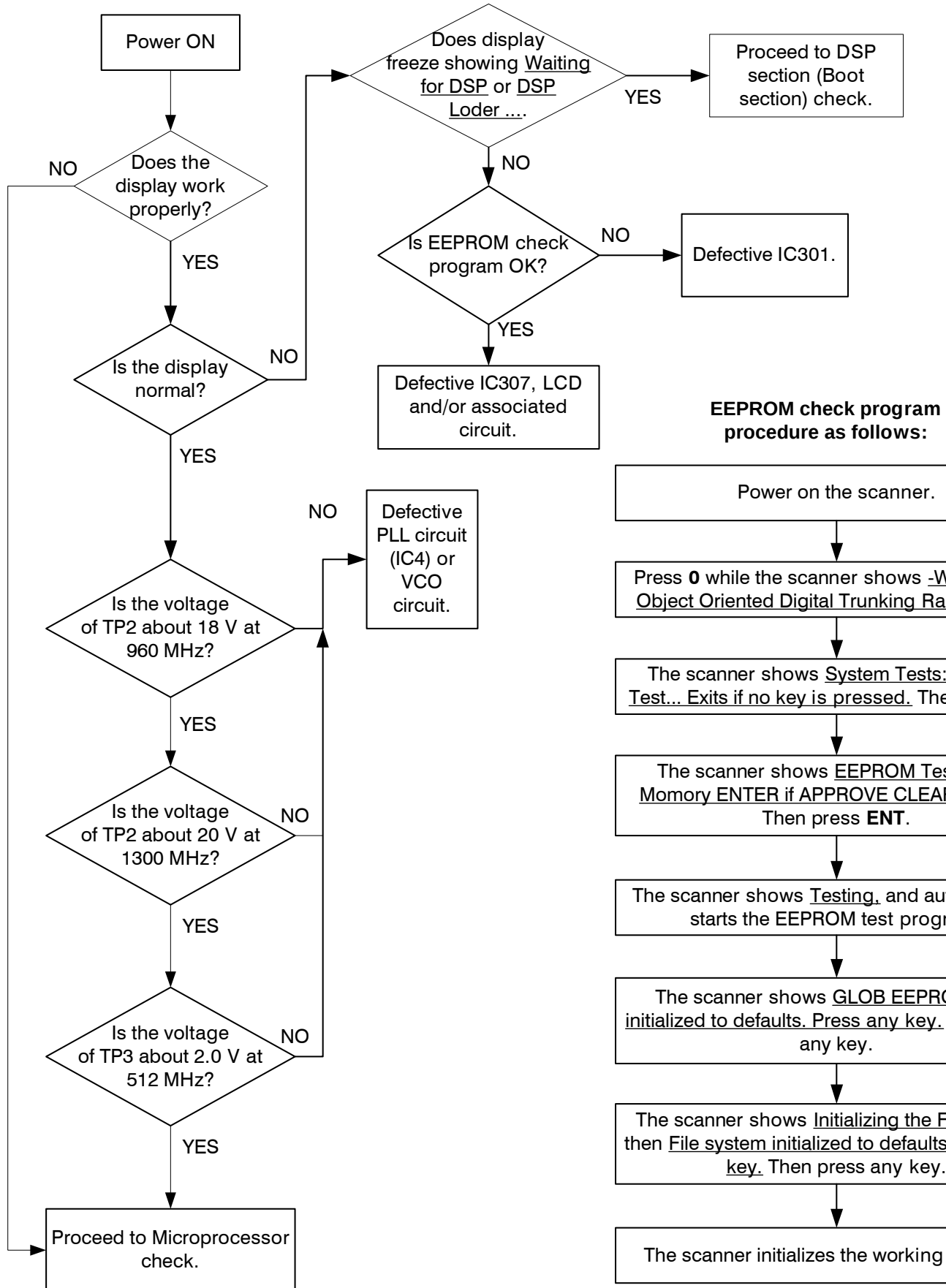


Figure 8

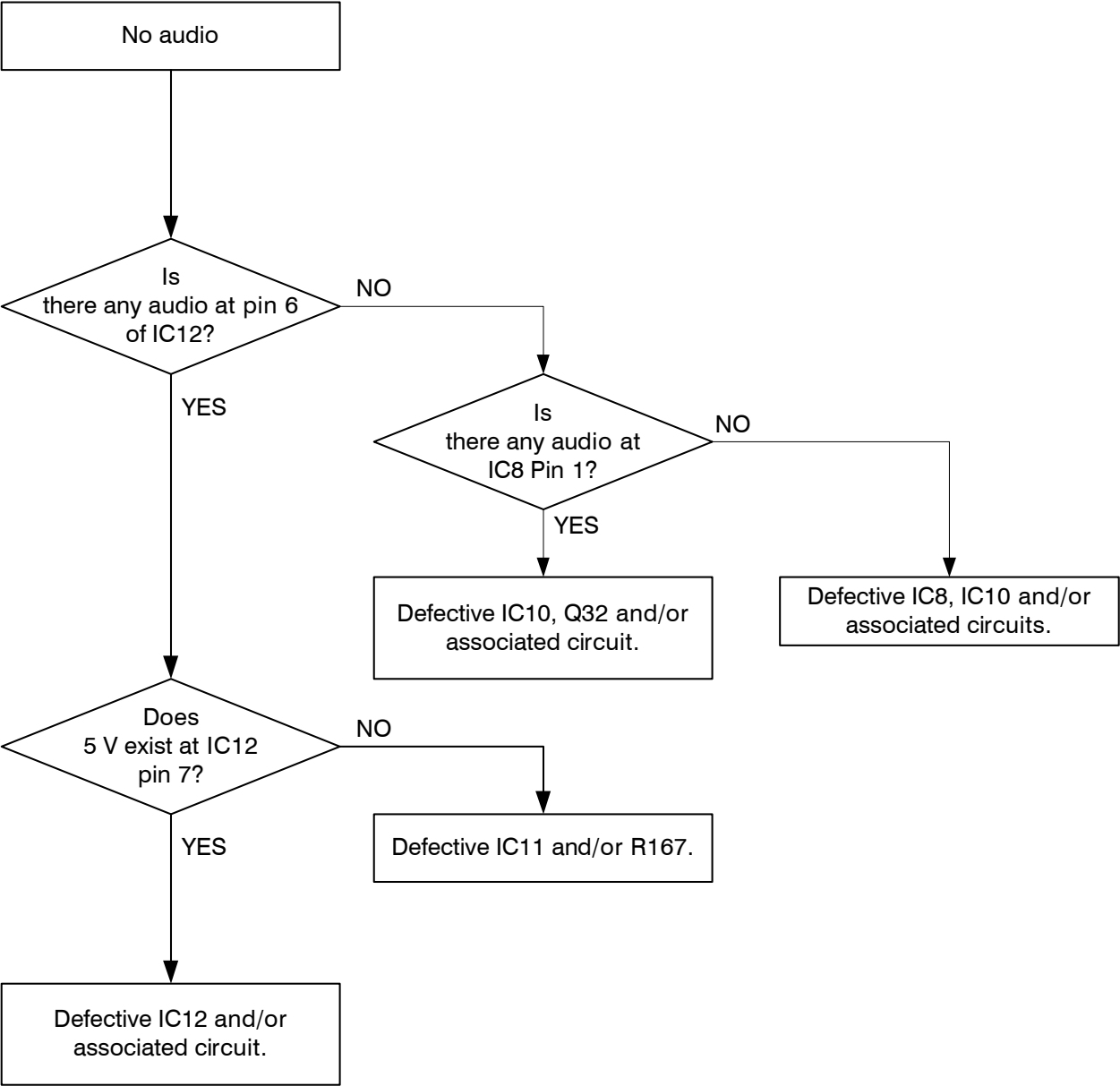
TROUBLESHOOTING

Reception Check

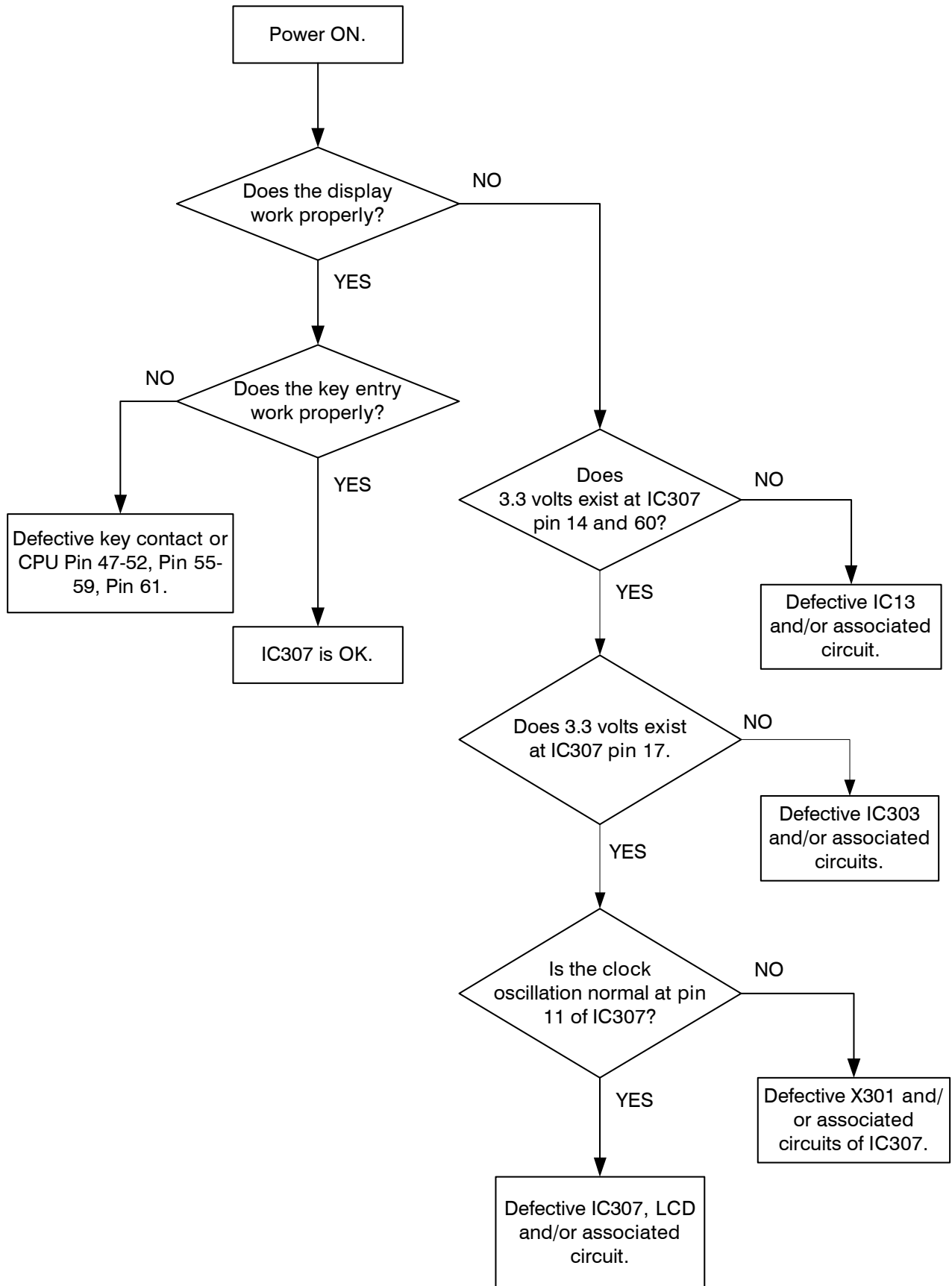


Note: This procedure clears all information you stored in the scanner's working memory.

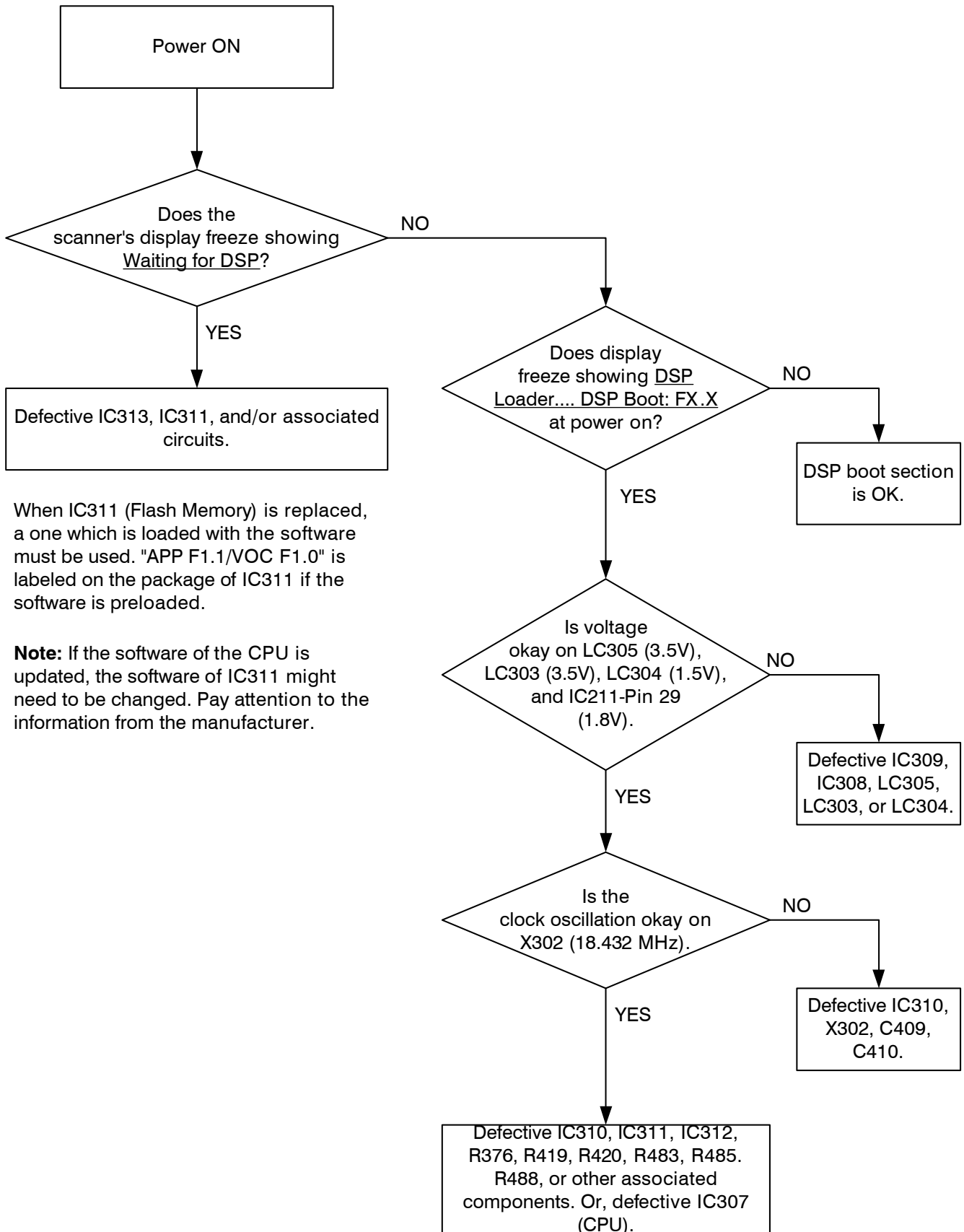
Audio Section



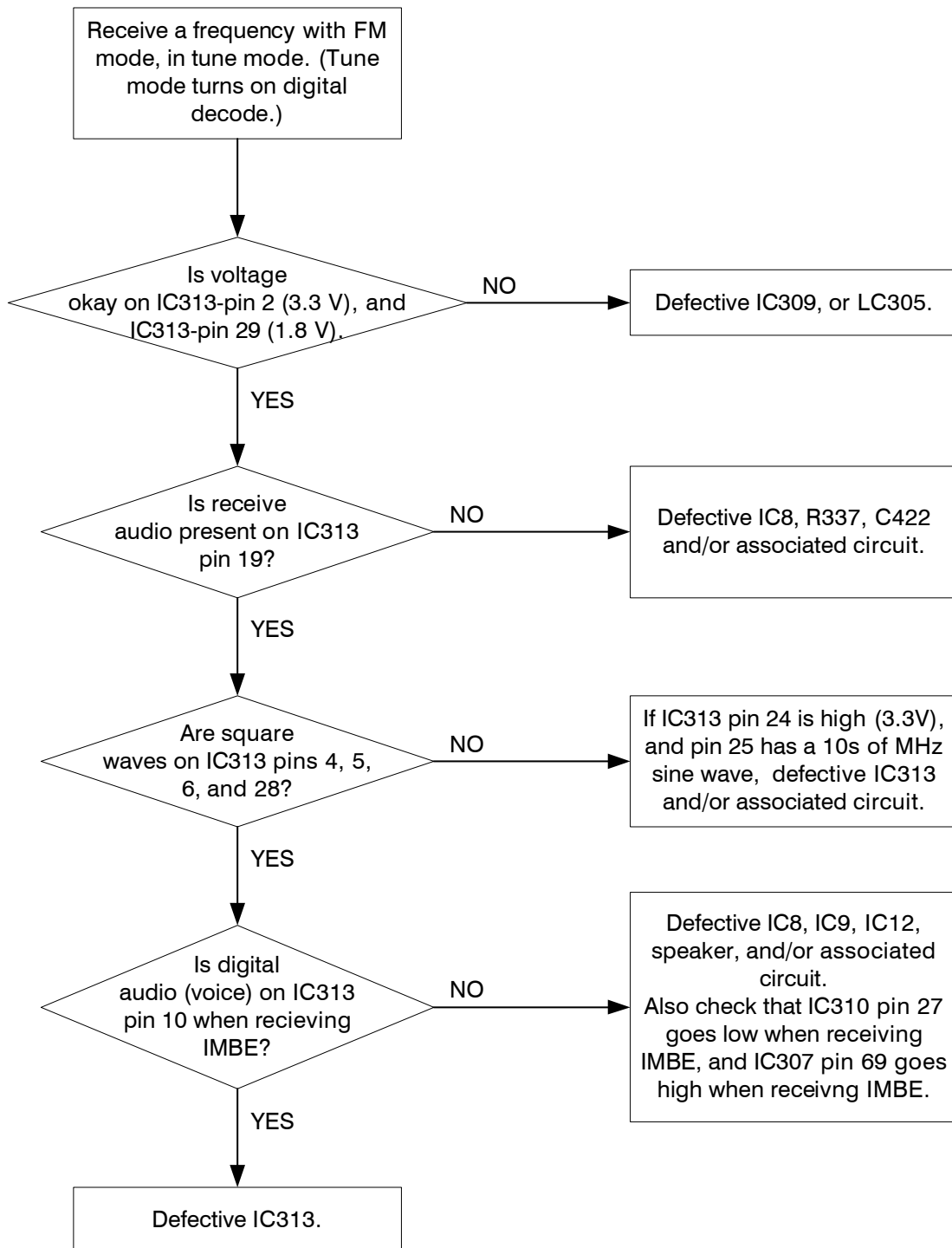
Microprocessor Check



DSP Section (Boot Section)

