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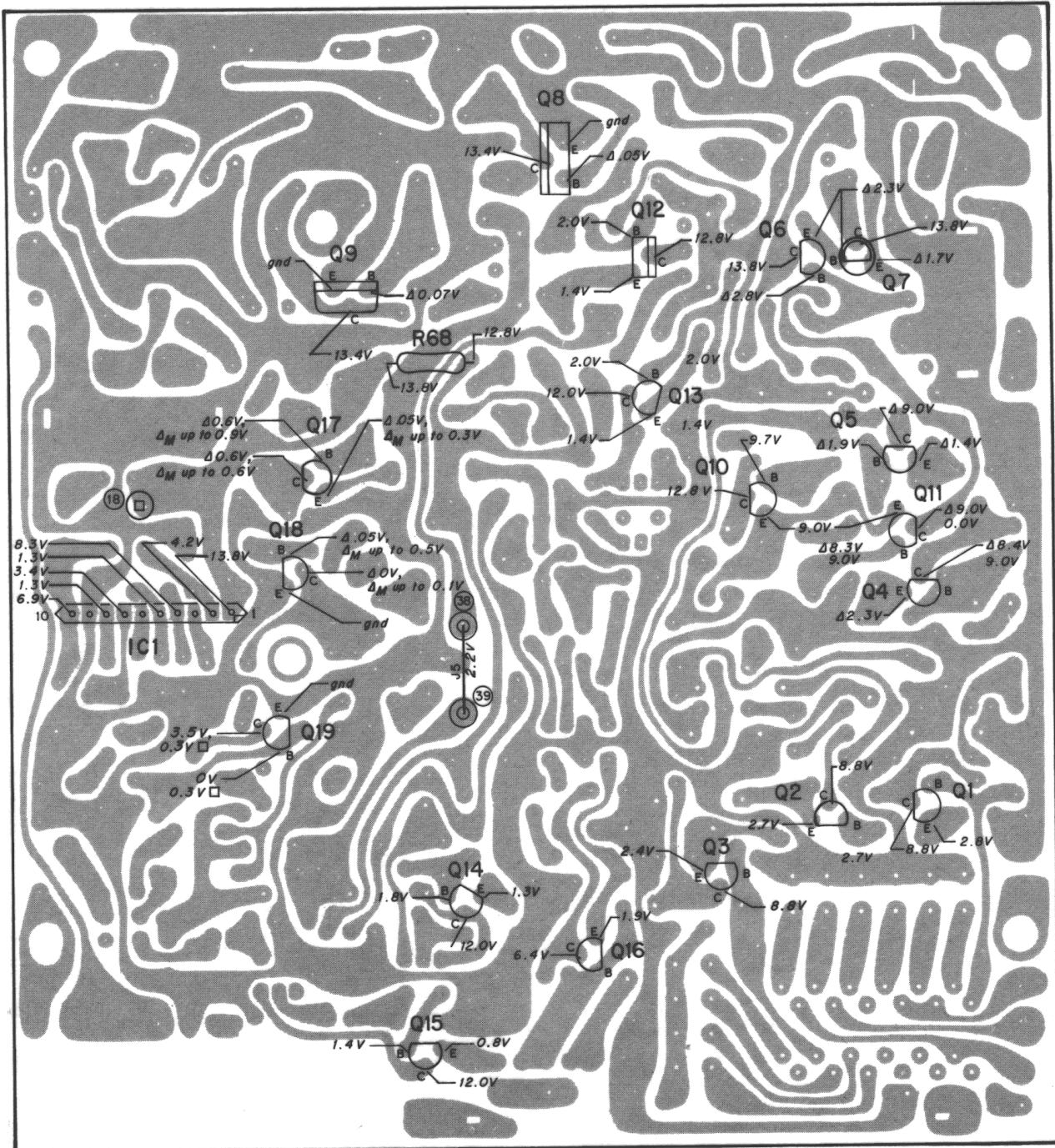
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NOTES:

1. P.C. board shown as viewed from foil side.
 2. All voltages are measured with a VTVM (11 mega-ohms/V) from a p.c. board ground and with the transceiver connected to an external power supply adjusted for +13.8 VDC.

