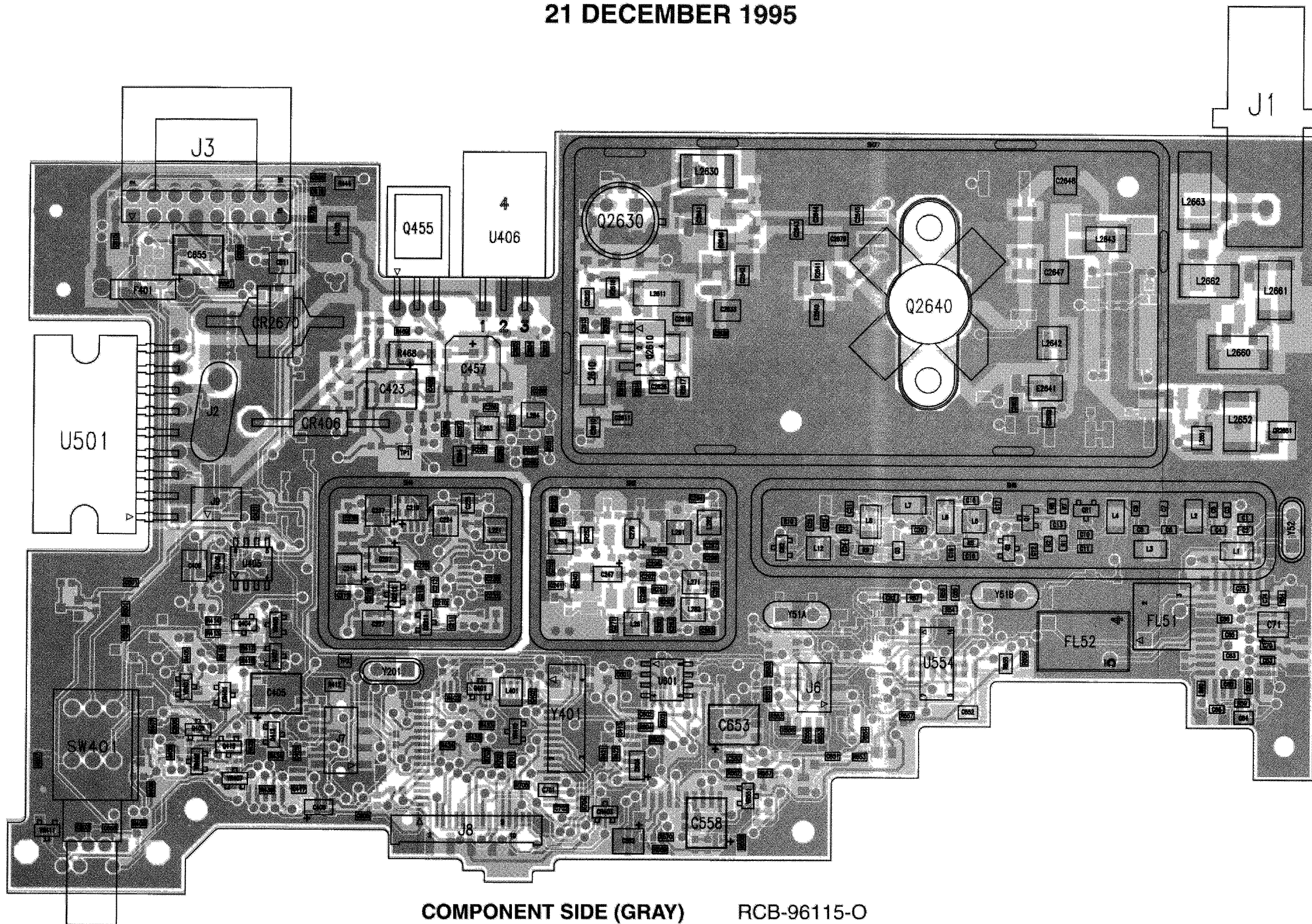


MOTOROLA P/N 8404787J01 REV O

21 DECEMBER 1995

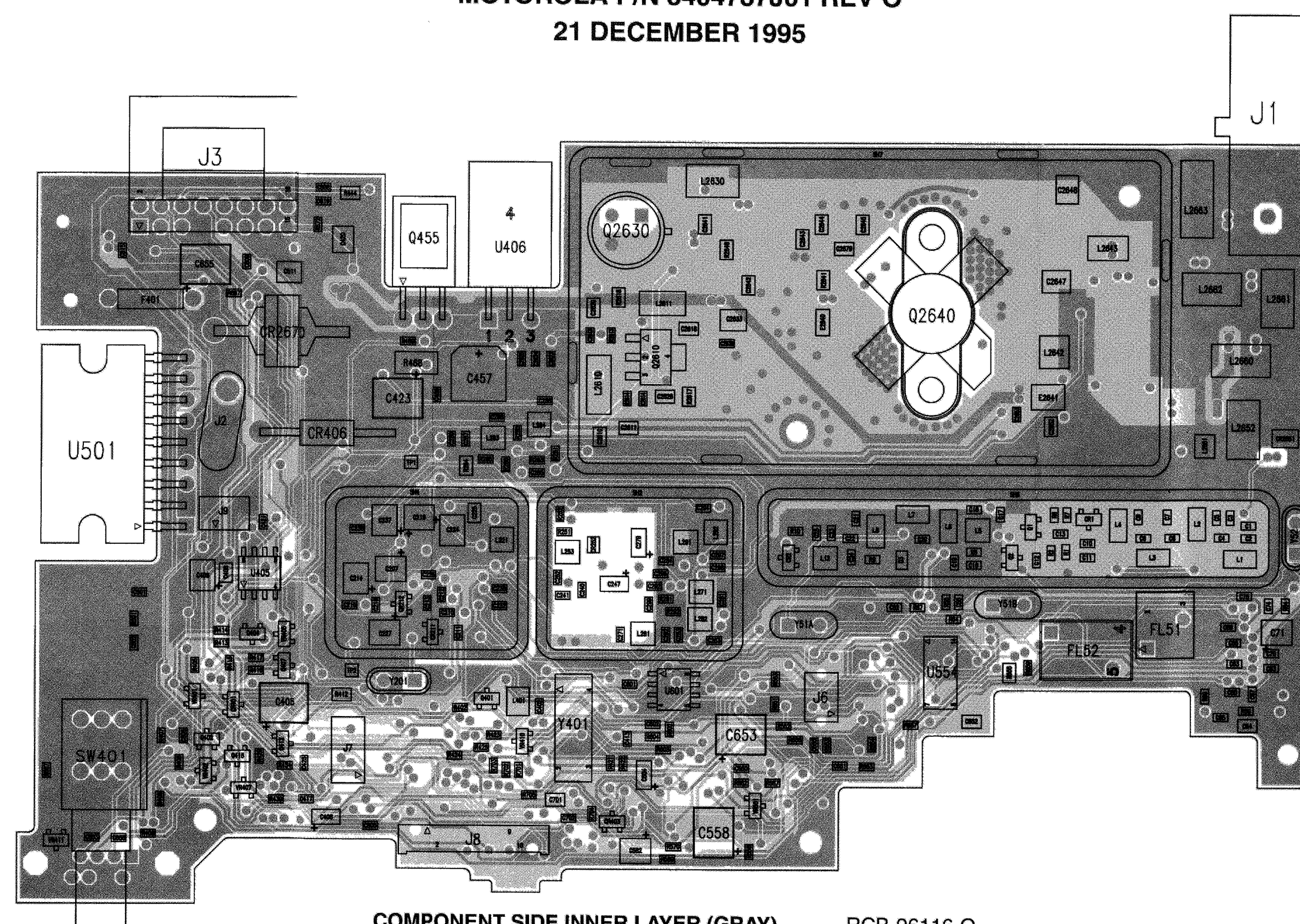


COMPONENT SIDE (GRAY) RCB-96115-O
SOLDER SIDE (PINK) RCB-96118-O