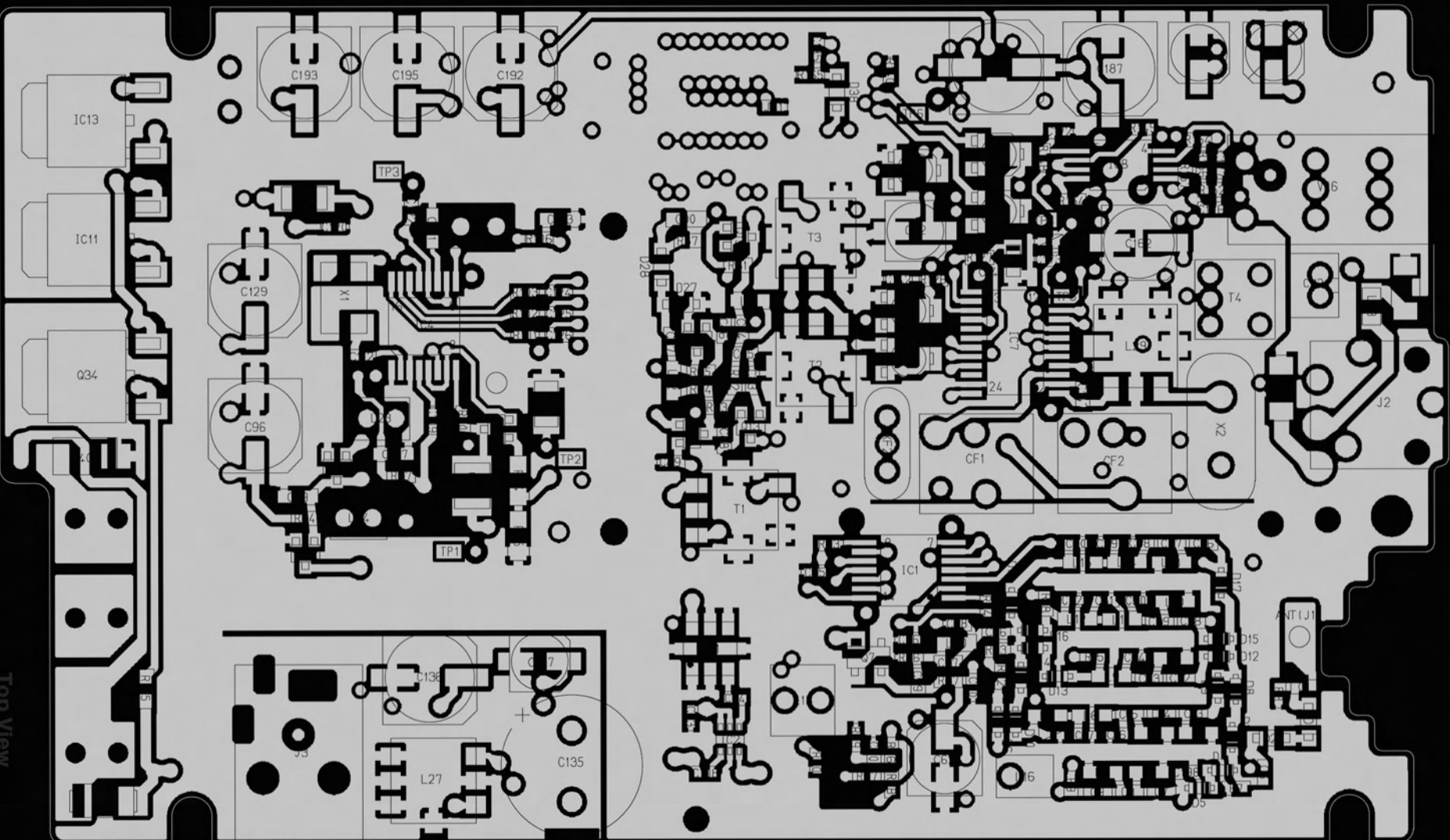


DSP Section (Digital Audio, etc.)

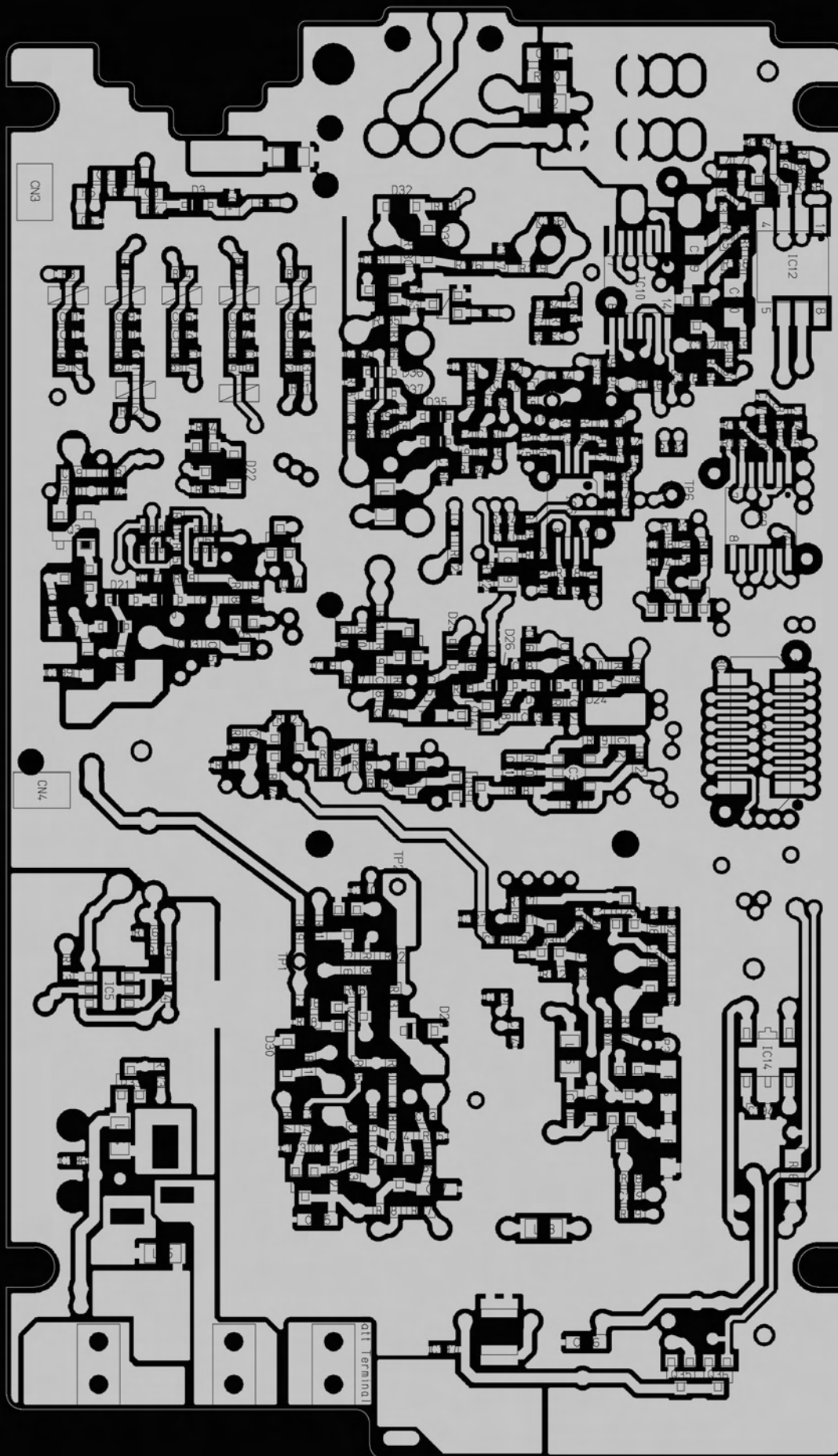


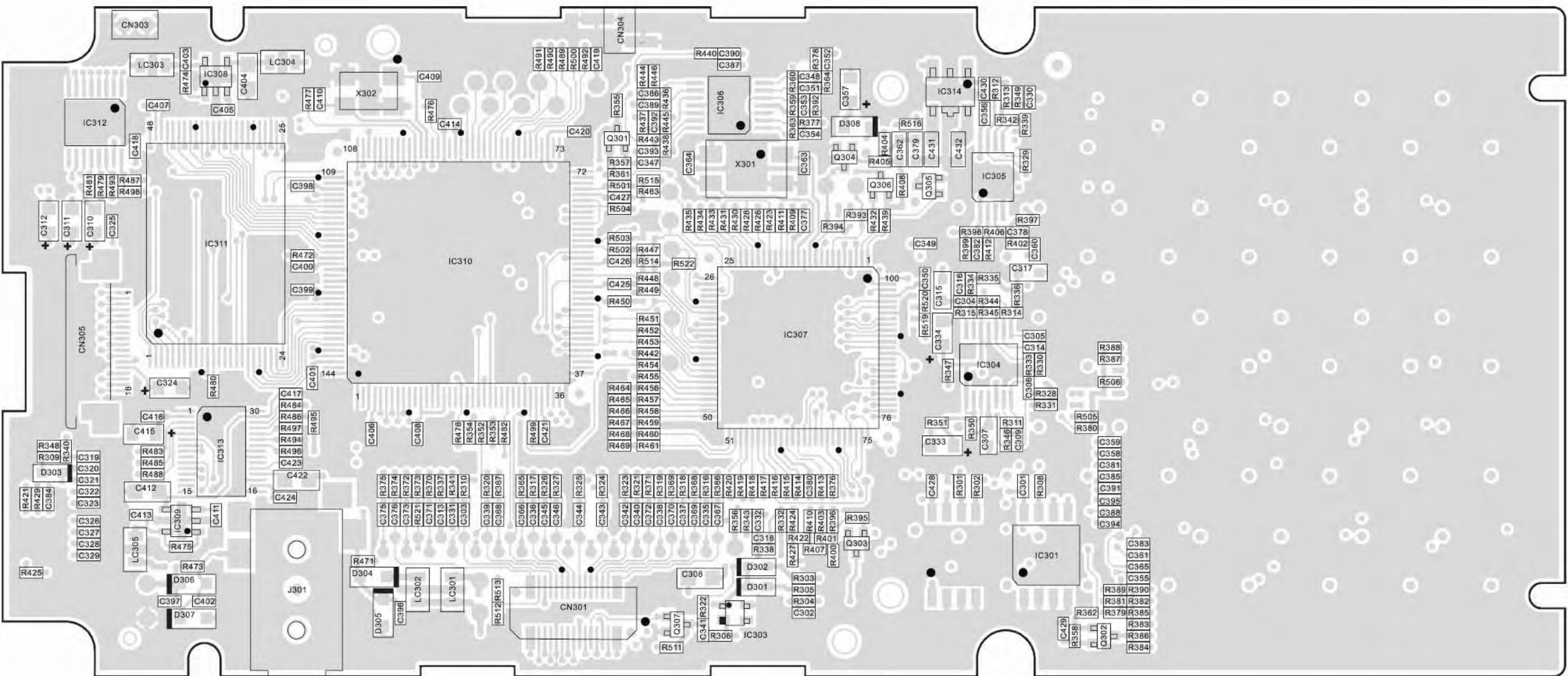
PRINTED CIRCUIT BOARD

Linear PCB

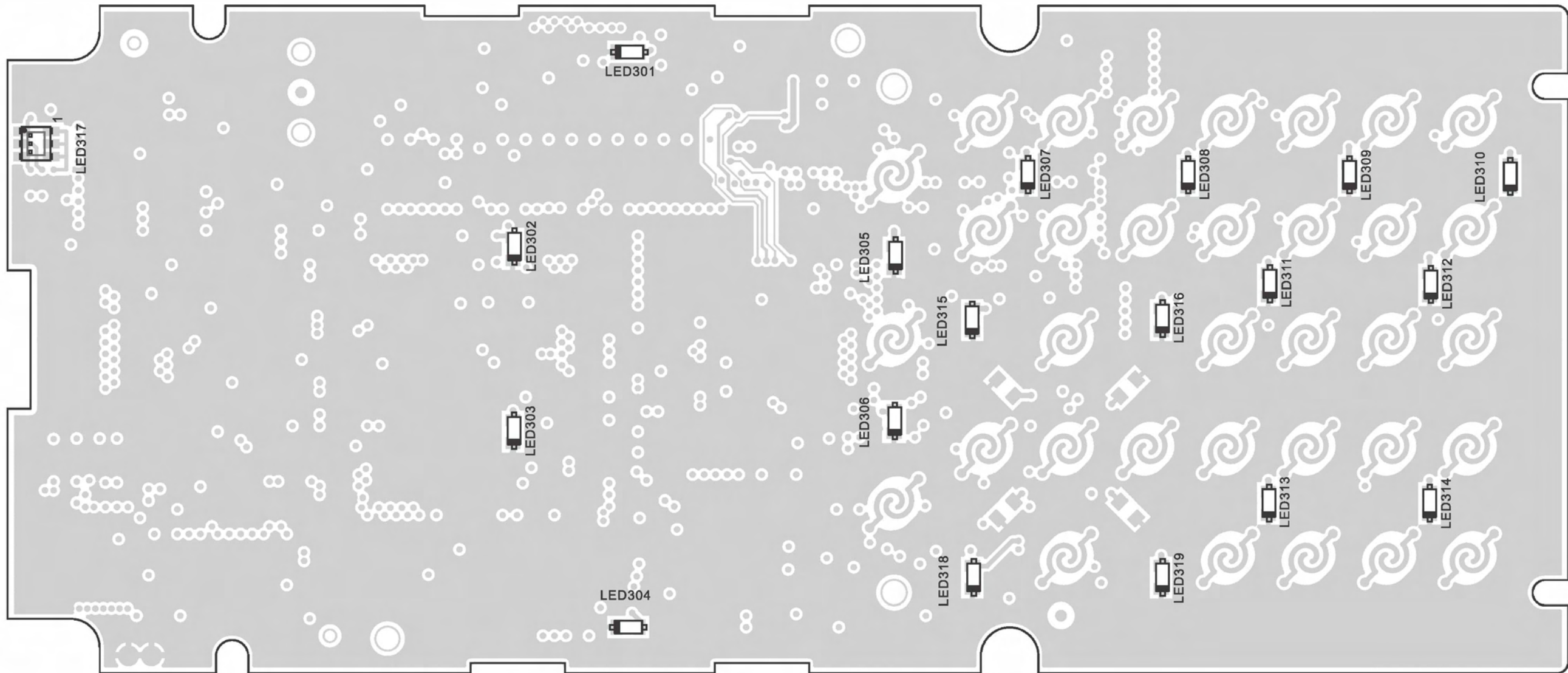


Top View



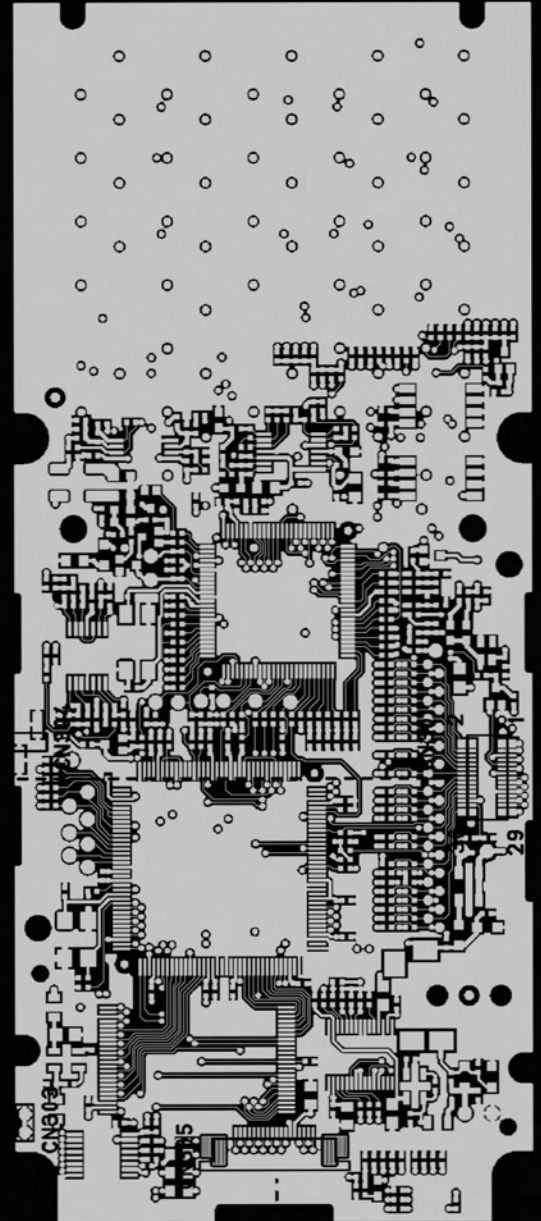
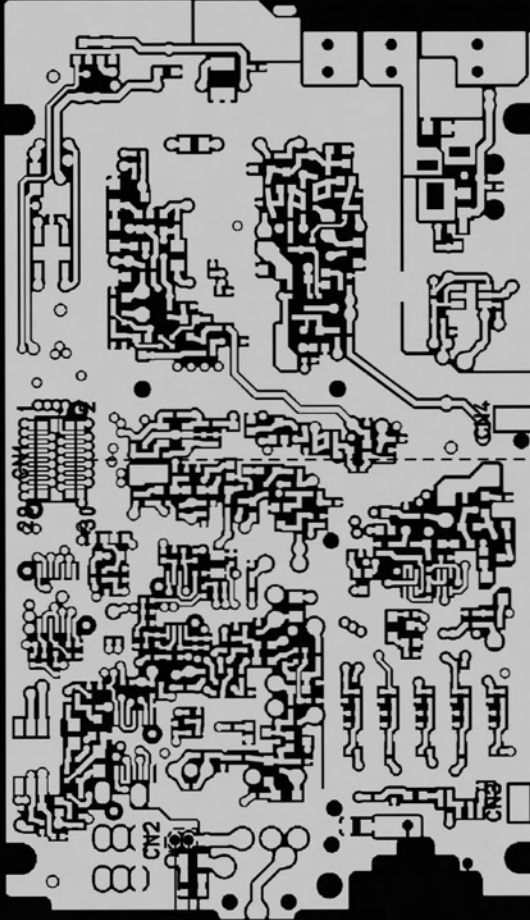