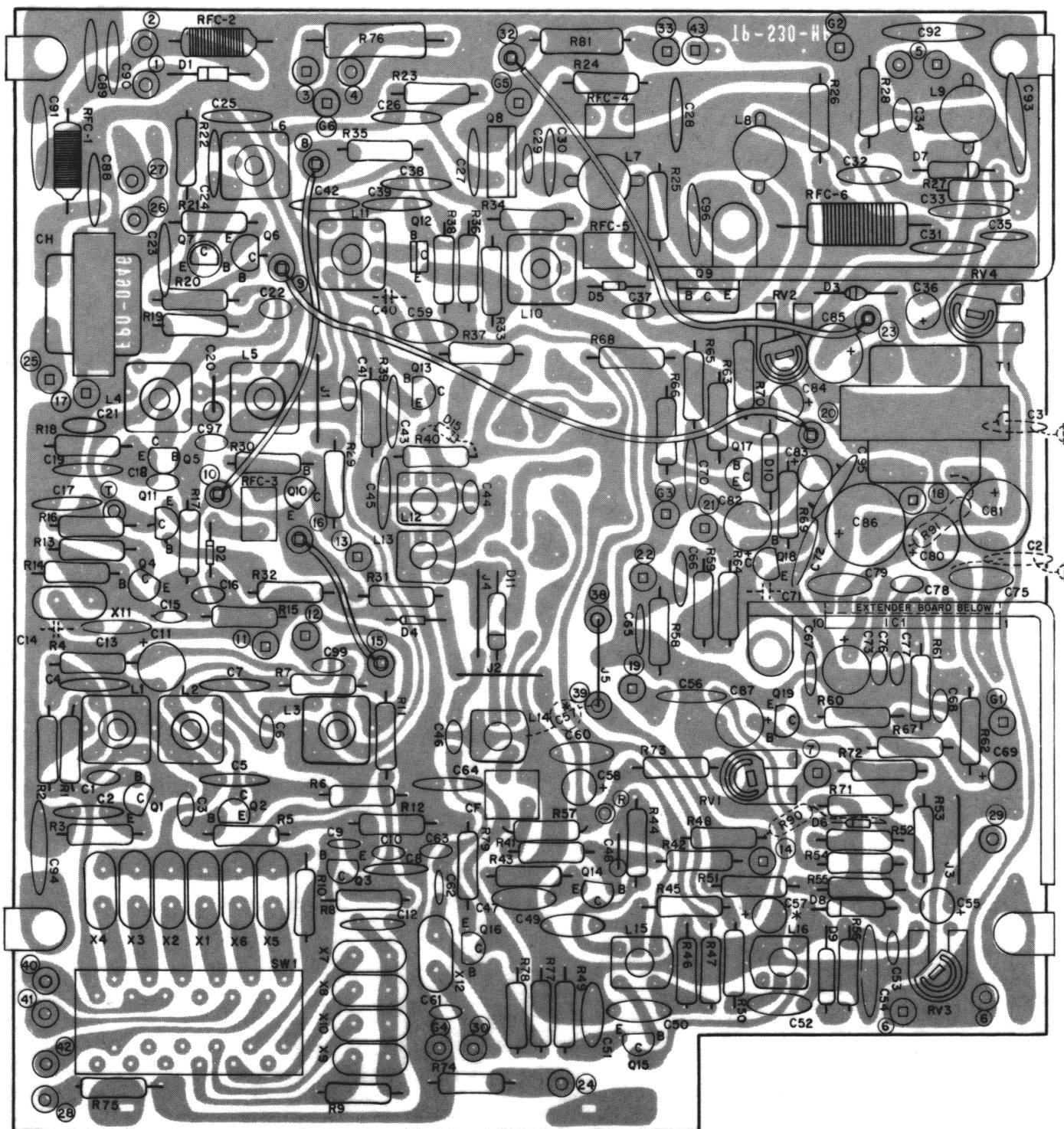
All readings are measured with the transceiver in the receive mode with no signal and unsquelched (except as noted). All are in VDC.

If measurements obtained exceed $\pm 20\%$ of the indicated values, the cause of the difference should be corrected.

 3. Symbols used:
 - \square — receive voltage, squelched
 - \triangle — transmit voltage, unmodulated
 - ΔM — transmit voltage, modulated (whistle)

**Figure 4-2. P.C. Board, Voltage Callouts,
Stages 1 & 2**

P.C. Board Drawings,
Stage 2

**NOTES:**

1. P.C. board shown as viewed from component side.
2. Dashed outline component — mounted on foil side.
Dashed schematic symbol — selectable component and/or value.
3. *C57 may be mounted either above or below the p.c. board.