OVERLAY ----- RCB-96119-O

COMPONENT SIDE VIEW

MOTOROLA P/N 8404787J01 REV O

21 DECEMBER 1995



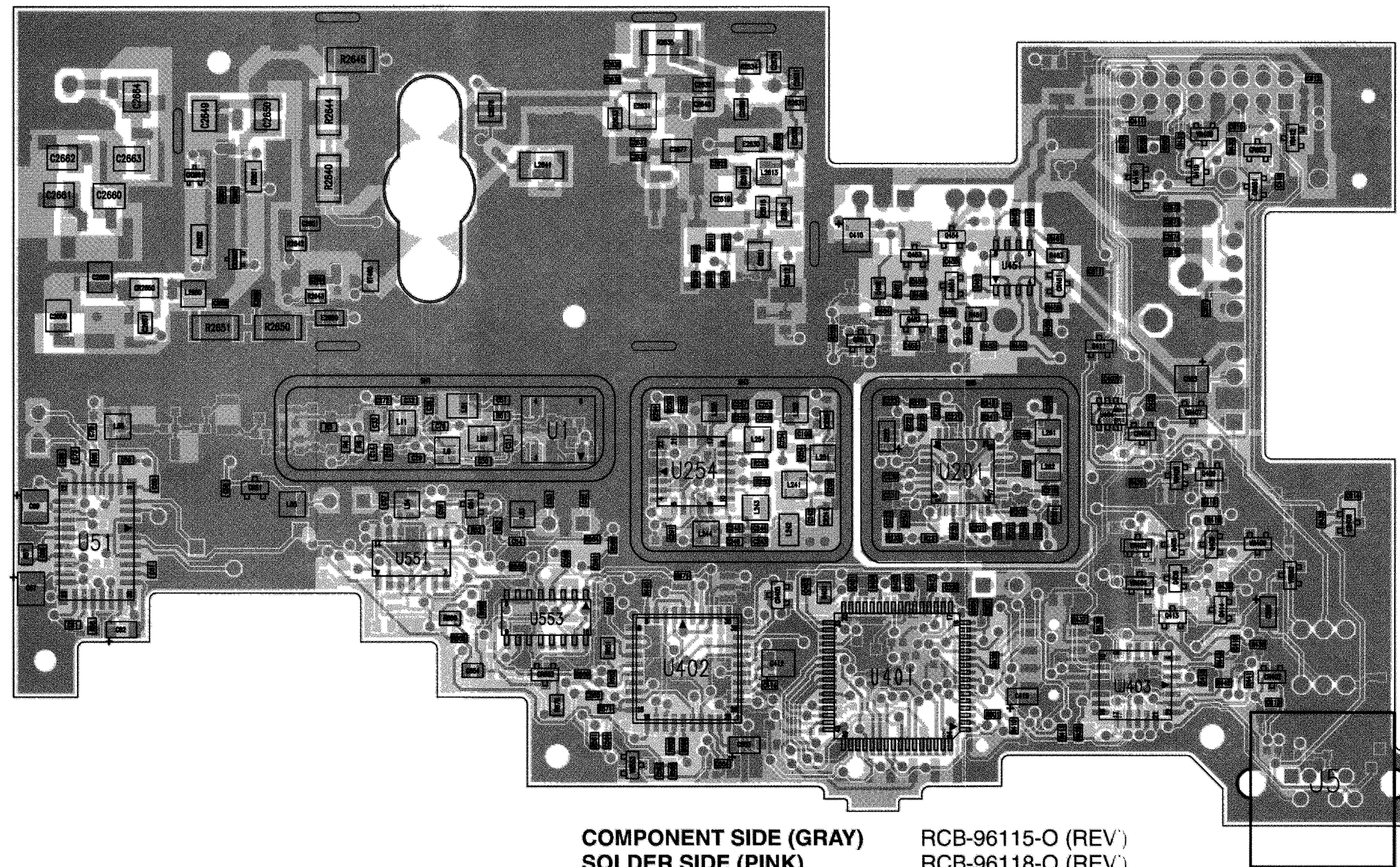
COMPONENT SIDE INNER LAYER (GRAY) RCB-96116-O
SOLDER SIDE INNER LAYER (PINK) RCB-96117-O
OVERLAY ----- RCB-96119-O

COMPONENT SIDE VIEW

Circuit Board Details for
VHF Main Boards, 136-156 MHz, 12.5 & 20/25/30 kHz, 10-25 W
(Part of PMUD1024A, PMUD1042A, PMUD1025A, PMUD1043A Radios)