Top View



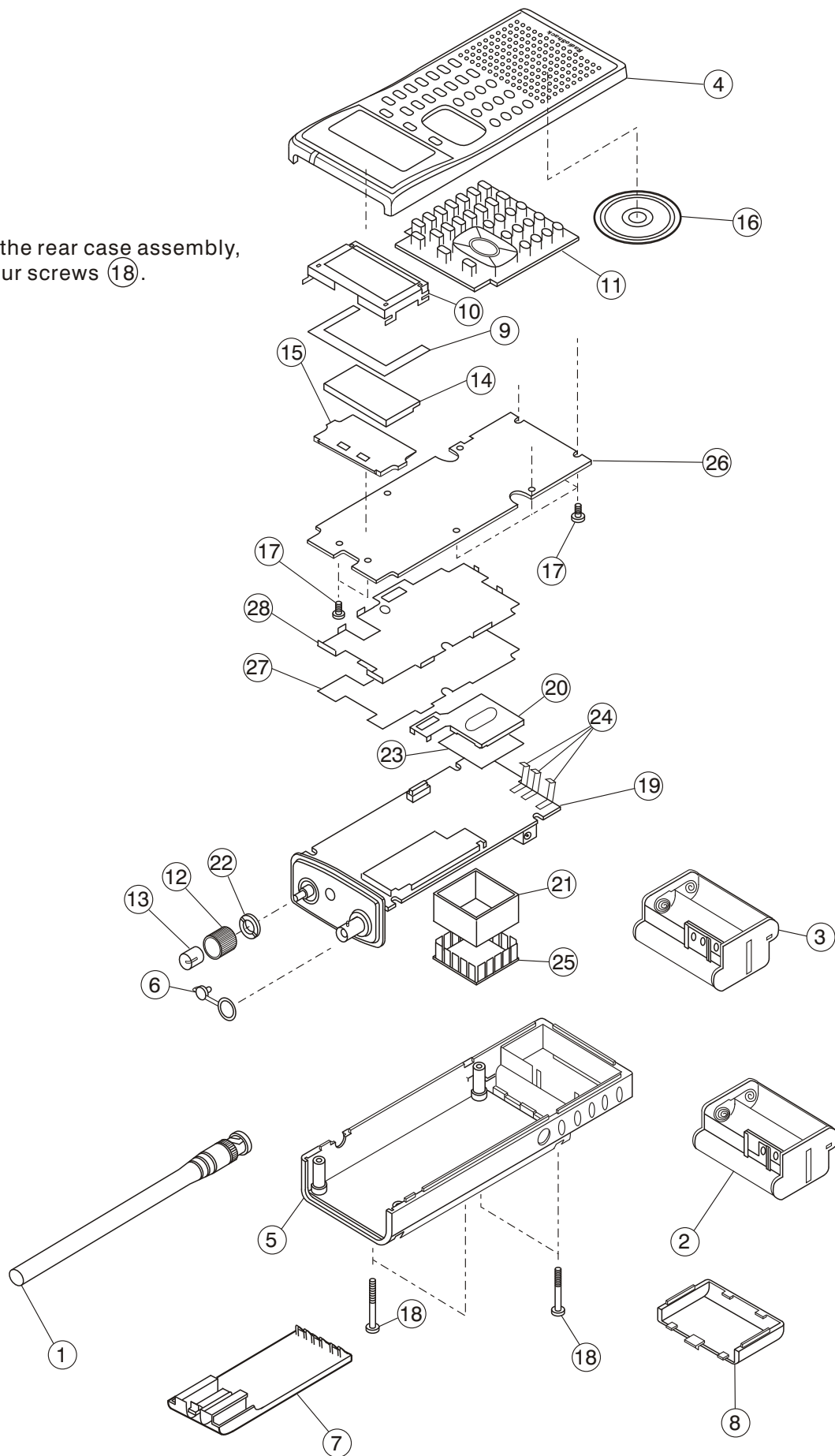
Bottom View

WIRING DIAGRAM



EXPLODED VIEW for 20-106

To remove the rear case assembly,
unscrew four screws 18.



MECHANICAL PARTS LIST

Ref. No.	Description	Mfr's Part No.
1	Antenna, Rubber	GE-04D-1050
2	Assembly, Case, Battery, Alkaline (Black)	GA-05D-3550 or GA-99D-3329B
3	Assembly, Case, Battery, Rechargeable (Yellow)	GA-05D-3680 or GA-99D-3326B
4	Assembly, Case, Front (Non-Repairable) Case, Front Window, LCD Tape, Adhesive (L) Tape, Adhesive (S) Himelon, Speaker Pipe, Light	GA-08D-0360 GR-08A-0240 GR-08D-0250 GR-08D-0260 GR-08D-0530 GR-08D-0570 GR-07D-1610
5	Assembly, Case, Rear (Non-Repairable) Case, Rear Label, Model	GA-08D-1650 GR-06D-1080 or GE-04A-1133 GR-08D-0391
6	Cap, Jack, Phone	GR-07D-1560
7	Clip, Belt	GR-06D-1120
8	Cover, Battery	GR-06D-1091
9	Cushion, LCD	GR-07D-1630
10	Holder, LCD	GR-07D-0270
11	Key Top	GR-08D-0280
12	Knob, Squelch	GR-07D-1550
13	Knob, Volume	GR-07D-1540
14	LCD	GR-07D-0160
15	Reflector, LCD	GR-07C-1620
16	Speaker 8-ohm 1W Max. Wire Housing Assembly Hardware Kit	GR-05D-3360 or 36A550-8B Item No. 1 #0801(B)
17	Screw, B P-tight 2x5 BLK Zn	Bind P tight 2x5 BLK Zn
18	Screw, P P-tight 2.6x25 Zn	P tight 2.6x25 Zn
19	See Electrical Parts List on Page 22.	
20-25	See Electrical Parts List on Page 44.	
26	See Electrical Parts List on Page 45.	
27-28	See Electrical Parts List on Page 64.	

ELECTRICAL PARTS LIST

Ref. No.	Description				RS Part No.	Mfr's Part No.
19	Assembly, PCB, Linear Consists of the following:				GA-08D-0020	
Capacitors						
C1	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C2	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C3	Ceramic	3 pF	50 V	±0.25 pF		ECJ0EC1H030C or CM05CH3R0C50AH or GRM1555C1H3R0CZ01D
C4	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C5	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C6	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C7	Ceramic	5 pF	50 V	±0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C8	Ceramic	3 pF	50 V	±0.25 pF		ECJ0EC1H030C or CM05CH3R0C50AH or GRM1555C1H3R0CZ01D
C9	Ceramic	5 pF	50 V	±0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C10	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C11	Ceramic	0.047 μF	10 V	±10% or ±5% or ±10%		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C12	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C13	Ceramic	22 pF	50 V	±5%		ECJ0EC1H220J or CM05CH220J50AH or GRM1555C1H220JZ01D
C14	Ceramic	6 pF	50 V	±0.5 pF		ECJ0EC1H060D or CM05CH6R0D50AH or GRM1555C1H6R0DZ01D
C15	Ceramic	7 pF	50 V	±0.5 pF		ECJ0EC1H070D or CM05CH7R0D50AH or GRM1555C1H7R0DZ01D
C16	Ceramic	2 pF	50 V	±0.25 pF		ECJ0EC1H020C or CM05CH2R0C50AH or GRM1555C1H2R0CZ01D
C17	Ceramic	12 pF	50 V	±5%		ECJ0EC1H120J or CM05CH120J50AH or GRM1555C1H120JZ01D
C18 C19	Not used. Ceramic	0.001 μF	50 V	±0% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C20	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C21	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C22	Ceramic	5 pF	50 V	± 0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C23	Ceramic	5 pF	50 V	± 0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C24	Ceramic	5 pF	50 V	± 0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C25	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C26	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C27	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C28	Ceramic	33 pF	50 V	$\pm 5\%$		ECJ0EC1H330J or CM05CH330J50AH or GRM1555C1H330JZ01D
C29	Ceramic	22 pF	50 V	$\pm 5\%$		ECJ0EC1H220J or CM05CH220J50AH or GRM1555C1H220JZ01D
C30	Ceramic	10 pF	50 V	± 0.5 pF or $\pm 5\%$		ECJ0EC1H100D or CM05CH100J50AH or GRM1555C1H100JZ01D
C31	Ceramic	15 pF	50 V	$\pm 5\%$		ECJ0EC1H150J or CM05CH150J50AH or GRM1555C1H150JZ01D
C32	Ceramic	10 pF	50 V	± 0.5 pF or $\pm 5\%$		ECJ0EC1H100D or CM05CH100J50AH or GRM1555C1H100JZ01D
C33	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C34	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C35	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C36	Ceramic	180 pF	50 V	$\pm 5\%$		ECJ0EC1H181J or CM05CH181J50AH or GRM1555C1H181JA01D
C37	Ceramic	180 pF	50 V	$\pm 5\%$		ECJ0EC1H181J or CM05CH181J50AH or GRM1555C1H181JA01D
C38	Ceramic	68 pF	50 V	$\pm 5\%$		ECJ0EC1H680J or CM05CH680J50AH or GRM1555C1H680JZ01D
C39	Ceramic	120 pF	50 V	$\pm 5\%$		ECJ0EC1H121J or CM05CH121J50AH or GRM1555C1H121JA01D
C40	Ceramic	68 pF	50 V	$\pm 5\%$		ECJ0EC1H680J or CM05CH680J50AH or GRM1555C1H680JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C41	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C42	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C43	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C44	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C45	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C46	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C47	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C48	Ceramic	2 pF	50 V	± 0.25 pF		ECJ0EC1H020C or CM05CH2R0C50AH or GRM1555C1H2R0CZ01D
C49	Ceramic	3 pF	50 V	± 0.25 pF		ECJ0EC1H030C or CM05CH3R0C50AH or GRM1555C1H3R0CZ01D
C50	Ceramic	22 pF	50 V	$\pm 5\%$		ECJ0EC1H220J or CM05CH220J50AH or GRM1555C1H220JZ01D
C51	Ceramic	5 pF	50 V	± 0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C52	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C53	Ceramic	3 pF	50 V	± 0.25 pF		ECJ0EC1H030C or CM05CH3R0C50AH or GRM1555C1H3R0CZ01D
C54	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C55	Ceramic	3 pF	50 V	± 0.25 pF		ECJ0EC1H030C or CM05CH3R0C50AH or GRM1555C1H3R0CZ01D
C56	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C57	Ceramic	1 pF	50 V	± 0.25 pF		ECJ0EC1H1R0C or CM05CH1R0C50AH or GRM1555C1H1R0CZ01D
C58	Ceramic	5 pF	50 V	± 0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C59	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C60	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C61	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C62	Electrolytic	33 μ F	10 V	$\pm 20\%$		1AECBS330M

Ref. No.	Description				RS Part No.	Mfr's Part No.
C63	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C64	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C65	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C66	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C67	Ceramic	33 pF	50 V	$\pm 5\%$		ECJ0EC1H330J or CM05CH330J50AH or GRM1555C1H330JZ01D
C68	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C69	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C70	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C71	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C72	Electrolytic	1 μ F	50 V	$\pm 20\%$		1HECBS1R0M
C73	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C74	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C75	Ceramic	68 pF	50 V	$\pm 5\%$		ECJ0EC1H680J or CM05CH680J50AH or GRM1555C1H680JZ01D
C76	Ceramic	39 pF	50 V	$\pm 5\%$		ECJ0EC1H390J or CM05CH390J50AH or GRM1555C1H390JZ01D
C77	Ceramic	1.5 pF	50 V	± 0.25 pF		ECJ0EC1H1R5C or CM05CH1R5C50AH or GRM1555C1H1R5CZ01D
C78	Ceramic	39 pF	50 V	$\pm 5\%$		ECJ0EC1H390J or CM05CH390J50AH or GRM1555C1H390JZ01D
C79	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C80	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C81	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C82	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C83	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C84	Ceramic	56 pF	50 V	$\pm 5\%$		ECJ0EC1H560J or CM05CH560J50AH or GRM1555C1H560JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C85	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C86	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C87	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C88	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C89	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C90	Ceramic	0.47 μ F	10 V or 6.3 V or 10 V	$\pm 10\%$		ECJ1VB1A474K or ECJ1VB0J474K or LMK107BJ474KA-T or GRM188R61A474KA61D
C91	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C92	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C93	Ceramic	220 pF	50 V	$\pm 5\%$		ECJ0EC1H221J or CM05CH221J50AH or GRM1555C1H221JA01D
C94	Ceramic	15 pF	50 V	$\pm 5\%$		ECJ0EC1H150J or CM05CH150J50AH or GRM1555C1H150JZ01D
C95	Ceramic	8 pF	50 V	± 0.5 pF		ECJ0EC1H080D or CM05CH8R0D50AH or GRM1555C1H8R0DZ01D
C96	Electrolytic	220 μ F	6.3 V	$\pm 20\%$		0JECBS221M
C97	Ceramic	0.001 μ F	50 V	$\pm \%$		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C98	Ceramic	3 pF	50 V	± 0.25 pF		ECJ0EC1H030C or CM05CH3R0C50AH or GRM1555C1H3R0CZ01D
C99	Ceramic	0.001 μ F	50 V	$\pm 5\%$		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C100	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C101	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C102	Ceramic	12 pF	50 V	$\pm 5\%$		ECJ0EC1H120J or CM05CH120J50AH or GRM1555C1H120JZ01D
C103	Ceramic	5 pF	50 V	± 0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C104	Ceramic	2 pF	50 V	± 0.25 pF		ECJ0EC1H020C or CM05CH2R0C50AH or GRM1555C1H2R0CZ01D
C105	Ceramic	0.001 μ F	50 V	$\pm 5\%$		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C106	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C107	Ceramic	0.001 μ F	50 V	$\pm 5\%$		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C108	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C109	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C110	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C111	Ceramic	0.001 μ F	50 V	$\pm 5\%$		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C112	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C113	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C114	Ceramic	33 pF	50 V	$\pm 5\%$		ECJ0EC1H330J or CM05CH330J50AH or GRM1555C1H330JZ01D
C115	Metalized PPS Film	0.0033 μ F	50 V	$\pm 5\%$		ECHU1H332JX5
C116	Ceramic	0.0022 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H222K or CM05B222J50AH or GRM155R71H222KA01D
C117	Metalized PPS Film	0.033 μ F	50 V	$\pm 5\%$		ECHU1H333JX5
C118	Metalized PPS Film	0.047 μ F	16 V	$\pm 5\%$		ECHU1C473JX5
C119	Ceramic	0.01 μ F	16 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C120	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C121	Ceramic	0.001 μ F	50 V	$\pm 5\%$		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C122	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C123	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C124	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C125	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C126	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C127	Ceramic	10 pF	50 V	± 0.5 pF or $\pm 5\%$		ECJ0EC1H100D or CM05CH100J50AH or GRM1555C1H100JZ01D
C128	Ceramic	10 pF	50 V	± 0.5 pF or $\pm 5\%$		ECJ0EC1H100D or CM05CH100J50AH or GRM1555C1H100JZ01D
C129	Electrolytic	220 μ F	6.3 V	$\pm 20\%$		0JECBS221M
C130	Ceramic	22 pF	50 V	$\pm 5\%$		ECJ0EC1H220J or CM05CH220J50AH or GRM1555C1H220JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C131	Ceramic	15 pF	50 V	±5%		ECJ0EC1H150J or CM05CH150J50AH or GRM1555C1H150JZ01D
C132	Ceramic	7 pF	50 V	±0.5 pF		ECJ0EC1H070D or CM05CH7R0D50AH or GRM1555C1H7R0DZ01D
C133	Ceramic	0.001 µF	50 V	±%		ECJ1VC1H102J or CM105CH102J50AT or GRM1885C1H102JA01D
C134	Ceramic	5 pF	50 V	±0.25 pF		ECJ0EC1H5R0C or CM05CH5R0C50AH or GRM1555C1H5R0CZ01D
C135	Electrolytic	1000 µF	16 V	±20%		UVK1C102MPD
C136	Electrolytic	33 µF	35 V	±20%		1VECBS330M
C137	Electrolytic	4.7 µF	35 V	±20%		1VECBS4R7M
C138	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C139	Metalized PPS Film	0.022 µF	50 V	±5%		ECHU1H223JX5
C140	Ceramic	12 pF	50 V	±5%		ECJ0EC1H120J or CM05CH120J50AH or GRM1555C1H120JZ01D
C141	Tantalum	10 µF	10 V	±20%		TCP1A106M8R or TESVSP1A106M8R or TEESVP1A106M8R or F921A106MPA
C142	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C143	Ceramic	220 pF	50 V	±5%		ECJ0EC1H221J or CM05CH221J50AH or GRM1555C1H221JA01D
C144	Ceramic	220 pF	50 V	±5%		ECJ0EC1H221J or CM05CH221J50AH or GRM1555C1H221JA01D
C145	Ceramic	220 pF	50 V	±5%		ECJ0EC1H221J or CM05CH221J50AH or GRM1555C1H221JA01D
C146	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C147	Ceramic	56 pF	50 V	±5%		ECJ0EC1H560J or CM05CH560J50AH or GRM1555C1H560JZ01D
C148	Ceramic	82 pF	50 V	±5%		ECJ0EC1H820J or CM05CH820J50AH or GRM1555C1H820JZ01D
C149	Ceramic	0.01 µF	16 V	±0% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C150	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C151	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C152	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C153	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C154	Ceramic	10 pF	50 V	±0.5 pF or ±5%		ECJ0EC1H100D or CM05CH100J50AH or GRM1555C1H100JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C155	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C156	Ceramic	180 pF	50 V	$\pm 5\%$		ECJ0EC1H181J or CM05CH181J50AH or GRM1555C1H181JA01D
C157	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C158	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C159	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C160	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C161	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C162	Electrolytic	47 μ F	6.3 V	$\pm 20\%$		0JECBS470M
C163	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C164	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C165	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C166	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C167	Ceramic	220 pF	50 V	$\pm 5\%$		ECJ0EC1H221J or CM05CH221J50AH or GRM1555C1H221JA01D
C168	Ceramic	100 pF	50 V	$\pm 5\%$		ECJ0EC1H101J or CM05CH101J50AH or GRM1555C1H101JZ01D
C169	Ceramic	220 pF	50 V	$\pm 5\%$		ECJ0EC1H221J or CM05CH221J50AH or GRM1555C1H221JA01D
C170	Ceramic	0.0047 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C472K or CM05B472J16AH or GRM155R71C472KA01D or GRM155R71H472KA01D
C171	Ceramic	0.022 μ F	or 50 V 16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C223K or CM05B223J16AH or GRM155R71C223KA01D
C172	Ceramic	33 pF	50 V	$\pm 5\%$		ECJ0EC1H330J or CM05CH330J50AH or GRM1555C1H330JZ01D
C173	Ceramic	0.0047 μ F	16 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C472K or CM05B472J16AH or GRM155R71C472KA01D or GRM155R71H472KA01D
C174	Ceramic	820 pF	or 50 V 50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H821K or CM05B821J50AH or GRM155R71H821KA01D
C175	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C176	Ceramic	0.022 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C223K or CM05B223J16AH or GRM155R71C223KA01D
C177	Ceramic	0.022 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C223K or CM05B223J16AH or GRM155R71C223KA01D
C178	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C179	Ceramic	10 μ F	6.3 V	$\pm 10\%$		JMK212X5R106KG-T or JMK212BJ106KG-T or GRM21BR61A106KE19L
C180	Ceramic	1 μ F	10 V or 10 V	$\pm 10\%$		ECJ2FB1A105K or LMK212BJ105KG-T or GRM21BR71A105KA01L
C181	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C182	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C183	Ceramic	0.022 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C223K or CM05B223J16AH or GRM155R71C223KA01D
C184	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C185	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C186	Ceramic	0.33 μ F	10 V or 6.3 V or 10 V	$\pm 10\%$		ECJ1VB1A334K or ECJ1VB0J334K or LMK107BJ334KA-T or GRM188R71A334KA61D
C187	Electrolytic	220 μ F	6.3 V	$\pm 20\%$		0JECBS221M
C188	Electrolytic	220 μ F	6.3 V	$\pm 20\%$		0JECBS221M
C189	Ceramic	0.022 μ F	16 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C223K or CM05B223J16AH or GRM155R71C223KA01D
C190	Electrolytic	10 μ F	16 V	$\pm 20\%$		1CECBS100M
C191	Ceramic	0.22 μ F	10 V or 50 V or 10 V or 16V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ1VB1A224K or CM105X7R224J50AT or GRM188R71A224KA01D or EMK107BJ224KA-T
C192	Electrolytic	220 μ F	6.3 V	$\pm 20\%$		0JECBS221M
C193	Electrolytic	220 μ F	16 V	$\pm 20\%$		1CECBS221M
C194	Ceramic	0.1 μ F	10 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D
C195	Electrolytic	220 μ F	6.3 V	$\pm 20\%$		0JECBS221M
C196	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C197	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C198	Ceramic	2 pF	50 V	± 0.25 pF		ECJ0EC1H020C or CM05CH2R0C50AH or GRM1555C1H2R0CZ01D
C199	Ceramic	12 pF	50 V	$\pm 5\%$		ECJ0EC1H120J or CM05CH120J50AH or GRM1555C1H120JZ01D
C200	Ceramic	0.001 μ F	50 V	$\pm 0\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D