**Figure 4-3. P.C. Board, Component Outline,
Stage 2**

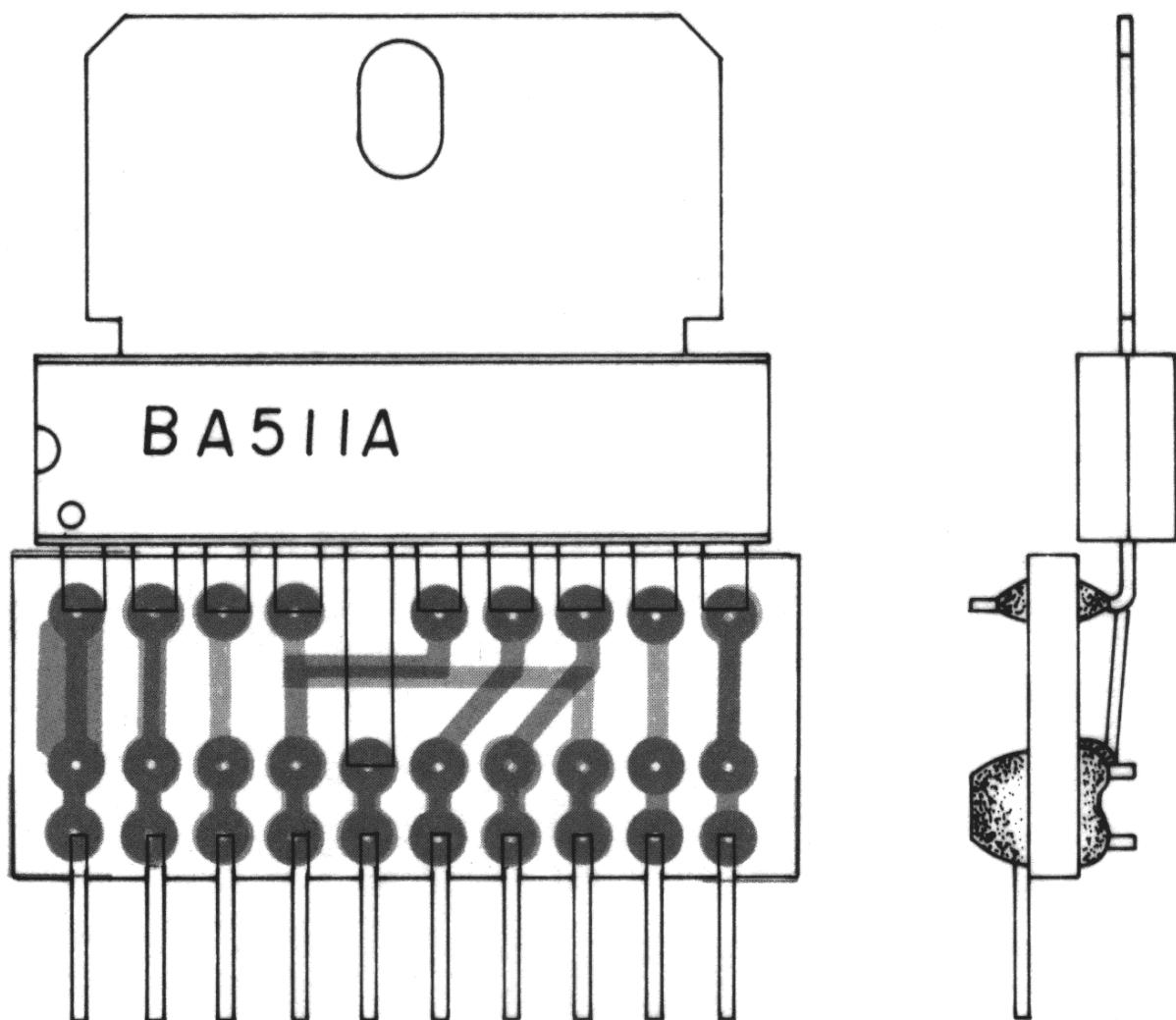
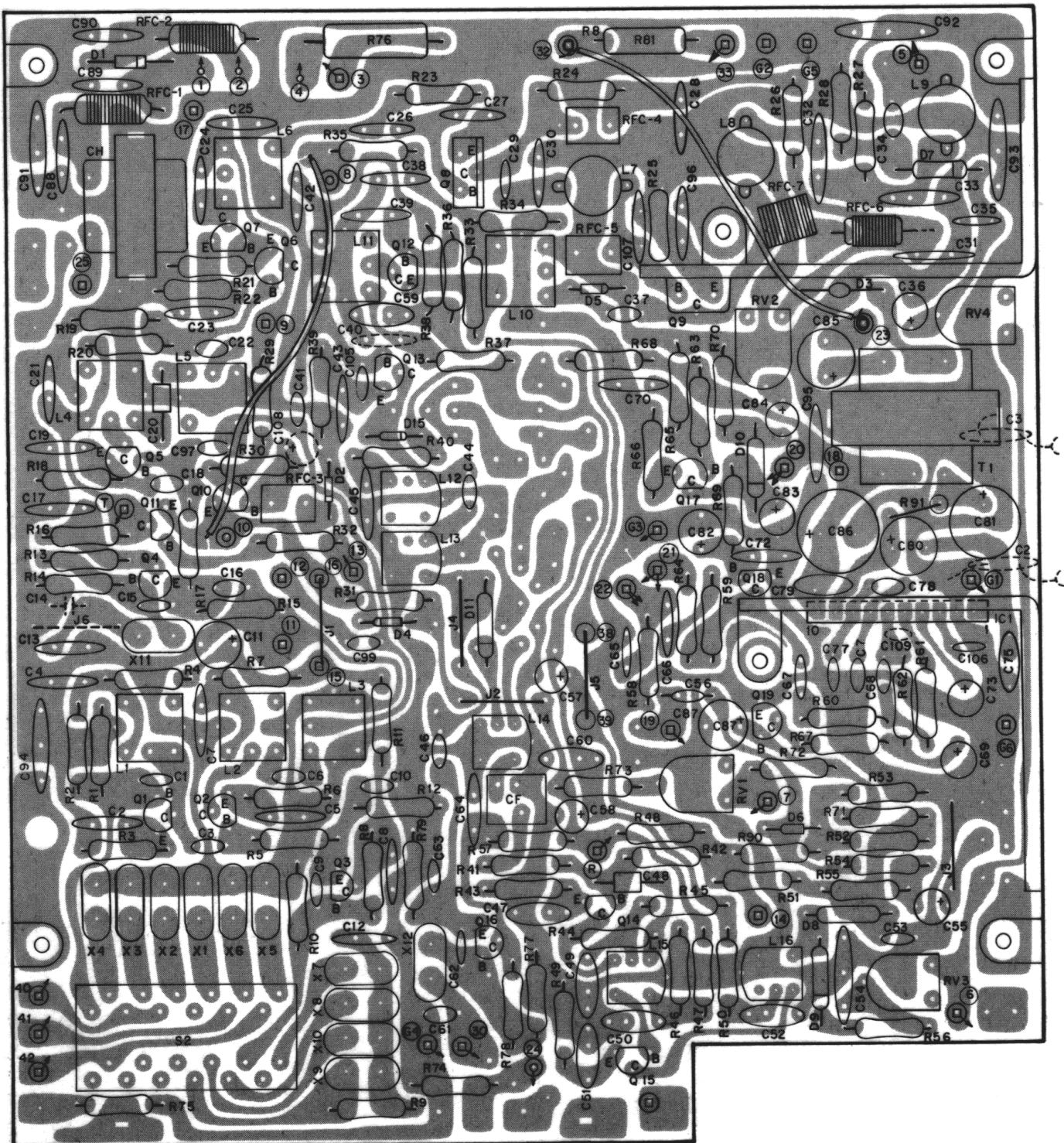
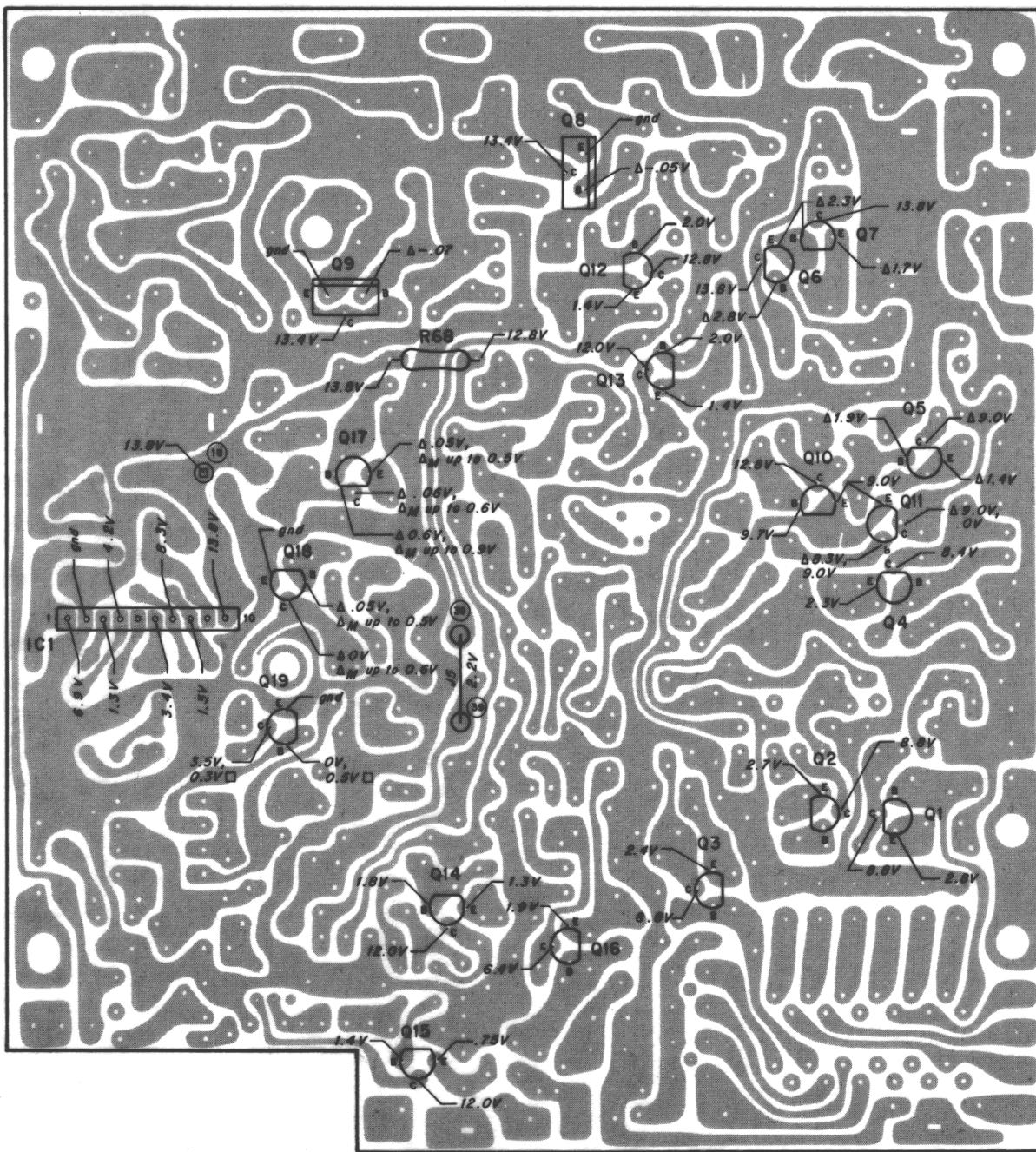