MOTOROLA P/N 8404787J01 REV O

21 DECEMBER 1995

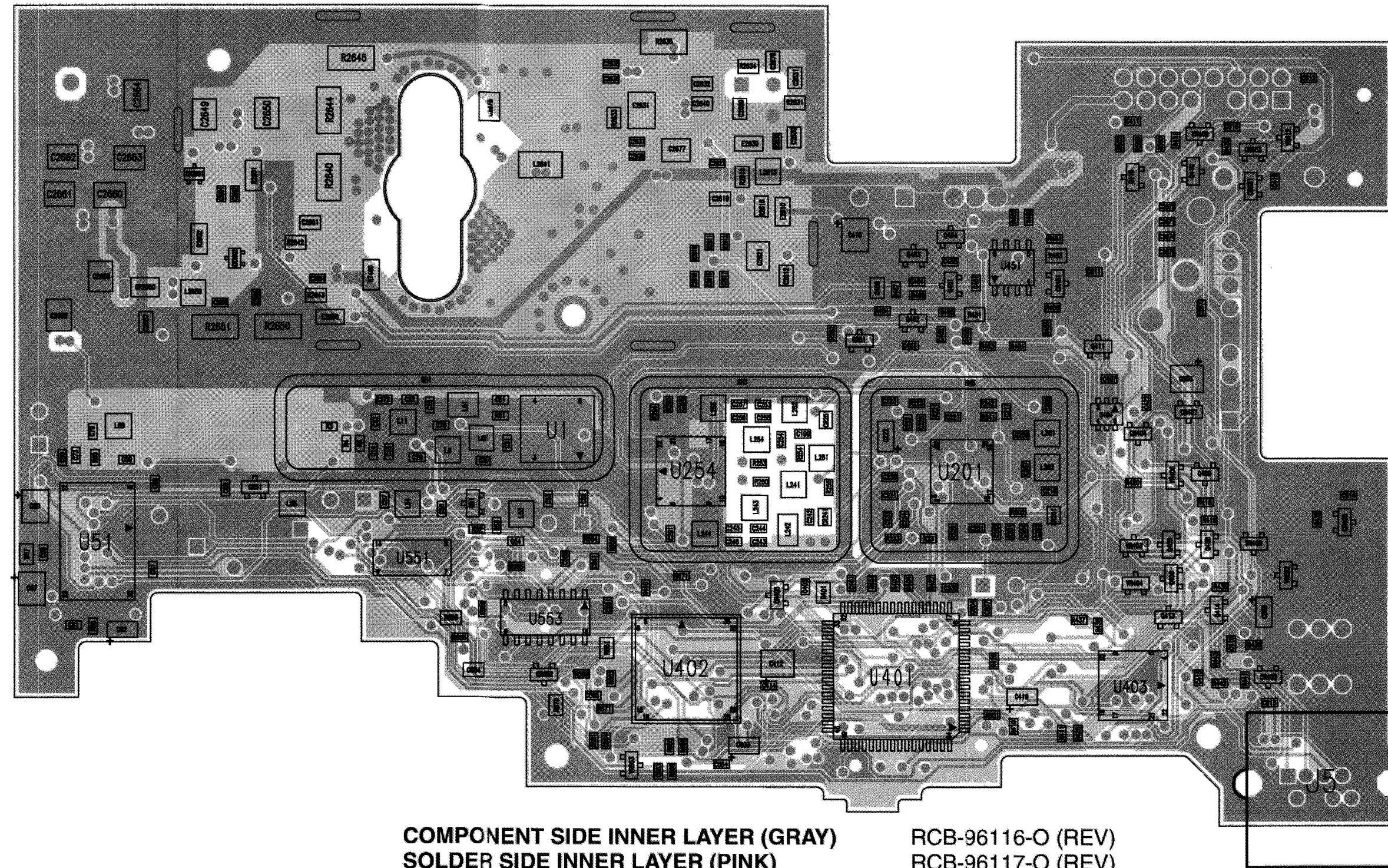


COMPONENT SIDE (GRAY) RCB-96115-O (REV)
SOLDER SIDE (PINK) RCB-96118-O (REV)
OVERLAY ----- RCB-96120-O

SOLDER SIDE VIEW

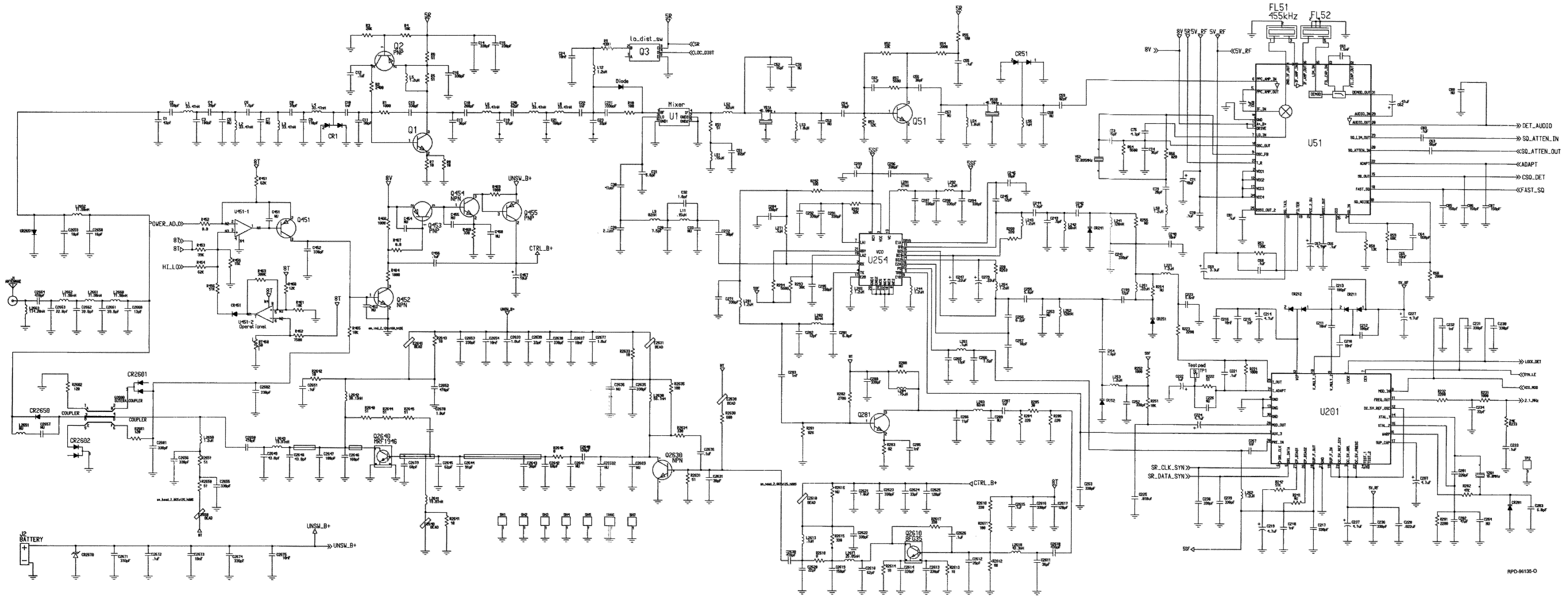