Ref. No.	Description			RS Part No.	Mfr's Part No.
Ceramic Filters					
CF1 CF2	455 kHz 455 kHz				CFULA455KF1Y-B0 SFPS455H or LT455HTU
Connectors					
CN1 CN2 CN3 CN4	30-pin, Male 2-pin, Male 2-pin, Male 2-pin, Male				AXK6S3064BV1 IL-Y-2P-S15T2-EF(pb Free) or IL-Y-2P-S15T2-EF 20010S-02G2T 20010S-02G2T
Diodes					
D1	HVU131-TR-F-E	Marked P1	Silicon		HVU131-TR-F-E
D2	HVU131-TR-F-E	Marked P1	Silicon		HVU131-TR-F-E
D3	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D4	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D5	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D6	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D7	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D8	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D9	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D10	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D11	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D12	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D13	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D14	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D15	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D16	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D17	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D18	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D19	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D20	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D21	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D22	1SS355F-TE17 or 1SS355TE-17	Marked A	Silicon		1SS355F-TE17 or 1SS355TE-17
D23	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D24	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D25	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D26	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D27	1SS357(TPH3,F) or 1SS355F-TE17	Marked S3	Silicon		1SS357(TPH3,F) or 1SS355F-TE17
D28	1SS357(TPH3,F) or 1SS355F-TE17	Marked S3	Silicon		1SS357(TPH3,F) or 1SS355F-TE17
D29	HVU300A-TR-U-E	Marked O	Silicon		HVU300A-TR-U-E
D30	HVU300A-TR-U-E	Marked O	Silicon		HVU300A-TR-U-E
D31	HVU300A-TR-U-E	Marked O	Silicon		HVU300A-TR-U-E
D32	HVU17-TR-U-E	Marked E	Silicon		HVU17-TR-U-E
D33	HVU17-TR-U-E	Marked E	Silicon		HVU17-TR-U-E
D34	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D35	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D36	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D37	HSC277-TR-F-E		Silicon		HSC277-TR-F-E
D38	1SS355F-TE17 or 1SS355TE-17	Marked A	Silicon		1SS355F-TE17 or 1SS355TE-17
D39	FM4003-T or FM4004-T		Silicon		FM4003-T or FM4004-T
D40	RB060L-40TE25	Marked 36	Silicon		RB060L-40TE25

Ref. No.	Description				RS Part No.	Mfr's Part No.
Integrated Circuits						
IC1	HD74AC164TELL-E or TC74VHC164FT-EL,F or HD74AC164TELL or TC74VHC164FT-EL	Band Select/Attenuator, MOS	SMT			HD74AC164TELL-E or TC74VHC164FT-EL,F or HD74AC164TELL or TC74VHC164FT-EL
IC2	μPC2757TB-E3-A or μPC2757TB	1st Mixer	MOS	SMT		μPC2757TB-E3-A or μPC2757TB
IC3	NJM2406F-TE1(pbF)	Detector	Bipolar	SMT		NJM2406F-TE1(pbF)
IC4	MB15F07SLPFV1-BND-EF-6E1 or MB15F07SLPFV1-BND		PLL, MOS	SMT		MB15F07SLPFV1-BND-EF-6E1 or MB15F07SLPFV1-BND
IC5	TK11819MTL-G or TK11819MTL	DC-DC Converter	Bipolar	SMT		TK11819MTL-G or TK11819MTL
IC6	NJM2904V-TE1(pbF)	Noise Amp.	Bipolar	SMT		NJM2904V-TE1(pbF)
IC7	TK10931V-TL-G or TK10931V-TL	3rd IF Amp./3rd Local Mixer/Quad.	Bipolar	SMT		TK10931V-TL-G or TK10931V-TL
IC8	NJM13404V-TE1(pbF)	Buffer/Pre Amp.	Bipolar	SMT		NJM13404V-TE1(pbF)
IC9	TC74HC4066AFT(EL),(F) or TC74HC4066AFT(EL) or TC74HC4066AFS-TE1608	Switching	MOS	SMT		TC74HC4066AFT(EL),(F) or TC74HC4066AFT(EL) or TC74HC4066AFS-TE1608
IC10	TC74HC4066AFT(EL),(F) or TC74HC4066AFT(EL) or TC74HC4066AFS-TE1608	Mute/Switching	MOS	SMT		TC74HC4066AFT(EL),(F) or TC74HC4066AFT(EL) or TC74HC4066AFS-TE1608
IC11	BA05FP-E2 or BA05CC0FP-E2	Voltage Regulator	Bipolar	SMT		BA05FP-E2 or BA05CC0FP-E2
IC12	NJM2070M-TE1(pbF)	Audio Amp.	Bipolar	SMT		NJM2070M-TE1(pbF)
IC13	AN77033SP-E1	Voltage Regulator	Bipolar	SMT		AN77033SP-E1
IC14	TK11233CUCB-G or TK11233BUCB-G or TK11233CUCB or TK11233BUCB-G	Regulator Switching, Bipolar		SMT		TK11233CUCB-G or TK11233BUCB-G or TK11233CUCB or TK11233BUCB-G
Jacks						
J1	Jack Antenna					G-BNC-KD104 or GE-02D-8220 or GE-85D-5383
J2	Jack, Earphone					HSJ1493-0100109 or HSJ1493-01-010
J3	Jack, Power					HEC3110-01-010
Coils						
L1	Choke	1 μH				LBC2012T1R0M
L2	LPF (764-1300MHz)	3.9 nH				HK1608 3N9S-T or LL1608-LFS3N9S
L3	LPF (764-1300MHz)	3.9 nH				HK1608 3N9S-T or LL1608-LFS3N9S
L4	LPF (406-512MHz)	8.2 nH				HK1608 8N2J-T or LL1608-LFS8N2J
L5	LPF (406-512MHz)	8.2 nH				HK1608 8N2J-T or LL1608-LFS8N2J
L6	LPF (406-512MHz)	18 nH				HK1608 18NJ-T or LL1608-LFS18NJ
L7	LPF (406-512MHz)	18 nH				HK1608 18NJ-T or LL1608-LFS18NJ
L8	LPF (225-406MHz)	47 nH				HK1608 47NJ-T or LL1608-LFS47NJ
L9	LPF (225-406MHz)	47 nH				HK1608 47NJ-T or LL1608-LFS47NJ

Ref. No.	Description			RS Part No.	Mfr's Part No.
L10	LPF (108-225MHz)	56 nH			HK1608 56NJ-T or LL1608-LFS56NJ
L11	LPF (108-225MHz)	82 nH			HK1608 82NJ-T or LL1608-LFS82NJ
L12	LPF (108-225MHz)	82 nH			HK1608 82NJ-T or LL1608-LFS82NJ
L13	LPF (25-54MHz)	0.22 μ H			LK1608 R22K-T or LL1608-LFS R22K
L14	LPF (25-54MHz)	0.22 μ H			LK1608 R22K-T or LL1608-LFS R22K
L15	LPF (25-54MHz)	0.22 μ H			LK1608 R22K-T or LL1608-LFS R22K
L16	Filter				2LNO-255(F)
L17	Choke	12 nH			HK1608 12NJ-T or LL1608-LFS12NJ
L18	Filter				4LNB-250(F)
L19	Choke	12 nH			HK1608 12NJ-T or LL1608-LFS12NJ
L20	Filter	15 nH			HK1608 15NJ-T or LL1608-LFS15NJ
L21	Filter	1 μ H			LK1608 1R0K-T
L22	Choke	22 nH			LK1608 220M-T
L23	VCO				2LNO-254(F)
L24	VCO				2LNO-255(F)
L25	Choke	100 μ H			LB2012T101M
L26	VCO				2LNO-256(F)
L27	Choke				GR-D864
L28	Choke	10 μ H			LB2012T100M
L29	Choke				5SSO-402
L30	Choke	100 μ H			LB2012T101M
L31	Not used.				
L32	Choke	1 μ H			LBC2012T1R0M
L33	Choke	1 μ H			LBC2012T1R0M
L34	Choke	1 μ H			LBC2012T1R0M
L35	Choke	1 μ H			LBC2012T1R0M
Transistors					
Q1	DTA114EUA-T106	Marked 14	PNP		DTA114EUA-T106
Q2	UMD2N-TR	Marked D2	PNP/NPN		UMD2N-TR
Q3	2SC4094(R38)-T2B-A or 2SC4094(R38)-T2B	Marked R38	NPN		2SC4094(R38)-T2B-A or 2SC4094(R38)-T2B
Q4	2SC4226(R25)T2B-A or 2SC4226(R25)-T2B	Marked R25	NPN		2SC4226(R25)T2B-A or 2SC4226(R25)-T2B
Q5	DTC114YUA-T106 or UN5214-TX	Marked 64 Marked 8D	NPN		DTC114YUA-T106 or UN5214-TX
Q6	UMD2N-TR	Marked D2	PNP/NPN		UMD2N-TR
Q7	2SC4094(R38)-T2B-A or 2SC4094(R38)-T2B	Marked R38	NPN		2SC4094(R38)-T2B-A or 2SC4094(R38)-T2B
Q8	2SC4116-Y(Te85L,F) or 2SC4116(Y)-TE85L	Marked LY	NPN		2SC4116-Y(Te85L,F) or 2SC4116(Y)-TE85L
Q9	2SC4250(Te85L,F) or 2SC4250-TE85L	Marked HE	NPN		2SC4250(Te85L,F) or 2SC4250-TE85L
Q10	2SC4215-O(Te85L,F) or 2SC4215(O)-TE85L or 2SC4215(O)-TE85LF	Marked QO	NPN		2SC4215-O(Te85L,F) or 2SC4215(O)-TE85L or 2SC4215(O)-TE85LF
Q11	2SC4116-GR(Te85L,F) or 2SC4116(GR)-TE85L	Marked LG	NPN		2SC4116-GR(Te85L,F) or 2SC4116(GR)-TE85L
Q12	DTC114YUA-T106 or UN5214-TX	Marked 64 Marked 8D	NPN		DTC114YUA-T106 or UN5214-TX
Q13	DTC114YUA-T106 or UN5214-TX	Marked 64 Marked 8D	NPN		DTC114YUA-T106 or UN5214-TX