Figure 4-4. Audio IC Mounted on Extender P.C. Board

P.C. Board Drawings,
Stage 3





NOTES:

1. P.C. board shown as viewed from foil side.
2. All voltages are measured with a VTVM (11 mega-ohms/V) from a p.c. board ground and with the transceiver connected to an external power supply adjusted for +13.8 VDC.

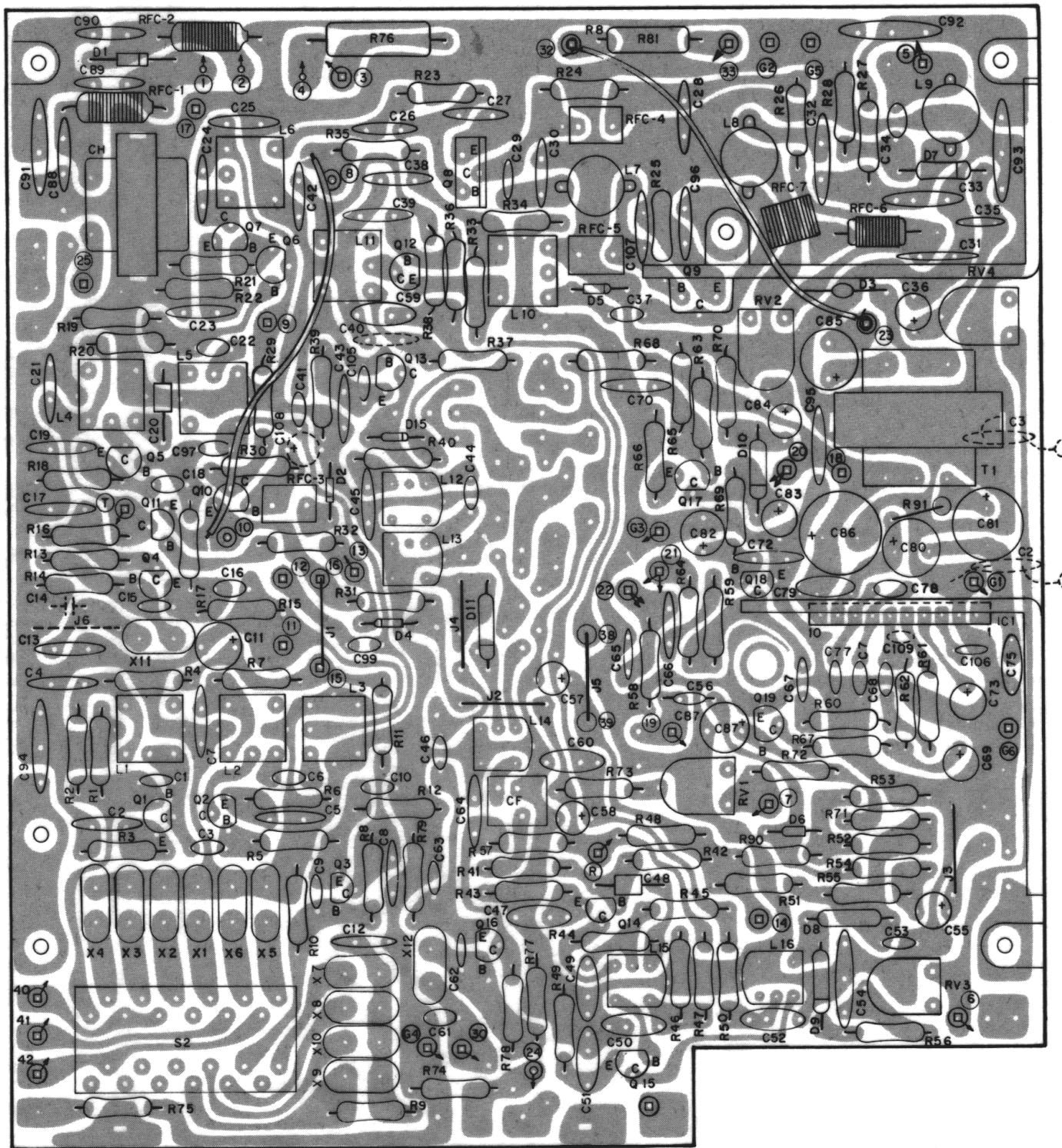
All readings are measured with the transceiver in the receiver mode with no signal and unsquelched (except as noted). All are in VDC.