MOTOROLA P/N 8404787J01 REV O

21 DECEMBER 1995



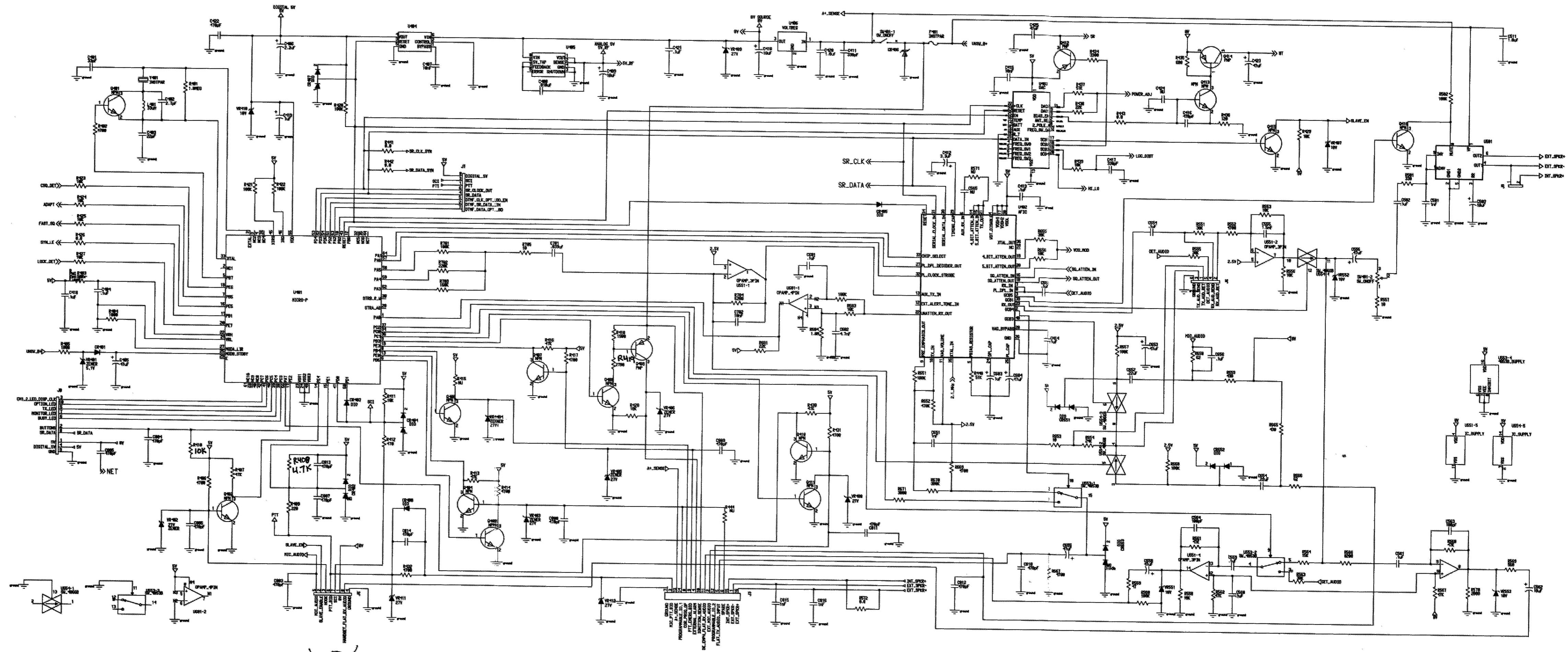
COMPONENT SIDE INNER LAYER (GRAY) RCB-96116-O (REV)
SOLDER SIDE INNER LAYER (PINK) RCB-96117-O (REV)
OVERLAY ----- RCB-96120-O