Ref. No.	Description				RS Part No.	Mfr's Part No.
Q14	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Q15	2SC4226(R25)T2B-A	Marked R25	NPN			2SC4226(R25)T2B-A
	or 2SC4226(R25)-T2B					or 2SC4226(R25)-T2B
Q16	2SC4226(R25)T2B-A	Marked R25	NPN			2SC4226(R25)T2B-A
	or 2SC4226(R25)-T2B					or 2SC4226(R25)-T2B
Q17	DTA114EUA-T106	Marked 14	PNP			DTA114EUA-T106
Q18	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Q19	2SC4226(R25)T2B-A	Marked R25	NPN			2SC4226(R25)T2B-A
	or 2SC4226(R25)-T2B					or 2SC4226(R25)-T2B
Q20	2SC4226(R25)T2B-A	Marked R25	NPN			2SC4226(R25)T2B-A
	or 2SC4226(R25)-T2B					or 2SC4226(R25)-T2B
Q21	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Q22	2SC4226(R25)T2B-A	Marked R25	NPN			2SC4226(R25)T2B-A
	or 2SC4226(R25)-T2B					or 2SC4226(R25)-T2B
Q23	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Q24	2SC4226(R25)T2B-A	Marked R25	NPN			2SC4226(R25)T2B-A
	or 2SC4226(R25)-T2B					or 2SC4226(R25)-T2B
Q25	2SC4116-GR(TE85L,F)	Marked LG	NPN			2SC4116-GR(TE85L,F)
	or 2SC4116(GR)-TE85L					or 2SC4116(GR)-TE85L
Q26	2SK880-Y(TE85L,F)	Marked XY	MOS	FET		2SK880-Y(TE85L,F)
	or 2SK880(Y)-TE85L					or 2SK880(Y)-TE85L
Q27	2SK880-Y(TE85L,F)	Marked XY	MOS	FET		2SK880-Y(TE85L,F)
	or 2SK880(Y)-TE85L					or 2SK880(Y)-TE85L
Q28	2SC4116-GR(TE85L,F)	Marked LG	NPN			2SC4116-GR(TE85L,F)
	or 2SC4116(GR)-TE85L					or 2SC4116(GR)-TE85L
Q29	MT3S16U-(TE85L,F)	Marked T4	NPN			MT3S16U-(TE85L,F)
	or MT3S16U-TE85L					or MT3S16U-TE85L
	or KTC4082					or KTC4082
	or 2SC4251-TE85L					or 2SC4251-TE85L
	or 2SC4251(TE85L,F)					or 2SC4251(TE85L,F)
Q30	2SC4251(TE85L,F)	Marked HF	NPN			2SC4251(TE85L,F)
	or 2SC4251-TE85L					or 2SC4251-TE85L
	or KTC4082					or KTC4082
Q31	DTA114EUA-T106	Marked 14	PNP			DTA114EUA-T106
Q32	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Q33	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Q34	2SD2118-TL		NPN			2SD2118-TL
Q35	2SC4117-GR(TE85L,F)	Marked DG	NPN			2SC4117-GR(TE85L,F)
	or 2SC4117(GR)-TE85L					or 2SC4117(GR)-TE85L
Q36	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
	or UN5214-TX	Marked 8D				or UN5214-TX
Resistors						
R1	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J
						or CR05-101J-H
						or ERJ2GEJ101X
R2	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J
						or CR05-101J-H
						or ERJ2GEJ101X
R3	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J
						or CR05-472J-H
						or ERJ2GEJ472X
R4	Chip, Metal Glaze	27 ohm	±5%	1/16 W		RK73B1ETTP270
						or CR05-270J-H
						or ERJ2GEJ270X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R5	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R6	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R7	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R8	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R9	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R10	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R11	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R12	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R13	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R14	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R15	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R16	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R17	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R18	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R19	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R20	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R21	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R22	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R23	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R24	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R25	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R26	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R27	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R28	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R29	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R30	Chip, Metal Glaze	15 kohm	±5%	1/16 W		RK73B1ETTP153J or CR05-153J-H or ERJ2GEJ153X
R31	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R32	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R33	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R34	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R35	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R36	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R37	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R38	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R39	Chip, Metal Glaze	10 kohm	5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R40	Chip, Metal Glaze	470 ohm	±5%	1/16 W		RK73B1ETTP471J or CR05-471J-H or ERJ2GEJ471X
R41	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R42	Chip, Metal Glaze	180 kohm	±5%	1/16 W		RK73B1ETTP184J or CR05-184J-H or ERJ2GEJ184X
R43	Chip, Metal Glaze	68 kohm	±5%	1/16 W		RK73B1ETTP683J or CR05-683J-H or ERJ2GEJ683X
R44	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R45	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R46	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R47	Chip, Metal Glaze	56 kohm	±5%	1/16 W		RK73B1ETTP563J or CR05-563J-H or ERJ2GEJ563X
R48	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ473X
R49	Chip, Metal Glaze	560 kohm	±5%	1/16 W		RK73B1ETTP564J or CR05-564J-H or ERJ2GEJ564X
R50	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R51	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R52	Chip, Metal Glaze	1.8 kohm	±5%	1/16 W		RK73B1ETTP182J or CR05-182J-H or ERJ2GEJ182X
R53	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R54	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R55	Chip, Metal Glaze	12 kohm	±5%	1/16 W		RK73B1ETTP123J or CR05-123J-H or ERJ2GEJ123X
R56	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R57	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R58	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R59	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R60	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R61	Chip, Metal Glaze	68 kohm	±5%	1/16 W		RK73B1ETTP683J or CR05-683J-H or ERJ2GEJ683X
R62	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R63	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R64	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R65	Chip, Metal Glaze	68 kohm	±5%	1/16 W		RK73B1ETTP683J or CR05-683J-H or ERJ2GEJ683X
R66	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R67	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R68	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R69	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R70	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R71	Chip, Metal Glaze	1 Mohm	±5%	1/16 W		RK73B1ETTP105J or CR05-105J-H or ERJ2GEJ105X
R72	Chip, Metal Glaze	3.3 kohm	±5%	1/16 W		RK73B1ETTP332J or CR05-332J-H or ERJ2GEJ332X
R73	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R74	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R75	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R76	Chip, Metal Glaze	6.8 kohm	±5%	1/16 W		RK73B1ETTP682J or CR05-682J-H or ERJ2GEJ682X
R77	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R78	Chip, Metal Glaze	47 ohm	±5%	1/16 W		RK73B1ETTP470J or CR05-470J-H or ERJ2GEJ470X
R79	Chip, Metal Glaze	330 ohm	±5%	1/16 W		RK73B1ETTP331J or CR05-331J-H or ERJ2GEJ331X
R80	Chip, Metal Glaze	47 ohm	±5%	1/16 W		RK73B1ETTP470J or CR05-470J-H or ERJ2GEJ470X
R81	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R82	Chip, Metal Glaze	6.8 kohm	±5%	1/16 W		RK73B1ETTP682J or CR05-682J-H or ERJ2GEJ682X
R83	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R84	Chip, Metal Glaze	150 ohm	±5%	1/16 W		RK73B1ETTP151J or CR05-151J-H or ERJ2GEJ151X
R85	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R86	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R87	Chip, Metal Glaze	470 ohm	±5%	1/16 W		RK73B1ETTP471J or CR05-471J-H or ERJ2GEJ471X
R88	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R89	Chip, Metal Glaze	47 ohm	±5%	1/16 W		RK73B1ETTP470J or CR05-470J-H or ERJ2GEJ470X
R90	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R91	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R92	Chip, Metal Glaze	3.3 kohm	±5%	1/16 W		RK73B1ETTP332J or CR05-332J-H or ERJ2GEJ332X
R93	Chip, Metal Glaze	6.8 kohm	±5%	1/16 W		RK73B1ETTP682J or CR05-682J-H or ERJ2GEJ682X
R94	Chip, Metal Glaze	1.5 kohm	±5%	1/8 W		RK73B2ATTD152J or CR21-152J-T or ERJ6GEYJ152V
R95	Chip, Metal Glaze	1 kohm	±5%	1/8 W		RK73B2ATTD102J or CR21-102J-T or ERJ6GEYJ102V
R96	Chip, Metal Glaze	3.3 kohm	±5%	1/8 W		RK73B2ATTD332J or CR21-332J-T or ERJ6GEYJ332
R97	Chip, Metal Glaze	3.3 kohm	±5%	1/8 W		RK73B2ATTD332J or CR21-332J-T or ERJ6GEYJ332
R98	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R99	Chip, Metal Glaze	3.3 kohm	±5%	1/16 W		RK73B1ETTP332J or CR05-332J-H or ERJ2GEJ332X
R100	Chip, Metal Glaze	1.5 kohm	±5%	1/16 W		RK73B1ETTP152J or CR05-152J-H or ERJ2GEJ152X
R101	Chip, Metal Glaze	470 ohm	±5%	1/16 W		RK73B1ETTP471J or CR05-471J-H or ERJ2GEJ471X
R102	Chip, Metal Glaze	470 ohm	±5%	1/16 W		RK73B1ETTP471J or CR05-471J-H or ERJ2GEJ471X
R103	Chip, Metal Glaze	470 ohm	±5%	1/16 W		RK73B1ETTP471J or CR05-471J-H or ERJ2GEJ471X
R104	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R105	Chip, Metal Glaze	15 kohm	±0.5%	1/16 W		ERA2AED153X
R106	Chip, Metal Glaze	6.8 kohm	±0.5%	1/16 W		ERA2AED682X
R107	Chip, Metal Glaze	100 ohm	±0.5%	1/16 W		ERA2AED101X
R108	Chip, Metal Glaze	470 ohm	±0.5%	1/16 W		ERA2AED471X
R109	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X
R110	Chip, Metal Glaze	150 okohm	±5%	1/16 W		RK73B1ETTP154J or CR05-154J-H or ERJ2GEJ154X
R111	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R112	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R113	Chip, Metal Glaze	47 ohm	±5%	1/16 W		RK73B1ETTP470J or CR05-470J-H or ERJ2GEJ470X
R114	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R115	Chip, Metal Glaze	3.3 kohm	±5%	1/16 W		RK73B1ETTP332J or CR05-332J-H or ERJ2GEJ332X
R116	Chip, Metal Glaze	470 kohm	±5%	1/16 W		RK73B1ETTP474J or CR05-474J-H or ERJ2GEJ474X
R117	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R118	Chip, Metal Glaze	27 kohm	±5%	1/16 W		RK73B1ETTP273J or CR05-273J-H or ERJ2GEJ273X
R119	Chip, Metal Glaze	27 kohm	±5%	1/16 W		RK73B1ETTP273J or CR05-273J-H or ERJ2GEJ273X
R120	Chip, Metal Glaze	82 kohm	±5%	1/16 W		RK73B1ETTP823J or CR05-823J-H or ERJ2GEJ823X
R121	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R122	Chip, Metal Glaze	82 kohm	±5%	1/16 W		RK73B1ETTP823J or CR05-823J-H or ERJ2GEJ823X
R123	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R124	Chip, Metal Glaze	1.5 Mohm	±5%	1/16 W		RK73B1ETTP155J or CR05-155J-H or ERJ2GEJ155X
R125	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R126	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R127	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R128	Chip, Metal Glaze	6.8 kohm	±5%	1/16 W		RK73B1ETTP682J or CR05-682J-H or ERJ2GEJ682X
R129	Chip, Metal Glaze	220 kohm	±5%	1/16 W		RK73B1ETTP224J or CR05-224J-H or ERJ2GEJ224X
R130	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R131	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R132	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R133	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ473X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R134	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R135	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R136	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R137	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R138	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R139	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R140	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ473X
R141	Chip, Metal Glaze	470 kohm	±5%	1/16 W		RK73B1ETTP474J or CR05-474J-H or ERJ2GEJ474X
R142	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R143	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R144	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R145	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ473X
R146	Chip, Metal Glaze	68 kohm	±5%	1/16 W		RK73B1ETTP683J or CR05-683J-H or ERJ2GEJ683X
R147	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R148	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R149	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R150	Not used.					
R151	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R152	Chip, Metal Glaze	15 kohm	±5%	1/16 W		RK73B1ETTP153J or CR05-153J-H or ERJ2GEJ153X
R153	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R154	Chip, Metal Glaze	12 kohm	±5%	1/16 W		RK73B1ETTP123J or CR05-123J-H or ERJ2GEJ123X
R155	Chip, Metal Glaze	8.2 kohm	±5%	1/16 W		RK73B1ETTP822J or CR05-822J-H or ERJ2GEJ822X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R156	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R157	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R158	Chip, Metal Glaze	12 kohm	±5%	1/16 W		RK73B1ETTP123J or CR05-123J-H or ERJ2GEJ123X
R159	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R160	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R161	Chip, Metal Glaze	56 kohm	±5%	1/16 W		RK73B1ETTP563J or CR05-563J-H or ERJ2GEJ563X
R162	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R163	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R164	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R165	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R166	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R167	Chip, Metal Glaze	1 ohm	±5%	1/8 W		RK73B2ATTD1R0J or CR21-1R0J-T or ERJ6GEYJ1R0V
R168	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R169	Chip, Metal Glaze	270 kohm	±5%	1/16 W		RK73B1ETTP274J or CR05-274J-H or ERJ2GEJ274X
R170	Chip, Metal Glaze	1 ohm	±5%	1/10 W		RK73B1JTDD1R0J or CR10-1R0J-T or ERJ3GEYJ1R0V
R171	Chip, Metal Glaze	68 ohm	±5%	1/4 W		RK73B2BTDD680J or CR32-680J-T or ERJ8GEYJ680V
R172	Chip, Metal Glaze	470 ohm	±5%	1/4 W		RK73B2BTDD471J or CR32-471J-T or ERJ8GEYJ471V
R173	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R174	Chip, Metal Glaze	4.12 ohm	±1%	1/2 W		RK73H2ETTD4R12F or RK73H2ETD4R12F
R175	Chip, Metal Glaze	2.2 kohm	±5%	1/10 W		RK73K1JTDD222J or CR10-222J-T or ERJ3GEYJ222V
R176	Chip, Metal Glaze	220 ohm	±5%	1/16 W		RK73B1ETTP221J or CR05-221J-H or ERJ2GEJ221X

Ref. No.	Description	RS Part No.	Mfr's Part No.
Transformers			
T1 T2 T3 T4	2nd IF 2nd IF 2nd IF Detector (455 kHz)		5SSI-403 5SSI-403 5SSI-403 GRJ-F863
Thermistor			
TH1	100ohm		TBPS1R101K315H5Q or ERTJ1VA101J
Crystals			
X1 X2	12.75 MHz 20.945 MHz		GR-07D-0661 GE-00D-3786
Crystal Filters			
XF1 XF2	380.8 MHz 21.4 MHz		SAFC380MA1F0T-TC05 or SAFCG380MAA0T00R05 GE-99D-3293 or MF21R TR-1-6(3) No. 20-18926
Semi-Fixed Resistor			
VR1 VR2 VR3 VR4 VR5	47 kohm 47 kohm 22 kohm 47 kohm 47 kohm		PVZ3A473C01R00 or EVM3ESX50BQ4 or RH03ADCS4X PVZ3A473C01R00 or EVM3ESX50BQ4 or RH03ADCS4X PVZ3A223C01R00 or EVM3ESX50BE4 or RH03ADCJ4X PVZ3A473C01R00 or EVM3ESX50BQ4 or RH03ADCS4X PVZ3A473C01R00 or EVM3ESX50BQ4 or RH03ADCS4X
Miscellaneous			
JP1 GND VR6	Jumper, Chip Pin, Test Volume/AF Control 50k (A)/10k (B)		RK73Z1ETTD or CJ05-000T GE-87D-7290(F) or GE-87D-7290 RG82BS-2A1-B103-0EC2 or GE-03D-0200 or GR-08D-1220

Ref. No.	Description	RS Part No.	Mfr's Part No.
	Chassis, Top		GR-07D-1570
	Escutcheon, Top		GR-07C-1530
	Lug, Earth		GR-07D-1710
	Screw, PM 2x4 Ni or BLK		PM 2x4 Ni or BLK
	Top, Shield, RF		GR-07D-1690
	Board, Insulation, RF		GR-07D-1680
	Bottom, Shield, RF		GR-07D-1670
20	Bottom, Shield, VCO		GR-07D-0920
21	Case, Shield		GR-07D-1720
22	Nut, 7m/m R		GR-05D-3520
23	Plate, Insulation, VCO		GR-07D-1770
24	Terminal, Battery		GR-06D-0410
			or GE-00D-3714
25	Top, Shield		GR-05D-3460
			or GE-98D-3050

Ref. No.	Description				RS Part No.	Mfr's Part No.
26	PCB Assembly, Logic Consists of the following:				GA-08D-0210	
Capacitors						
C301	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C302	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C303	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C304	Ceramic	470 pF	50 V	±10% or ±5% or ±10%		ECJ0EB1H471K or CM05B471J50AH or GRM155R71H471KA01D
C305	Ceramic	0.018 μF	16 V	±10% or ±5% or ±10%		ECJ0EB1C183K or CM05B183J16AH or GRM155R71C183KA01D
C306	Ceramic	0.018 μF	16 V	±10% or ±5% or ±10%		ECJ0EB1C183K or CM05B183J16AH or GRM155R71C183KA01D
C307	Ceramic	0.22 μF	10 V or 50 V or 10 V	±10% or ±5% or ±10%		ECJ1VB1A224K or CM105X7R224J50AT or GRM188R71A224KA01D
C308	Ceramic	2.2 μF	10 V	±10%		ECJ2FB1A225K or LMK212BJ225KG-T or GRM21BR71A225KA01L
C309	Ceramic	0.018 μF	16 V	±10% or ±5% or ±10%		ECJ0EB1C183K or CM05B183J16AH or GRM155R71C183KA01D
C310	Tantalum	2.2 μF	10 V	±20%		TCP1A225M8R or TESVSP1A225M8R or TEESVP1A225M8R or F921A225MPA
C311	Tantalum	2.2 μF	10 V	±20%		TCP1A225M8R or TESVSP1A225M8R or TEESVP1A225M8R or F921A225MPA
C312	Tantalum	2.2 μF	10 V	±20%		TCP1A225M8R or TESVSP1A225M8R or TEESVP1A225M8R or F921A225MPA
C313	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C314	Ceramic	0.018 μF	16 V	±10% or ±5% or ±10%		ECJ0EB1C183K or CM05B183J16AH or GRM155R71C183KA01D
C315	Ceramic	0.33 μF	10 V or 6.3 V or 10 V	±10% or ±5% or ±10%		ECJ1VB1A334K or ECJ1VBOJ334K or LMK107BJ334KA-T or GRM188R71A334KA61D
C316	Ceramic	0.039 μF	16 V	±10% or ±5% or ±10%		ECJ0EB1C393K or CM05B393J16AH or GRM155R71C393KA01D or CM05X5R393K10AH
C317	Ceramic	0.15 μF	or 10 V 10 V or 50 V or 10 V	±10% or ±5% or ±10%		ECJ1VB1A154K or CM105X7R154J50AT or GRM188R71A154KA01D
C318	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C319	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C320	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C321	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C322	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C323	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C324	Tantalum	1 μ F	10 V	$\pm 20\%$		TCP1A105M8R or TESVSP1A105M8R or TEESVP1A105M8R or F921A105MPA
C325	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C326	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C327	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C328	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C329	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C330	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C331	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C332	Ceramic	0.068 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A683K or CM05B683J10AH or GRM155R71A683KA01D or GRM155R71C683KA88D
C333	Tantalum	1 μ F	or 16 V 10 V	$\pm 20\%$		TCP1A105M8R or TESVSP1A105M8R or TEESVP1A105M8R or F921A105MPA
C334	Tantalum	1 μ F	10 V	$\pm 20\%$		TCP1A105M8R or TESVSP1A105M8R or TEESVP1A105M8R or F921A105MPA
C335	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C336	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C337	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C338	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C339	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C340	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C341	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C342	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C343	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C344	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C345	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C346	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C347	Ceramic	0.001 µF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C348	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C349	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C350	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C351	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C352	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C353	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C354	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C355	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C356	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C357	Tantalum	1 μ F	10 V	$\pm 20\%$		TCP1A105M8R or TESVSP1A105M8R or TEESVP1A105M8R or F921A105MPA
C358	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C359	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C360	Ceramic	0.047 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1A473K or CM05B473J10AH or GRM155R71A473KA01D
C361	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C362	Ceramic	0.22 μ F	10 V or 50 V	$\pm 10\%$ or $\pm 5\%$		ECJ1VB1A224K or CM105X7R224J50AT or GRM188R71A224KA01D
C363	Ceramic	47 pF	or 10 V 50 V	or $\pm 10\%$ $\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C364	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C365	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C366	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C367	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C368	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C369	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C370	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C371	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C372	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C373	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C374 C375	Not used. Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C376	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C377	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C378	Ceramic	0.0022 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H222K or CM05B222J50AH or GRM155R71H222KA01D
C379	Ceramic	0.22 μ F	10 V or 50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ1VB1A224K or CM105X7R224J50AT or GRM188R71A224KA01D
C380	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C381	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C382	Ceramic	0.0033 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H332K or CM05B332J50AH or GRM155R71H332KA01D
C383	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C384	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C385	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C386	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C387	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C388	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C389	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C390	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C391	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C392	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C393	Ceramic	0.01 μ F	16 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C394	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C395	Ceramic	47 pF	50 V	$\pm 5\%$		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C396	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C397	Ceramic	0.001 µF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C398	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C399	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C400	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C401	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C402	Ceramic	47 pF	50 V	±5%		ECJ0EC1H470J or CM05CH470J50AH or GRM1555C1H470JZ01D
C403	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C404	Ceramic	2.2 µF	10 V	±10%		ECJ2FB1A225K or LMK212BJ225KG-T or GRM21BR71A225KA01L
C405	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D
C406	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C407	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C408	Ceramic	0.1 µF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C409	Ceramic	33 pF	50 V	±5%		ECJ0EC1H330J or CM05CH330J50AH or GRM1555C1H330JZ01D
C410	Ceramic	33 pF	50 V	±5%		ECJ0EC1H330J or CM05CH330J50AH or GRM1555C1H330JZ01D
C411	Ceramic	0.01 µF	16 V	±10% or ±5% or ±10%		ECJ0EB1C103K or CM05B103J16AH or GRM155R71C103KA01D