If measurements obtained exceed $\pm 20\%$ of the indicated values, the cause of the difference should be corrected.

3. Symbols used:

- \square — receive voltage, squelched
- Δ — transmit voltage, unmodulated
- Δ_M — transmit voltage, modulated (whistle)

Figure 4-6. P.C. Board, Voltage Callouts,
Stages 3 & 4



Parts List

Main P.C. Board

- Stage 1
- Stage 2
- Stage 3
- Stage 4

Unmarked components are common to all four stages.

Reference Designator	Description	Part No.
	○ main p.c. board, complete	EPA-0646CB
	● main p.c. board, complete	EPA-0646C 2
	□ main p.c. board, complete	APTBMO26CA 1
	■ main p.c. board, complete	APTBMO26CA 2
	○ ● main p.c. board, plated and drilled	EPO-0646-01
	□ ■ main p.c. board, plated and drilled	EPO-0646C-01
C1	2 pF, 50 V, ceramic disc	DD340-65SL020C50
C2	220 pF, 50 V, ceramic disc	DD310-65SL221K50
C3	6 pF, 50 V, ceramic disc	DD340-65SL060D50
C4	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C5	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C6	1 pF, 50 V, ceramic disc	DD340-65SL010C50
C7	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C8	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C9	560 pF, 50 V, mylar	FW-561K50
C10	68 pF, 50 V, ceramic disc	DD350-65SL680K50
C11	33 uF, 16 V, electrolytic	ECE-A16V33LE
C12	220 pF, 50 V, ceramic disc	DD310-65SL221K50
C13	270 pF, 50 V, ceramic disc	DD310-65SL271K50
C14	(field selectable)	
C15	1000 pF, 50 V, mylar	FW-102K50
C16	68 pF, 50 V, ceramic disc	DD350-65SL680K50
C17	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C18	68 pF, 50 V, ceramic disc	DD350-65SL680K50
C19	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C20	1.5 pF, 500 V, ceramic disc	ECG-N51R5K
C21	.022 uF, 50 V, mylar	FW-223K50
C22	22 pF, 50 V, ceramic disc	DD340-65SL220K50
C23	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C24	82 pF, 50 V, ceramic disc	DD310-65PH820K50
C25	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C26	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C27	○ ● 330 pF, 50 V, ceramic disc	DD310-65SC-331K50
	□ ■ 390 pF, 50 V, ceramic disc	DD312-65SL391K50
C28	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C29	120 pF, 50 V, ceramic disc	DD360-65SL121K50
C30	220 pF, 50 V, ceramic disc	DD310-65SL221K50
C31	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C32	100 pF, 500 V, mica	FM09ZC101K5
C33	270 pF, 500 V, mica	FM13ZC271K5
C34	2 pF, 50 V, ceramic disc	DD340-65SL020C50
C35	.0047 uF, 50 V, ceramic disc	DD380-65E472P50
C36	1 uF, 50 V, electrolytic	ECE-A50V1LE
C37	27 pF, 50 V, ceramic disc	DD340-65SL270K50
C38	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C39	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C40	(factory selected)	
C41	12 pF, 50 V, ceramic disc	DD340-65SL120K50
C42	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C43	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C44	2 pF, 50 V, ceramic disc	DD340-65SL020C50
C45	.01 uF, 50 V, ceramic disc	DD310-65E103P50
C46	47 pF, 50 V, ceramic disc	DD340-65SL470K50
C47	.047 uF, 50 V, mylar	FW-473K50
C48	2.2 pF, 50 V, ceramic disc	ECG-N52R2K
C49	.047 uF, 50 V, mylar	FW-473K50
C50	.047 uF, 50 V, mylar	FW-473K50
C51	.047 uF, 50 V, mylar	FW-473K50
C52	.047 uF, 50 V, mylar	FW-473K50