SOLDER SIDE VIEW



RPD-96135-0

Schematic Diagram for
 VHF Main Boards, 136-156 MHz, 12.5 & 20/25/30 kHz, 10-25 W
 (Part of PMUD1024A, PMUD1042A, PMUD1025A, PMUD1043A Radios)
 (Sheet 1 of 2)



Schematic Diagram for
 VHF Main Boards, 136-156 MHz, 12.5 & 20/25/30 kHz, 10-25 W
 (Part of PMUD1024A, PMUD1042A, PMUD1025A, PMUD1043A Radios)
 (Sheet 2 of 2)

MIC

ACCESSORY

Parts List

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 12.5 kHz (N)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
SM50/SM120 VHF Main Board, 136-156 MHz, 10-25 W, 20/25/30 kHz (W)
(used in PMUD1025 and PMUD1143) PL-961020-A

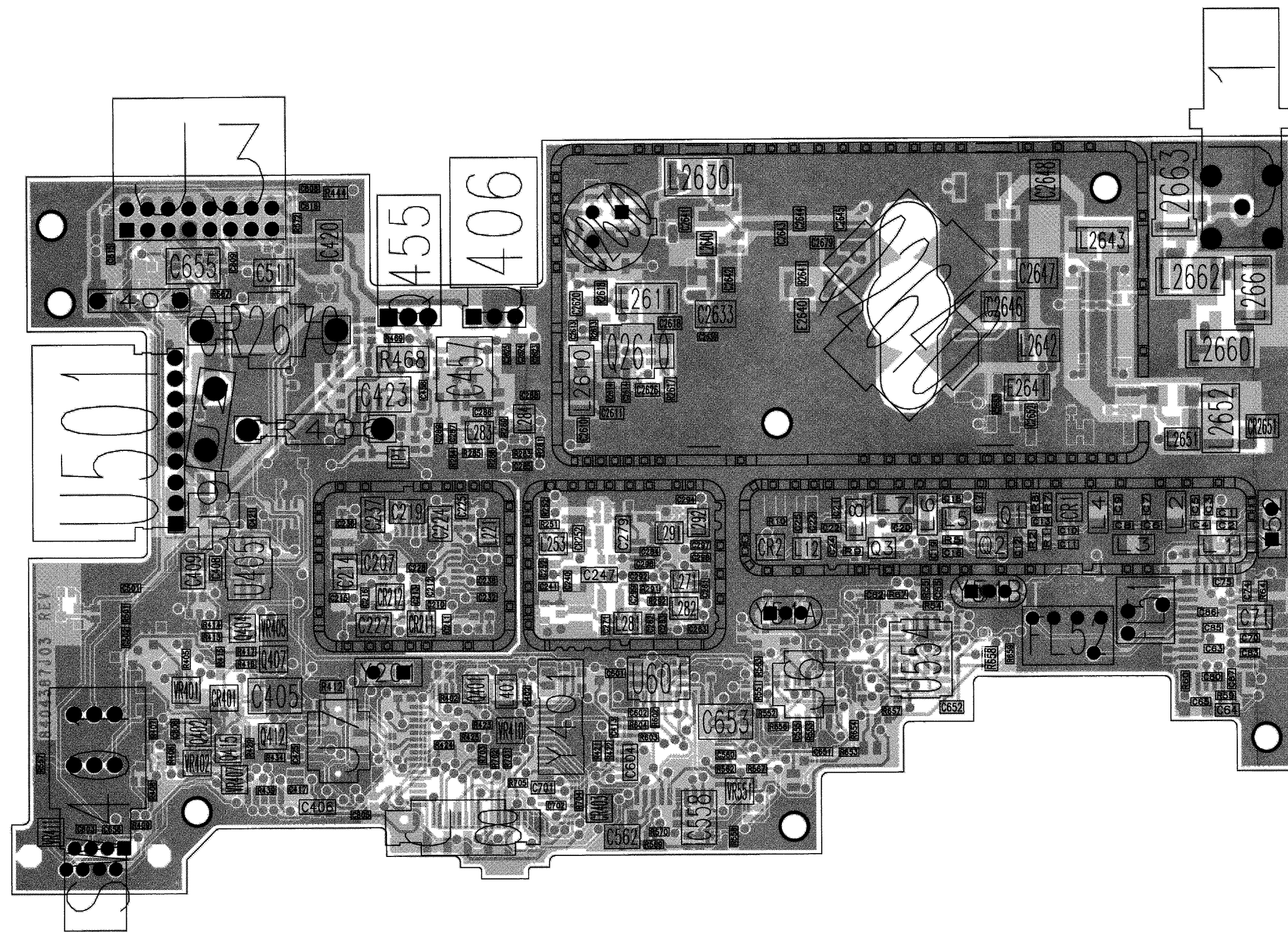
Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

note: For optimum performance, diodes, transistors, and integrated circuits must be ordered by Motorola part numbers.