Ref. No.	Description				RS Part No.	Mfr's Part No.
C412	Ceramic	2.2 μ F	10 V	$\pm 10\%$		ECJ2FB1A225K or LMK212BJ225KG-T or GRM21BR71A225KA01L
C413	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C414	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C415	Tantalum	4.7 μ F	6.3 V	$\pm 20\%$		TCP0J475M or TESVSP0J475M8R or TEESVP0J475M8R or F920J475MPA
C416	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C417	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C418	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C419	Ceramic	0.001 μ F	50 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C420	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C421	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C422	Ceramic	2.2 μ F	10 V	$\pm 10\%$		ECJ2FB1A225K or LMK212BJ225KG-T or GRM21BR71A225KA01L
C423	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C424	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C425	Ceramic	0.1 μ F	10 V	$\pm 10\%$ or $\pm 5\%$ or $\pm 10\%$ or $\pm 5\%$		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH

Ref. No.	Description				RS Part No.	Mfr's Part No.
C426	Ceramic	0.1 μF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C427	Ceramic	0.1 μF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C428	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C429	Ceramic	0.001 μF	50 V	±10% or ±5% or ±10%		ECJ0EB1H102K or CM05B102J50AH or GRM155R71H102KA01D
C430	Ceramic	0.1 μF	10 V	±10% or ±5% or ±10% or ±5%		ECJ0EB1A104K or CM05B104J10AH or GRM155R71A104KA01D or CM05X5R104J10AH or CM05X7R104J10AH
C431	Ceramic	0.22 μF	10 V or 50 V or 10 V	±10% or ±5% or ±10%		ECJ1VB1A224K or CM105X7R224J50AT or GRM188R71A224KA01D
C432	Ceramic	0.22 μF	10 V or 50 V or 10 V	±10% or ±5% or ±10%		ECJ1VB1A224K or CM105X7R224J50AT or GRM188R71A224KA01D
Connectors						
CN301 CN302 CN303 CN304 CN305	30-pin/Female Not used. 2-pin/Female 2-pin/Female 18-pin/Male					AXK5S3004BV1 20030S-02G2T 20030S-02G2T 52745-1896 or 52745-1890
Diodes						
D301 D302 D303 D304 D305 D306 D307 D308	HSC277-TR-E-F HSC277-TR-E-F HSC277-TR-E-F 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3	Marked 3 Marked 3 Marked 3 Marked 3 Marked 3	Silicon Silicon Silicon Silicon Silicon Silicon Silicon			HSC277-TR-E-F HSC277-TR-E-F HSC277-TR-E-F 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3 1SS357(TPH3,F) or 1SS357-TPH3
Integrated Circuits						
IC301 IC302	M24512WMW6T or M24512WMW6TG Not used.	Memory	MOS	SMT		M24512WMW6T or M24512WMW6TG

Ref. No.	Description				RS Part No.	Mfr's Part No.
IC303	S-80820CNNB-B8F-T2G or S80820ANNP-EDH-T2G or S-80820CNNB-B8F-T2 or S80820ANNP-EDH-T2	Voltage Detector	MOS	SMT		S-80820CNNB-B8F-T2G or S80820ANNP-EDH-T2G or S-80820CNNB-B8F-T2 or S80820ANNP-EDH-T2
IC304	NJM13403V-TE1-(pbF) or NJM13403V-TE1	Data Filter	Bipolar	SMT		NJM13403V-TE1-(pbF) or NJM13403V-TE1
IC305	NJM2903V-TE1-(pbF) or NJM2903V-TE1	Data Filter	Bipolar	SMT		NJM2903V-TE1-(pbF) or NJM2903V-TE1
IC306	NJM13403V-TE1-(pbF) or NJM13403V-TE1	Data Filter	Bipolar	SMT		NJM13403V-TE1-(pbF) or NJM13403V-TE1
IC307	GRE-0801	Microprocessor with CPU Label	MOS	SMT		GRE0801 GR-08D-0420
IC308	NJM2871BF15-TE1-(pbF) or NJM2871BF15-TE1	Voltage Regulator	Bipolar	SMT		NJM2871BF15-TE1-(pbF) or NJM2871BF15-TE1
IC309	NJM2871BF18-TE1-(pbF) or NJM2871BF18-TE1	Voltage Regulator	Bipolar	SMT		NJM2871BF18-TE1-(pbF) or NJM2871BF18-TE1
IC310	TMS320VC5409APGE12	DSP Processor	MOS	SMT		TMS320VC5409APGE12
IC311	TC58FVT160ATG70(YP) or TC58FVT160AFT-70	Flash Memory	MOS	SMT		TC58FVT160ATG70(YP) or TC58FVT160AFT-70
IC312	HD74LV595ATELL-E	Shift Registor	MOS	SMT		HD74LV595ATELL-E
IC313	TLV320AIC13CDBT	CODEC	MOS	SMT		TLV320AIC13CDBT
IC314	TK11233CUCB-G or TK11233BUCB-G or TK11233CUCB or TK11233BUCB	Regulator, Switching		Bipolar		SMT TK11233CUCB-G or TK11233BUCB-G or TK11233CUCB or TK11233BUCB
Jack						
J301	Jack, PC/IF					SO-040-SMT
EMI Filters						
LC301 LC302 LC303 LC304 LC305	0.022μF 0.022μF 0.022μF 0.022μF 0.022μF					NFM21CC223R1H3D NFM21CC223R1H3D NFM21CC223R1H3D NFM21CC223R1H3D NFM21CC223R1H3D
LEDs						
LED301 LED302 LED303 LED304 LED305 LED306 LED307 LED308 LED309 LED310 LED311 LED312 LED313 LED134 LED315 LED316 LED317 LED318 LED319	Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Orange Tri-Color Orange Orange AlGaInP Al					

Ref. No.	Description				RS Part No.	Mfr's Part No.
Transistors						
Q301	2SA1577(Q)-T106	Marked HQ	PNP			2SA1577(Q)-T106
Q302	2SA1577(Q)-T106	Marked HQ	PNP			2SA1577(Q)-T106
Q303	2SC4116GR-TE85L,F	Marked LG	NPN			2SC4116GR-TE85L,F
Q304	2SC4116GR-TE85L,F	Marked LG	NPN			2SC4116GR-TE85L,F
Q305	2SC4116GR-TE85L,F	Marked LG	NPN			2SC4116GR-TE85L,F
Q306	2SC4116GR-TE85L,F	Marked LG	NPN			2SC4116GR-TE85L,F
Q307	DTC114YUA-T106	Marked 64	NPN			DTC114YUA-T106
Resistors						
R301	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R302	Chip, Metal Glaze	3.3 kohm	±5%	1/16 W		RK73B1ETTP332J or CR05-332J-H or ERJ2GEJ332X
R303	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R304	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R305	Chip, Metal Glaze	150 kohm	±5%	1/16 W		RK73B1ETTP154J or CR05-154J-H or ERJ2GEJ154X
R306	Chip, Metal Glaze	56 kohm	±5%	1/16 W		RK73B1ETTP563J or CR05-563J-H or ERJ2GEJ563X
R307	Not used.					
R308	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R309	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R310	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R311	Chip, Metal Glaze	82 kohm	±5%	1/16 W		RK73B1ETTP823J or CR05-823J-H or ERJ2GEJ823X
R312	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R313	Chip, Metal Glaze	120 kohm	±5%	1/16 W		RK73B1ETTP124J or CR05-124J-H or ERJ2GEJ124X
R314	Chip, Metal Glaze	200 kohm	±5%	1/16 W		RK73B1ETTP204J or CR05-204J-H or ERJ2GEJ204X
R315	Chip, Metal Glaze	1 Mohm	±5%	1/16 W		RK73B1ETTP105J or CR05-105J-H or ERJ2GEJ105X
R316	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R317	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R318	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R319	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R320	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R321	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R322	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R323	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R324	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R325	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R326	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R327	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R328	Chip, Metal Glaze	20 kohm	±5%	1/16 W		RK73B1ETTP203J or CR05-203J-H or ERJ2GEJ203X
R329	Chip, Metal Glaze	1 Mohm	±5%	1/16 W		RK73B1ETTP105J or CR05-105J-H or ERJ2GEJ105X
R330	Chip, Metal Glaze	8.2 kohm	±5%	1/16 W		RK73B1ETTP822J or CR05-822J-H or ERJ2GEJ822X
R331	Chip, Metal Glaze	91 kohm	±5%	1/16 W		RK73B1ETTP913J or CR05-913J-H or ERJ2GEJ913X
R332	Chip, Metal Glaze	82 kohm	±5%	1/16 W		RK73B1ETTP823J or CR05-823J-H or ERJ2GEJ823X
R333	Chip, Metal Glaze	1.5 kohm	±5%	1/16 W		RK73B1ETTP152J or CR05-152J-H or ERJ2GEJ152X
R334	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R335	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R336	Chip, Metal Glaze	2.2 kohm	±5%	1/16 W		RK73B1ETTP222J or CR05-222J-H or ERJ2GEJ222X
R337	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R338	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R339	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R340	Chip, Metal Glaze	2.2 Mohm	±1%	1/16 W		RK73H1ETTP2204F or MCR01MZPF2204
R341	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R342	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R343	Chip, Metal Glaze	75 kohm	±5%	1/16 W		RK73B1ETTP753J or CR05-753J-H or ERJ2GEJ753X
R344	Chip, Metal Glaze	160 kohm	±5%	1/16 W		RK73B1ETTP164J or CR05-164J-H or ERJ2GEJ164X
R345	Chip, Metal Glaze	8.2 kohm	±5%	1/16 W		RK73B1ETTP822J or CR05-822J-H or ERJ2GEJ822X
R346	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R347	Chip, Metal Glaze	20 kohm	±5%	1/16 W		RK73B1ETTP203J or CR05-203J-H or ERJ2GEJ203X
R348	Chip, Metal Glaze	1.1 Mohm	±1%	1/16 W		RK73H1ETTP1104F or MCR01MZPF1104
R349	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R350	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R351	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R352	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R353	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R354	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R355	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R356	Chip/0ohm (Jumper)					RK73Z1ETTD or CJ05-000T
R357	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R358	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R359	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R360	Chip, Metal Glaze	150 kohm	±5%	1/16 W		RK73B1ETTP154J or CR05-154J-H or ERJ2GEJ154X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R361	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R362	Chip, Metal Glaze	15 kohm	±5%	1/16 W		RK73B1ETTP153J or CR05-153J-H or ERJ2GEJ153X
R363	Chip, Metal Glaze	1 Mohm	±5%	1/16 W		RK73B1ETTP105J or CR05-105J-H or ERJ2GEJ105X
R364	Chip, Metal Glaze	68 kohm	±5%	1/16 W		RK73B1ETTP683J or CR05-683J-H or ERJ2GEJ683X
R365	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R366	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R367	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R368	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R369	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R370	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R371	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R372	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R373	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R374	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R375	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R376	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R377	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R378	Chip, Metal Glaze	1.5 kohm	±5%	1/16 W		RK73B1ETTP152J or CR05-152J-H or ERJ2GEJ152X
R379	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R380	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R381	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R382	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R383	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R384	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R385	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R386	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R387	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R388	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R389	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R390	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R391	Not used.					
R392	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R393	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R394	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R395	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R396	Chip, Metal Glaze	2.4 kohm	±5%	1/16 W		RK73B1ETTP242J or CR05-242J-H or ERJ2GEJ242X
R397	Chip, Metal Glaze	1 Mohm	±5%	1/16 W		RK73B1ETTP105J or CR05-105J-H or ERJ2GEJ105X
R398	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R399	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R400	Chip, Metal Glaze	2.4 kohm	±5%	1/16 W		RK73B1ETTP242J or CR05-242J-H or ERJ2GEJ242X
R401	Chip, Metal Glaze	1.2 kohm	±5%	1/16 W		RK73B1ETTP122J or CR05-122J-H or ERJ2GEJ122X
R402	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R403	Chip, Metal Glaze	2.4 kohm	±5%	1/16 W		RK73B1ETTP242J or CR05-242J-H or ERJ2GEJ242X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R404	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R405	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R406	Chip, Metal Glaze	22 kohm	±5%	1/16 W		RK73B1ETTP223J or CR05-223J-H or ERJ2GEJ223X
R407	Chip, Metal Glaze	1.2 kohm	±5%	1/16 W		RK73B1ETTP122J or CR05-122J-H or ERJ2GEJ122X
R408	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R409	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R410	Chip, Metal Glaze	2.4 kohm	±5%	1/16 W		RK73B1ETTP242J or CR05-242J-H or ERJ2GEJ242X
R411	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R412	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R413	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R414	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R415	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R416	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R417	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R418	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R419	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R420	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R421	Chip, Metal Glaze	22 ohm	±5%	1/16 W		RK73B1ETTP220J or CR05-220J-H or ERJ2GEJ220X
R422	Chip, Metal Glaze	1.2 kohm	±5%	1/16 W		RK73B1ETTP122J or CR05-122J-H or ERJ2GEJ122X
R423	Chip, Metal Glaze	82 kohm	±5%	1/16 W		RK73B1ETTP823J or CR05-823J-H or ERJ2GEJ823X
R424	Chip, Metal Glaze	2.4 kohm	±5%	1/16 W		RK73B1ETTP242J or CR05-242J-H or ERJ2GEJ242X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R425	Chip, Metal Glaze	22 ohm	±5%	1/16 W		RK73B1ETTP220J or CR05-220J-H or ERJ2GEJ220X
R426	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R427	Chip, Metal Glaze	2.4 kohm	±5%	1/16 W		RK73B1ETTP242J or CR05-242J-H or ERJ2GEJ242X
R428	Chip, Metal Glaze	390 kohm	±5%	1/16 W		RK73B1ETTP394J or CR05-394J-H or ERJ2GEJ394X
R429	Chip, Metal Glaze	22 ohm	±5%	1/16 W		RK73B1ETTP220J or CR05-220J-H or ERJ2GEJ220X
R430	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R431	Chip, Metal Glaze	390 kohm	±5%	1/16 W		RK73B1ETTP394J or CR05-394J-H or ERJ2GEJ394X
R432	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R433	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R434	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R435	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R436	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R437	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R438	Chip, Metal Glaze	1 Mohm	±5%	1/16 W		RK73B1ETTP105J or CR05-105J-H or ERJ2GEJ105X
R439	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R440	Chip, Metal Glaze	24 kohm	±5%	1/16 W		RK73B1ETTP243J or CR05-243J-H or ERJ2GEJ243X
R441	Not used.					
R442	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R443	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R444	Chip, Metal Glaze	1.8 kohm	±5%	1/16 W		RK73B1ETTP182J or CR05-182J-H or ERJ2GEJ182X
R445	Chip, Metal Glaze	100 kohm	±5%	1/16 W		RK73B1ETTP104J or CR05-104J-H or ERJ2GEJ104X
R446	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R447	Chip, Metal Glaze	620 ohm	±5%	1/16 W		RK73B1ETTP621J or CR05-621J-H or ERJ2GEJ621X
R448	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R449	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R450	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R451	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R452	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R453	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R454	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R455	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R456	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R457	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R458	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R459	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R460	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R461	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R462	Not used.					
R463	Chip, Metal Glaze	620 ohm	±5%	1/16 W		RK73B1ETTP621J or CR05-621J-H or ERJ2GEJ621X
R464	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R465	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R466	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R467	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R468	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R469	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R470	Not used.					
R471	Chip, Metal Glaze	470 kohm	±5%	1/16 W		RK73B1ETTP474J or CR05-474J-H or ERJ2GEJ474X
R472	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R473	Chip, Metal Glaze	470 kohm	±5%	1/16 W		RK73B1ETTP474J or CR05-474J-H or ERJ2GEJ474X
R474	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R475	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R476	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R477	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R478	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R479	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R480	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R481	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R482	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R483	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R484	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R485	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R486	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R487	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R488	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R489	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R490	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X