Reference Designator	Description	Part No.
C53	.0047 μ F, 50 V, mylar	FW-472K50
C54	.022 μ F, 50 V, ceramic disc	DD314-66E223Z50
C55	1 μ F, 50 V, electrolytic	ECE-A50V1LE
C56	<input checked="" type="radio"/> <input checked="" type="checkbox"/> 2200 pF, 50 V, mylar	FW-222K50
	<input checked="" type="radio"/> <input checked="" type="checkbox"/> .047 μ F, 50 V, mylar	FW-473K50
C57	3.3 μ F, 25 V, electrolytic	ECE-A25V3R3LE
C58	10 μ F, 16 V, electrolytic	ECE-A16V1OLE
C59	.047 μ F, 50 V, mylar	FW-473K50
C60	.047 μ F, 50 V, mylar	FW-473K50
C61	27 pF, 50 V, ceramic disc	DD350-65PH270K50
C62	560 pF, 50 V, mylar	FW-561K50
C63	68 pF, 50 V, ceramic disc	DD350-65SL680K50
C64	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C65	2200 pF, 50 V, ceramic disc	DD360-65B222K50
C66	.022 μ F, 50 V, mylar	FW-223K50
C67	.01 μ F, 50 V, mylar	FW-103K50
C68	2200 pF, 50 V, ceramic disc	DD350-65E222P50
C69	<input checked="" type="radio"/> 3.9 μ F, 25 V, tantalum	ECS-Z25EF3R9Q
	<input checked="" type="radio"/> <input checked="" type="checkbox"/> 5.6 μ F, 25 V, tantalum	ECS-Z25EF5R6Q
C70	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C71	(factory selected)	
C72	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C73	33 μ F, 6.3 V, electrolytic	ECE-A6V33LE
C74	<input checked="" type="radio"/> 100 pF, 50 V, ceramic disc	DD360-65SL101K50
	<input checked="" type="radio"/> <input checked="" type="checkbox"/> (not used)	
C75	.068 μ F, 50 V, mylar	FW-683K50
C76	68 pF, 50 V, ceramic disc	DD350-65SL680K50
C77	68 pF, 50 V, ceramic disc	DD350-65SL680K50
C78	<input checked="" type="radio"/> 100 pF, 50 V, ceramic disc	DD360-65SL101K50
	<input checked="" type="radio"/> <input checked="" type="checkbox"/> 390 pF, 50 V, ceramics disc	DD350-65B391K50
C79	.068 μ F, 50 V, mylar	FW-683K50
C80	47 μ F, 16 V, electrolytic	ECE-A16V47LE
C81	220 μ F, 20%, 10 V, electrolytic	ECE-A10Z220E
C82	33 μ F, 6.3 V, electrolytic	ECE-A6V33LE
C83	10 μ F, 16 V, electrolytic	ECE-A16V1OLE
C84	1 μ F, 50 V, electrolytic	ECE-A50V1LE
C85	47 μ F, 20%, 16 V, electrolytic	ECE-A16Z47
C86	1000 μ F, 16 V, electrolytic	ECE-A16V1000W
C87	33 μ F, 6.3 V, electrolytic	ECE-A6V33LE
C88	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C89	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C90	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C91	.047 μ F, 50 V, ceramic disc	DD314-66F473Z50
C92	.047 μ F, 50 V, ceramic disc	DD314-66F473Z50
C93	.047 μ F, 50 V, ceramic disc	DD314-66F473Z50
C94	.047 μ F, 50 V, ceramic disc	DD314-66F473Z50
C95	.047 μ F, 50 V, ceramic disc	DD314F473Z50V02
C96	.01 μ F, 50 V, ceramic disc	DD310-65E103P50
C97	22 pF, 50 V, ceramic disc	DD340-65SL220K50
C98	33 μ F, 16 V, electrolytic	ECE-A16V33LE
C99	47 pF, 50 V, ceramic disc	DD340-65SL470K50
C100 through		
C104	(not used)	
C105	<input checked="" type="radio"/> (not used)	
	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 39 pF, 50 V, ceramic disc	DD340-65SL390K50
C106	<input checked="" type="radio"/> (not used)	
	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> .01 μ F, 50 V, mylar	FW-103K50
C107	<input checked="" type="radio"/> (not used)	
	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 100 pF, 50 V, ceramic disc	DD360-65SL101K50
C108	<input checked="" type="radio"/> (not used)	
	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 10 μ F, 16 V, electrolytic	ECE-A16V1OLE
C109	<input checked="" type="radio"/> (not used)	
	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 390 pF, 50 V, ceramic disc	DD350-65B391K50
C110	<input checked="" type="radio"/> (not used)	
	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> .01 μ F, 50 V, ceramic disc	DD310-65E103P50
CF	ceramic filter	EFC-0040
CH	0.125 μ H, audio choke coil	ELA-0016
D1	10D1, silicon	EDS-0002
	SR1K-4, silicon	EDS-0024
	1S1885, silicon	QD-SS1885XT
	(these three diodes are fully interchangeable)	