Designators marked with an (*) denote parts which are not field serviceable. Recalibration of the radio using specialized factory equipment is mandatory when these components are replaced in order to guarantee the specified frequency stability of the radio at temperature extremes.

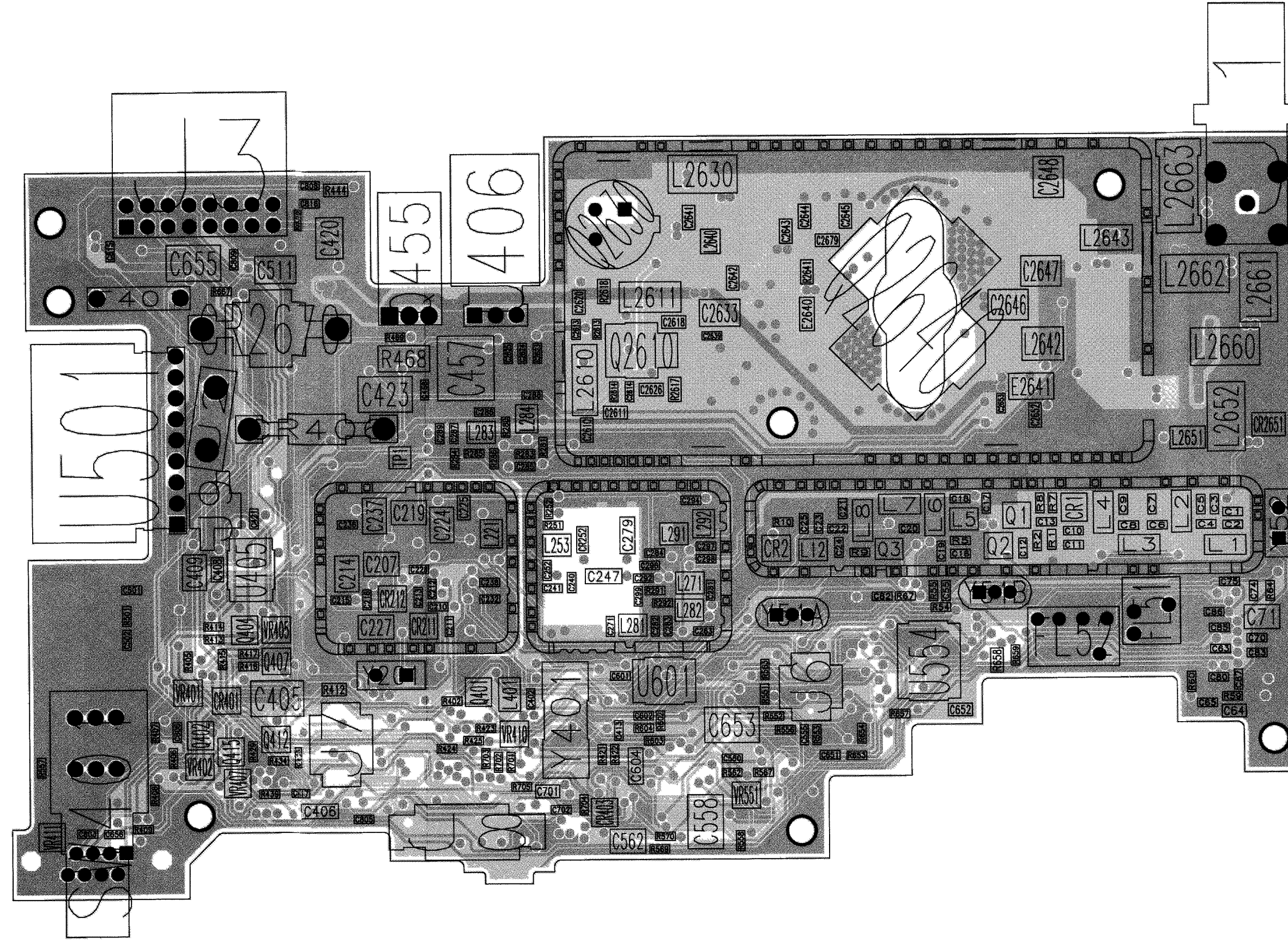
VHF Main Boards, 136-156 MHz, 12.5 & 20/25/30 kHz, 10-25 W
(Part of PMUD1024A, PMUD1042A, PMUD1025A, PMUD1043A Radios)