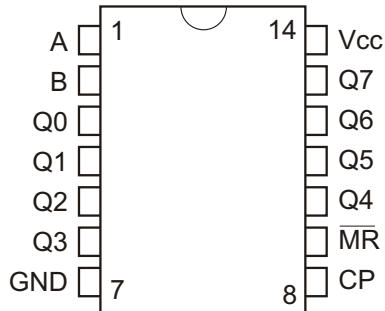
Ref. No.	Description				RS Part No.	Mfr's Part No.
R491	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R492	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R493	Chip, Metal Glaze	2 kohm	±5%	1/16 W		RK73B1ETTP202J or CR05-202J-H or ERJ2GEJ202X
R494	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R495	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R496	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R497	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R498	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R499	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R500	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R501	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R502	Chip, Metal Glaze	1 kohm	±5%	1/16 W		RK73B1ETTP102J or CR05-102J-H or ERJ2GEJ102X
R503	Chip, Metal Glaze	39 kohm	±5%	1/16 W		RK73B1ETTP393J or CR05-393J-H or ERJ2GEJ393X
R504	Chip, Metal Glaze	10 kohm	±5%	1/16 W		RK73B1ETTP103J or CR05-103J-H or ERJ2GEJ103X
R505	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R506	Chip, Metal Glaze	100 ohm	±5%	1/16 W		RK73B1ETTP101J or CR05-101J-H or ERJ2GEJ101X
R507	Not used.					
R508	Not used.					
R509	Not used.					
R510	Not used.					
R511	Chip, Metal Glaze	4.7 kohm	±5%	1/16 W		RK73B1ETTP472J or CR05-472J-H or ERJ2GEJ472X
R512	Chip/0ohm (Jumper)					RK73Z1ETTD or CJ05-000T
R513	Not used.					
R514	Chip, Metal Glaze	620 ohm	±5%	1/16 W		RK73B1ETTP621J or CR05-621J-H or ERJ2GEJ621X
R515	Chip, Metal Glaze	620 ohm	±5%	1/16 W		RK73B1ETTP621J or CR05-621J-H or ERJ2GEJ621X

Ref. No.	Description				RS Part No.	Mfr's Part No.
R516	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R517	Not used.					
R518	Not used.					
R519	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R520	Chip, Metal Glaze	47 kohm	±5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
R521	Chip, Metal Glaze	33 kohm	±5%	1/16 W		RK73B1ETTP333J or CR05-333J-H or ERJ2GEJ333X
R522	Chip, Metal Glaze	47 kohm	5%	1/16 W		RK73B1ETTP473J or CR05-473J-H or ERJ2GEJ4723X
Crystals						
X301	11.0592Mhz					GE-06D-3121
X302	18.432MHz					GE-06D-3130
Miscellaneous						
27	Himelon, Protect					GR-07D-3310
28	Plate, Earth, LED					GR-07D-3320
	Board, Insulation, Logic					GR-08D-0380
	Shile, Logic					GR-08D-0370

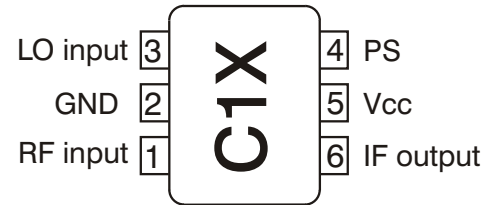
SEMICONDUCTOR LEAD IDENTIFICATION

Integrated Circuit

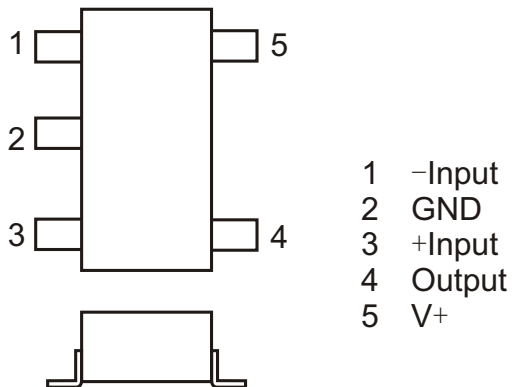
IC1 HD74AC164TELL
or TC74VHC164FT



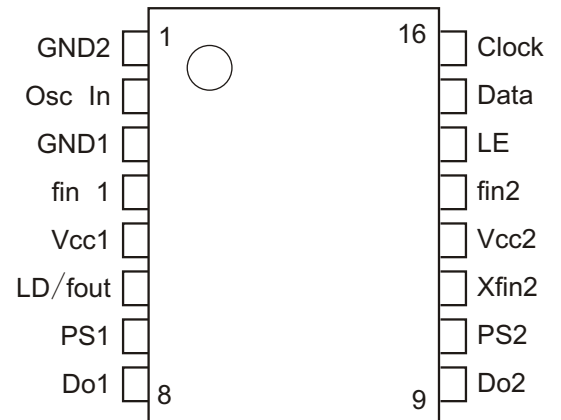
IC2 uPC2757TB



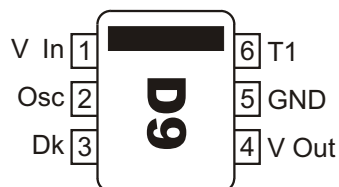
IC3 NJM2406F



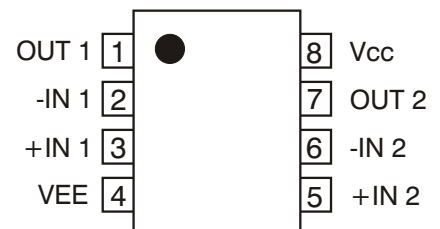
IC4 MB15F07SLPFV1-BND



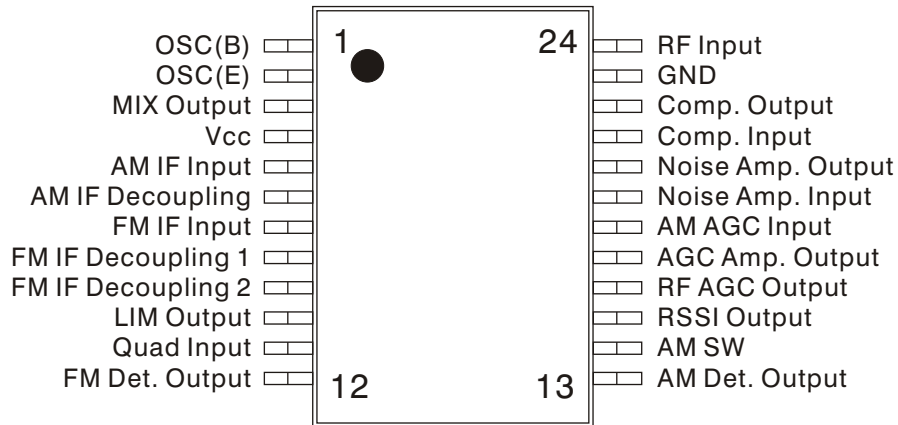
IC5 TK11819MTL



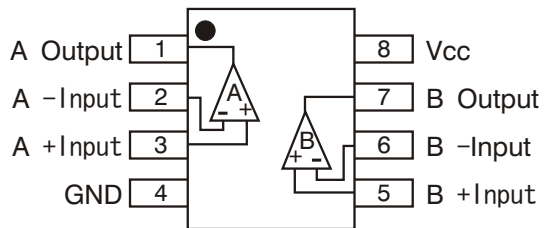
IC6 NJM2904V



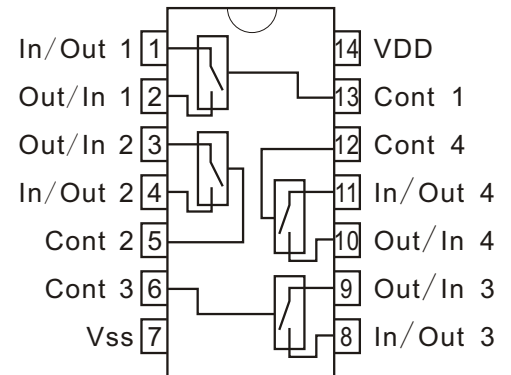
IC7 TK10931



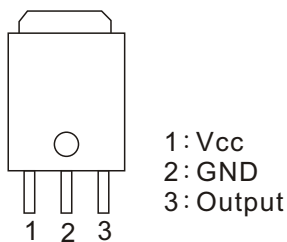
IC8 NJM13404V



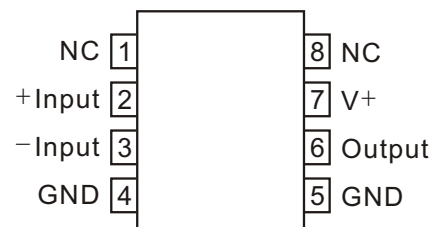
IC9, 10 TC74HC4066AFT or TC74HC4066AFS



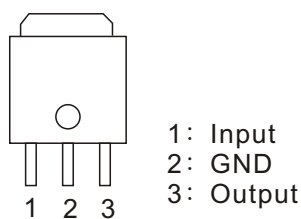
IC11 BA05FP or BA05CC0FP



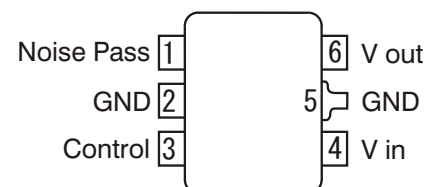
IC12 NJM2070M



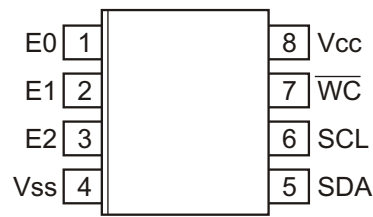
IC13 AN77033



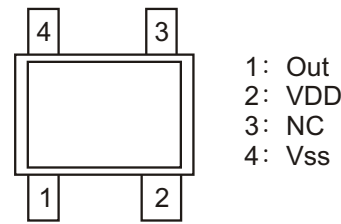
IC14, 314 TK11233CUCB/BUCEB



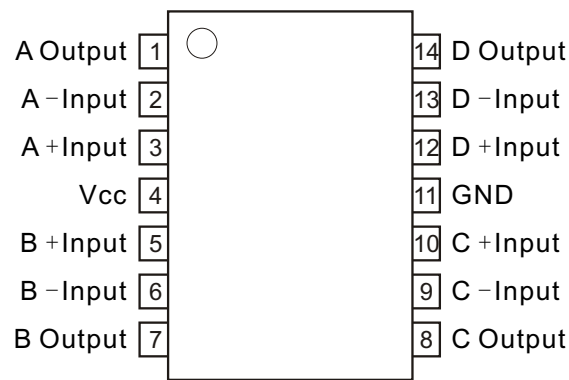
IC301 M24512WMW6T



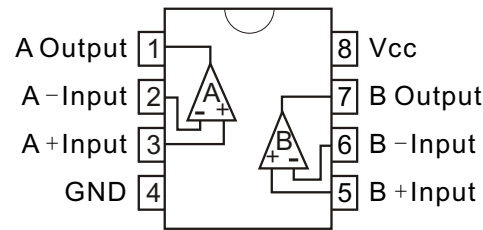
IC303 S-80820CNNB/ANNP



IC304, 306 NJM13403V



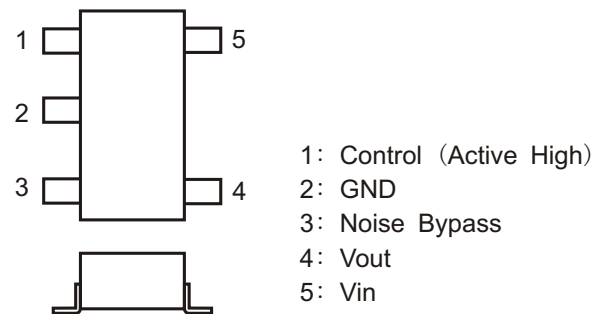
IC305 NJM2903V



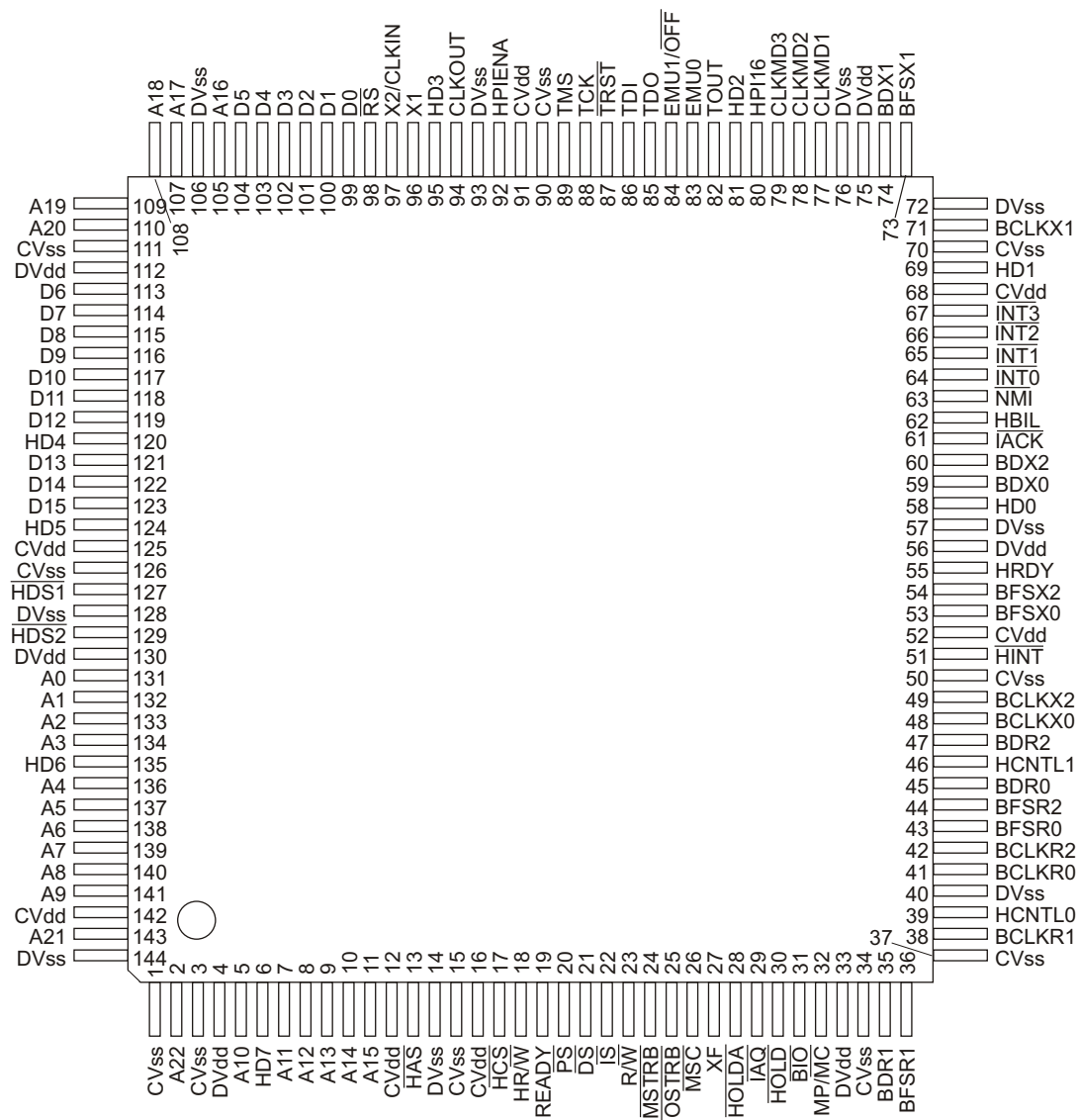
IC307 See "Microprocessor (IC307) Port Format" on Page 71.