Reference Designator	Description	Part No.
D2	RD9.1 E, silicon, zener	EDZ-0045
D3	V06C, silicon	EDS-0004
D4	1S1555, silicon	EDS-0001
D5	1S1555, silicon	EDS-0001
D6	1S1555, silicon	EDS-0001
D7	1N60, germanium	EDG-0003
D8	1N60, germanium	EDG-0003
D9	1N60, germanium	EDG-0003
D10	1N60, germanium	EDG-0003
D11	1N60, germanium	EDG-0003
D12	(not used)	
D13	(not used)	
D14	(not used)	
D15	1S1555, silicon	EDS-0001
IC1	<input type="radio"/> (TOSHIBA) TA7205P	EICM-0060
	<input checked="" type="radio"/> (TOYO) BA511A (has straight leads)	QQ-MBA511AX
	or (TOYO) BA511A mounted on extender p.c. board	AZQQ001GEA
	<input type="checkbox"/> (TOYO) BA511A (has formed leads)	QQ-MBA511BX
	<input type="checkbox"/> (TOYO) BA521	QQ-MBA521AX
L1	rf coil	ETR-0336
L2	rf coil	ETR-0337
L3	rf coil	ETR-0338
L4	rf coil	ETR-0339
L5	rf coil	ETR-0340
L6	rf coil	ETR-0341
L7	rf coil	ETR-0342
L8	rf coil	ETR-0343
L9	rf coil	ETR-0344
L10	rf coil	ETR-0333
L11	rf coil	ETR-0334
L12	rf coil	ETR-0335
L13	rf coil	ETR-0335
L14	i-f coil	ETI-0122
L15	i-f coil	ETI-0123
L16	i-f coil	ETI-0129
Q1	(NEC) 2SC839(H)	EQS-0100
Q2	(MITSUBISHI) 2SC710(C)	EQS-0195
Q3	(NEC) 2SC839(H)	EQS-0100
Q4	(NEC) 2SC839(H)	EQS-0100
Q5	(MITSUBISHI) 2SC710(C)	EQS-0195
Q6	(MITSUBISHI) 2SC710(C)	EQS-0195
Q7	(TOSHIBA) 2SC735(O)	EQS-0192
Q8	(SONY) 2SC1760-3	EQS-0184
Q9	(NEC) 2SC1306	EQS-0160
Q10	(MATSUSHITA) 2SC1318(Q)	EQS-0165
Q11	(MATSUSHITA) 2SA719(Q)	EQR-0038
Q12	(HITACHI) 2SC460(A)	EQS-0018
Q13	(MITSUBISHI) 2SC710(C)	EQS-0195
Q14	(MITSUBISHI) 2SC710(C)	EQS-0195
Q15	(MITSUBISHI) 2SC710(C)	EQS-0195
Q16	(NEC) 2SC839(H)	EQS-0100
Q17	(NEC) 2SC945(B)	EQS-0061
Q18	(NEC) 2SC945(R)	EQS-0061
Q19	(NEC) 2SC945(R)	EQS-0061
R1	3.9 k, 5%, 1/4 w, carbon film	FCR14-A392
R2	12 k, 5%, 1/4 w, carbon film	FCR14-A123
R3	330, 5%, 1/4 w, carbon film	FCR14-A331
R4	47, 5%, 1/4 w, carbon film	FCR14-A470
R5	1 k, 5%, 1/4 w, carbon film	FCR14-A102
R6	680, 5%, 1/4 w, carbon film	FCR14-A681
R7	47, 5%, 1/4 w, carbon film	FCR14-A470
R8	6.8 k, 5%, 1/4 w, carbon film	FCR14-A682
R9	5.6 k, 5%, 1/4 w, carbon film	FCR14-A562
R10	3.3 k, 5%, 1/4 w, carbon film	FCR14-A332
R11	47, 5%, 1/4 w, carbon film	FCR14-A470
R12	470, 5%, 1/4 w, carbon film	FCR14-A471
R13	6.8 k, 5%, 1/4 w, carbon film	FCR14-A682
R14	3.3 k, 5%, 1/4 w, carbon film	FCR14-A332
R15	470, 5%, 1/4 w, carbon film	FCR14-A471
R16	100, 5%, 1/4 w, carbon film	FCR14-A101
R17	3.9 k, 5%, 1/4 w, carbon film	FCR14-A392

Reference Designator	Description	Part No.
R18	270, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A271
R19	2.7 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A272
R20	5.6 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A562
R21	220, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A221
R22	68, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A680
R23	100, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A101
R24	220, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A221
R25	47, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A470
R26	10, 5%, $\frac{1}{2}$ w, metal oxide	ERX-12ANJ100
R27	47 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A473
R28	1 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A102
R29	22, 5%, $\frac{1}{2}$ w, metal oxide	ERG-12ANJ220
R30	1 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A102
R31	390, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A391
R32	3.3 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A332
R33	330, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A331
R34	1 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A102
R35	33 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A333
R36	680, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A681
R37	220, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A221
R38	1.8 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A182
R39	560, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A561
R40	470, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A471
R41	1 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A102
R42	4.7 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A472
R43	470, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A471
R44	<input type="radio"/> ● 33 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 47 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 470, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A333 .FCR14-A473 .FCR14-A471
R45	<input type="radio"/> ● 4.7 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 3.3 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A472 .FCR14-A332
R46	<input type="checkbox"/> ■ 12 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 22 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A123 .FCR14-A223
R47	<input type="radio"/> ● 330, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 220, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A331 .FCR14-A221
R48	<input type="radio"/> ● 470, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 47, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A471 .FCR14-A470
R49	<input type="checkbox"/> ■ 22 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 47 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A223 .FCR14-A473
R50	<input type="radio"/> ● 33 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 220, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A333 .FCR14-A221
R51	22 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A223
R52	47 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A473
R53	68 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A683
R54	47 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A473
R55	33 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A333
R56	820, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A821
R57	100, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A101
R58	<input type="radio"/> ● 5.6 k, 5%, $\frac{1}{4}$ w, carbon film <input type="radio"/> ● <input type="checkbox"/> ■ 3.3 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A562 .FCR14-A332
R59	3.3 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A332
R60	2.2 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A222
R61	820, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A821
R62	<input type="radio"/> ● 47, 5%, $\frac{1}{4}$ w, carbon film <input type="radio"/> ● <input type="checkbox"/> ■ 4.7, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A470 .FCR14-A4R2
R63	<input type="checkbox"/> ■ 10, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 220 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A100 .FCR14-A224
R64	27 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A273
R65	22 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A223
R66	150, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A151
R67	10 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A103
R68	82, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A820
R69	270, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A271
R70	680, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A681
R71	22 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A223
R72	1.8 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A182
R73	<input type="radio"/> ● 12 k, 5%, $\frac{1}{4}$ w, carbon film <input type="checkbox"/> ■ 15 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A123 .FCR14-A153
R74	<input type="radio"/> ● 270, 5%, $\frac{1}{2}$ w, metal oxide <input type="checkbox"/> ■ 150, 5%, 1 w, metal oxide	ERG-12ANJ271 ERG-1ANJ151
R75	270, 5%, $\frac{1}{2}$ w, metal oxide	ERG-12ANJ271
R76	15, 5%, 2 w, metal oxide	ERX-2ANJ150
R77	3.3 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A332
R78	5.6 k, 5%, $\frac{1}{4}$ w, carbon film . . . . .	.FCR14-A562
R79	560, 5%, $\frac{1}{4}$ w, carbon film (not used)	.FCR14-A561
R80	150, 5%, 1 w, metal oxide	ERG-1ANJ151
R81	150, 5%, $\frac{1}{4}$ w, metal oxide	ERG-1ANJ151

Reference Designator	Description	Part-No.
R82 through		
R89	(not used)	
R90	○ ● 390 K, 5%, 1/4 w, carbon film	FCR14-A394
	390 K, 5%, 1/4 w, solid carbon (on some early units)	ERC-14GK394
	□ ■ 270, 5%, 1/4 w, carbon film	FCR14-A274
R91	○ (not used)	
	● □ ■ 100, 5%, 1/4 w, solid carbon	ERD-14VJ101
RFC1	0.75 uH, rf choke coil	ELR-0011
RFC2	0.75 uH, rf choke coil	ELR-0011
RFC3	68 uH, rf choke coil	ELR-0125
RFC4	○ ● 15 uH, rf choke coil	ELR-0126
	□ ■ 2.2 uH, rf choke coil	ELR-0128
RFC5	68 uH, rf choke coil	ELR-0125
RFC6	rf choke coil	ELR-0127
RFC7	○ ● (not used)	
	□ ■ 0.55 uH, rf choke coil	LA1KE1011A
RV1	10 k, potentiometer	ERP-0041
RV2	2 k, potentiometer	ERP-0047
RV3	20 k, potentiometer	ERP-0022
RV4	20 k, potentiometer	ERP-0022
S2	rotary wafer switch	ESR-0171
T1	○ audio transformer	ETA-0066
	● □ ■ audio transformer	TB-G25B004W
X1	23.290 MHz crystal	EXT-002S023290
X2	23.340 MHz crystal	EXT-002S023340
X3	23.390 MHz crystal	EXT-002S023390
X4	23.440 MHz crystal	EXT-002S023440
X5	23.490 MHz crystal	EXT-002S023490
X6	23.540 MHz crystal	EXT-002S023540
X7	14.950 MHz crystal	EXT-002S014950
X8	14.960 MHz crystal	EXT-002S014960
X9	14.970 MHz crystal	EXT-002S014970
X10	14.990 MHz crystal	EXT-002S014990
X11	11.275 MHz crystal	EXT-002Z011275
X12	11.730 MHz crystal	EXT-002Z011730

Chassis-Mounted Components

Reference Designator	Description	Part No.
C1	.220 pF, 50 V, mica	FM11ZC221K5
C2	.01 uF, 50 V, ceramic disc	DD310E103P50
C3	.01 uF, 50 V, ceramic disc	DD310E103P50
C4	.01 uF, 50 V, ceramic disc	DD310E103P50
J1	SO-239 UHF jack	EZS-0066
J2	5-pin, DIN microphone jack	EZS-0084
J3	3.5 mm, phone jack	EZS-0056
J4	1/4" dia., 3-conductor phone jack	EZS-0126
M	meter	EMM-0046
PL1	pilot lamp	EZP-0024E
PL2	pilot lamp	EZP-0024E
R1	8.2, 5%, 1/4 w, carbon film	ERD-14TJ8R2
S1	on/off power switch (part of volume control)	ERV-0176
S2	(see main p.c. board)	
SP	8 ohm, 77mm, speaker	EAS-0029
VR1	50 k, potentiometer (volume control w/power switch)	ERV-0176
VR2	10 k, potentiometer (squench)	ERV-0177
	2 A, 30 mm, fuse	EZF-0005
	heat sink (A) - for IC1	MC092P007
	heat sink (B) - for Q8	MC092P008

Mechanical Parts

Part No.	Description	Qty.
MC045A001	front panel, plastic	1
MC088P001	chassis, main frame	1
MC088P002	chassis, front frame	1
MC088P003	case (upper)	1
MC088P004	case (lower)	1
MC045P005	channel selector dial plate	1
MC046P010	bracket, meter	1
MWO-0345	lamp holder	2
MTO-0003	knob, channel selector	1
MTO-0004	knob, squelch and volume	2
MYO-142	bracket, speaker	3
EZS-0001	fuse holder	1
ENO-0090	power cord set	1
EZZ-0025	bushing, power cord	1

Accessory Parts

Part No.	Description	Qty.
MC046P006	mounting bracket	1
MMO-0108A	handscrew	2
MYO-0025	microphone holder	1
STPT50132SN	self-tapping screw, M5 x 13	4
ZTS050000SX	outside tooth washer, M5	4
STN40102SN	self-tapping screw, M4 x 10	2
ZTU040000SX	outside tooth washer, M4	2
EAM-0032	microphone	1

Schematic Diagrams

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