IC308 NJM2871BF15

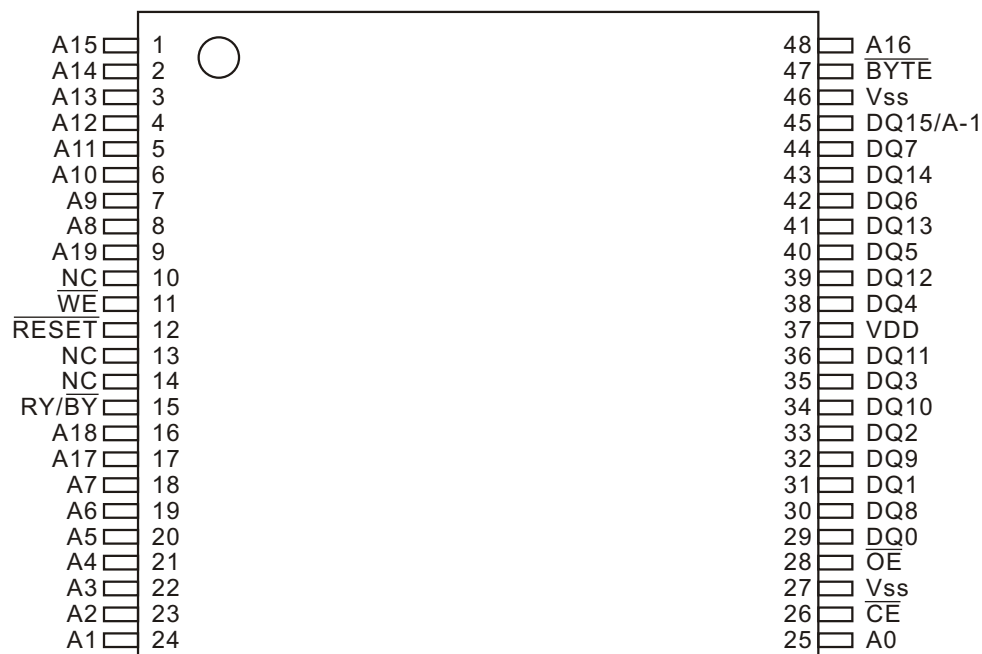
IC309 NJM2871BF18



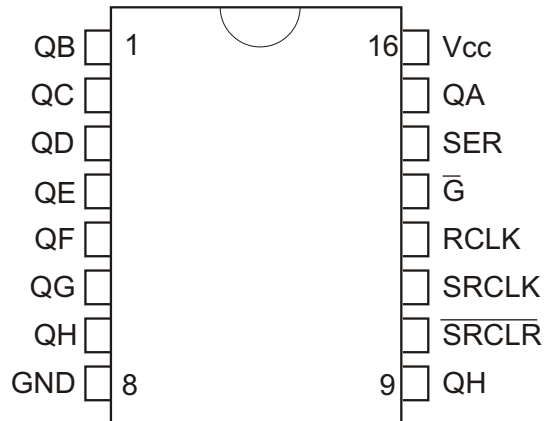
IC310 TMS320VC



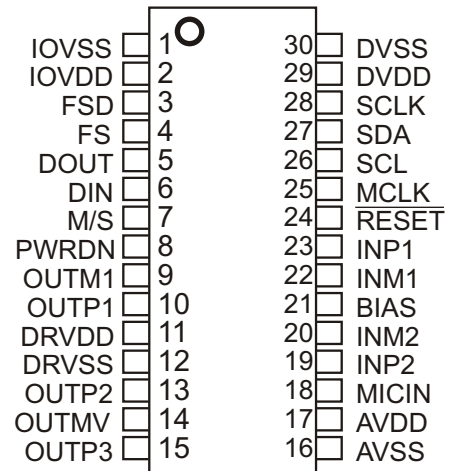
IC311 TC58FVT160A



IC312 HD74LV595A

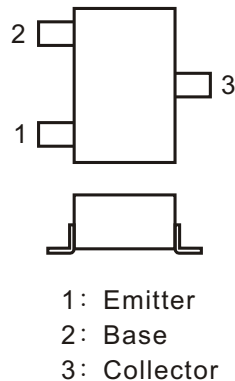


IC313 TLV320AIC13

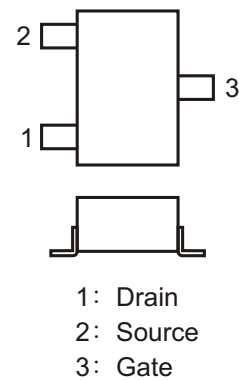


Transistors

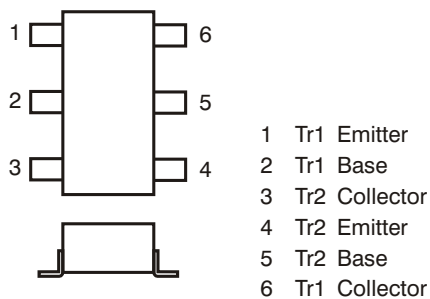
2SC4094 (R38) Marked R38
 2SC4116 (Y) Marked LY
 2SC4116 (GR) Marked LG
 2SC4117 (GR) Marked DG
 2SC4215 (O) Marked QO
 2SC4226 (R25) Marked R25
 2SC4250 Marked HE
 2SC4251 Marked HF
 DTA114EUA Marked 14
 DTC114YUA Marked 64
 KTC4082
 MT3S16U Marked T4
 UN5214-TX Marked 8D



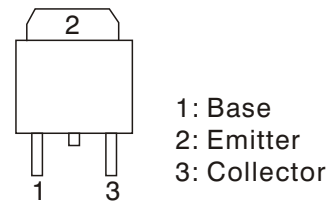
2SK880 (Y) Marked XY



UMD2N-TR Marked D2

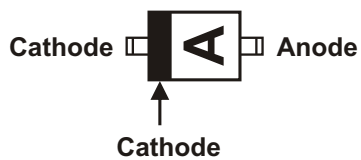


2SD2118-TL

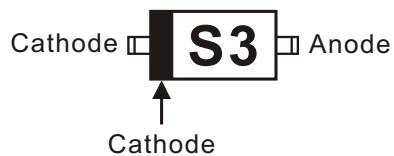


Diodes

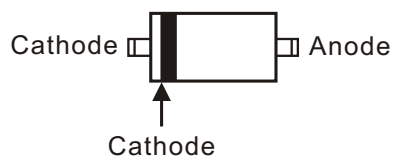
1SS355 Marked A



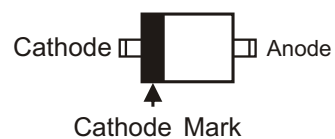
1SS357 Marked S3



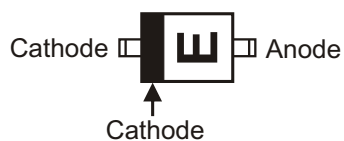
FM4003-T
or FM4004-T



HSC277



HVU17 Marked E



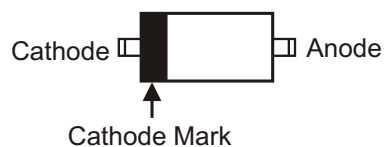
HVU131 Marked P1



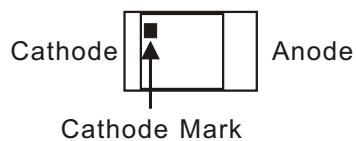
HVU300A Marked O



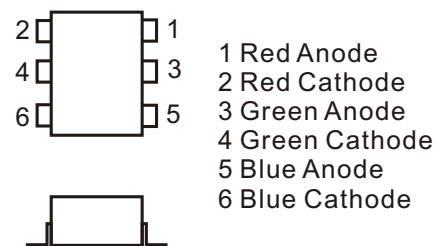
RB060L Marked 36



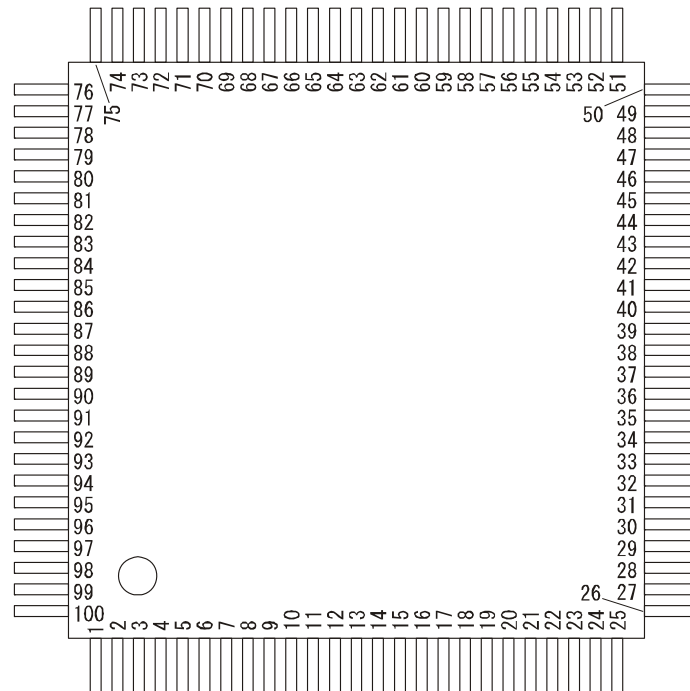
FY1112H (D or E)



URGB1308B

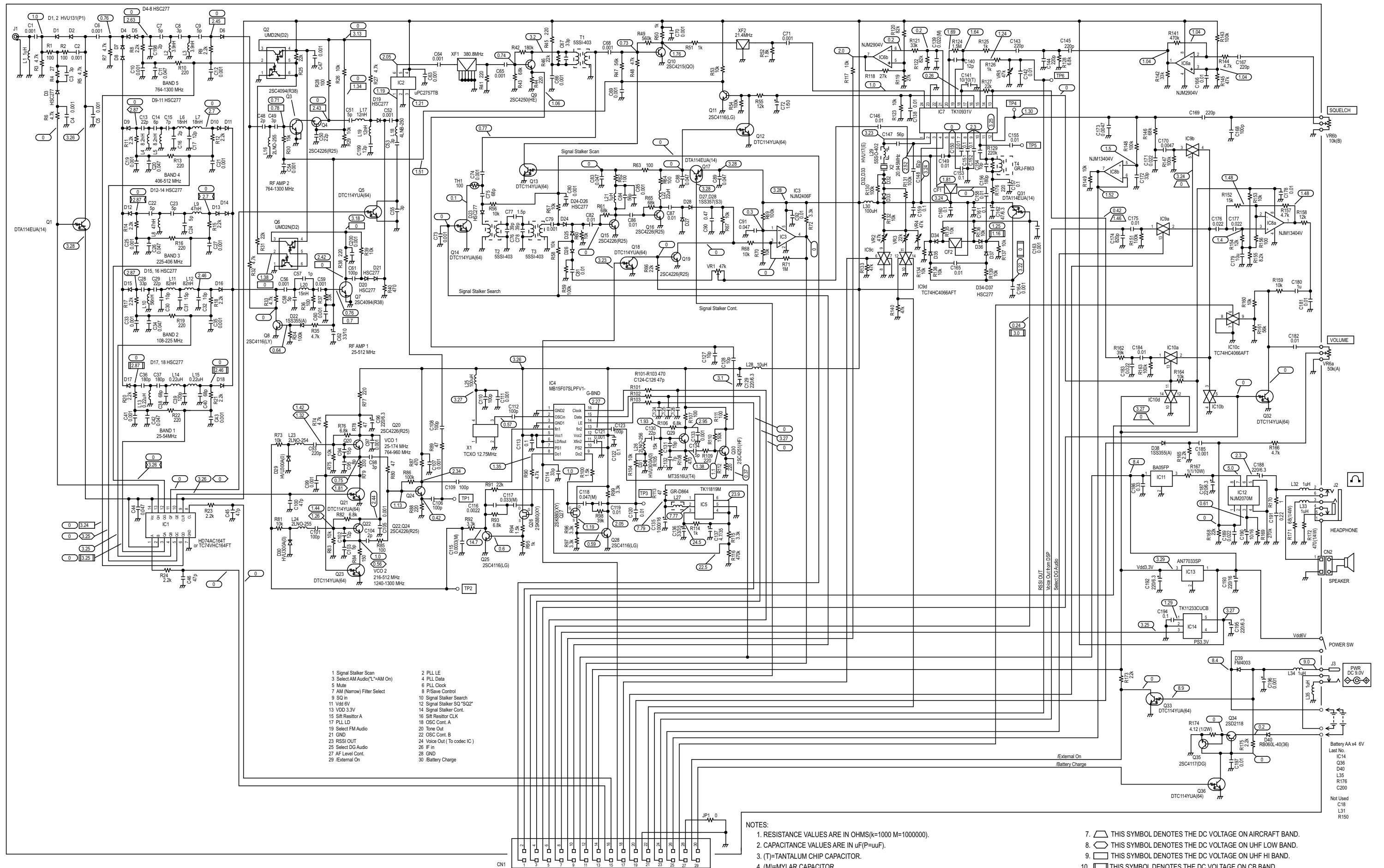


MICROPROCESSOR (IC307) PORT FORMAT

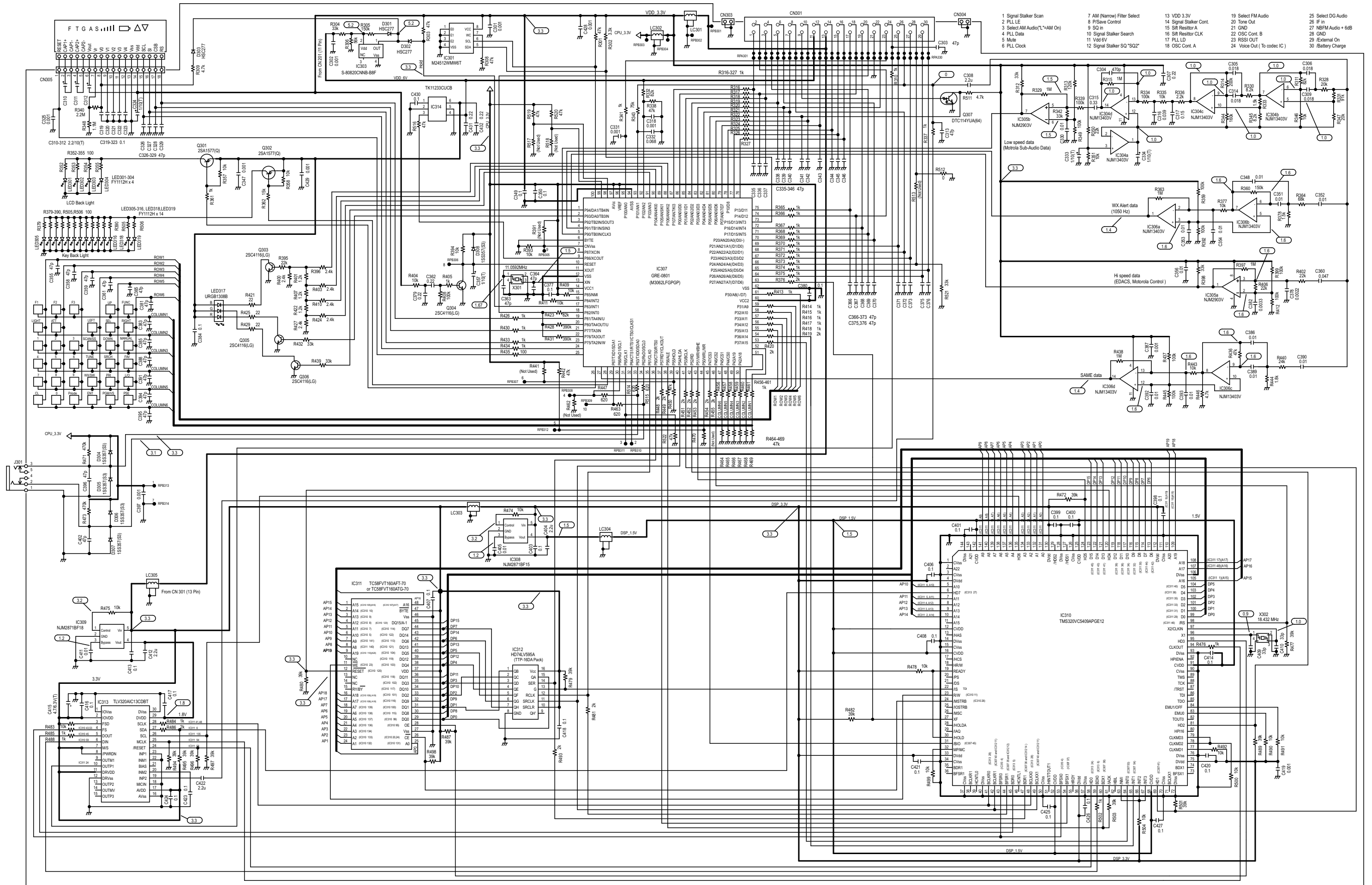


Pin Number	Function	Pin Number	Function	Pin Number	Function
1	Tri-Color LED D/A output	35	DSP Comms and Pin 12 74LV595A out	68	Power Save output
2	Tri-Color LED D/A output	36	DSP Comms and Pin 14 74LV595A out	69	Select DG Audio output
3	High Speed Data input	37	DSP Comms output	70	PLL Clock output
4	WX Alert input	38	DSP Comms input	71	PLL Data output
5	Low Speed Data input	39	Boot input	72	Select FM Audio output
6	BYTE input (GND)	40	DSP Comms and Pin 11 74LV595A out	73	EEPROM SDA output
7	CNVSS input (Pull down)	41	DSP-LD Ready input	74	PLL LE output
8	NC	42	DSP-LD 9600-Det input	75	PLL LD input
9	Voltage Regulator Control	43	DSP-LD ES-Det input/output	76	Shift Register CLK output
10	Reset input	44	NC (Pull down)	77	Shift Register A output
11	X-Out	45	DSP LD output	78	Signal Sweeper Control output
12	VSS	46	DSP Reset output	79	Signal Sweeper SQ2 input
13	X-in	47	Keyboard input	80	Signal Sweeper Search Control output
14	VCC1	48	Keyboard input	81	SQ1 input
15	NC (Pull up)	49	Keyboard input	82	AM Narrow Filter Select output
16	NC (Pull down)	50	Keyboard input	83	3rd OSC Control B output
17	Hold input	51	Keyboard input	84	Mute output
18	Alert Tone output	52	Keyboard input	85	Select AM Audio output
19	LCD RS output	53	DSP Sleep output	86	3rd OSC Control A output
20	Beep Tone output	54	DSP Wake output	87	Signal Sweeper Scan Control output
21	LCD CSB output	55	Keyboard output	88	Tri-Color LED output
22	Beep Tone output	56	Keyboard output	89	Tri-Color LED output
23	LCD SI output	57	Keyboard output	90	Tri-Color LED output
24	LCD SCL output	58	Keyboard output	91	Tri-Color LED output
25	LCD Reset output	59	Keyboard output	92	Low Battery Voltage A/D input
26	LCD Back Light output	60	VCC2	93	Zeromatic Voltage A/D input
27	WX Same Data input	61	Keyboard output	94	AVSS
28	Key Back Light output	62	VSS	95	RSSI A/D input
29	PC/IF output	63	DSP-LD RX-DG input	96	V REF
30	PC/IF input	64	External On input	97	AVCC
31	NC (Pull down)	65	Battery Charge output	98	Pocket/Mobile Select input
32	NC	66	Hiss Reduction output	99	NC (Pull up)
33	PC/IF output	67	NBFM Audio + 6 dB output	100	EEPROM SCL output
34	PC/IF input				

SCHEMATIC DIAGRAM for 20-106 (Linear Section)



SCHEMATIC DIAGRAM for 20-106 (Logic Section)



- NOTES:
1. RESISTANCE VALUES ARE IN OHMS (K=1000 M=1000000).
 2. CAPACITANCE VALUES ARE IN uF (P=uF).
 3. (T)=TANTALUM CHIP CAPACITOR.
 4. (M)=MYLAR CAPACITOR.
 5. NO SUFFIX: CERAMIC CHIP CAPACITOR.
 6. THIS SYMBOL DENOTES THE DC VOLTAGE ON VHF HI BAND. (154.1000 MHz) WITH SQUELCH CONTROL SET TO CCW POSITION.
 7. ALL DC VOLTAGES ARE MEASURED WITH A 100KOHM/V DC VOLTMEETER. WITH VOLUME CONTROL SET TO MINIMUM.