Parts List for



COMPONENT SIDE (GRAY) RCB-95108-O
 SOLDER SIDE (PINK) RCB-95111-O
 OVERLAY ----- RCB-95112-O

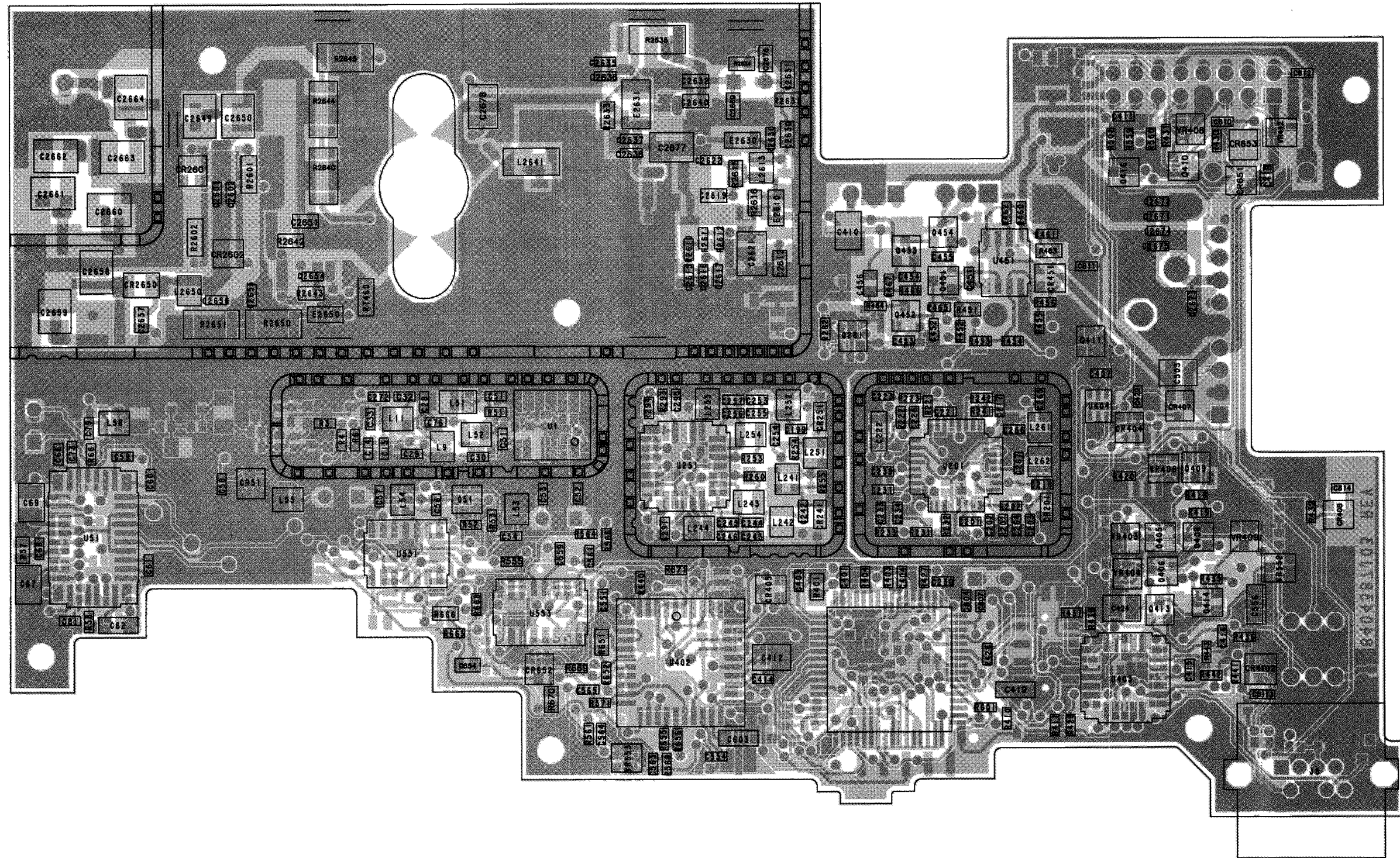
COMPONENT SIDE VIEW



COMPONENT SIDE INNER LAYER (GRAY) RCB-95109-O
 SOLDER SIDE INNER LAYER (PINK) RCB-95110-O
 OVERLAY ----- RCB-95112-O

COMPONENT SIDE VIEW

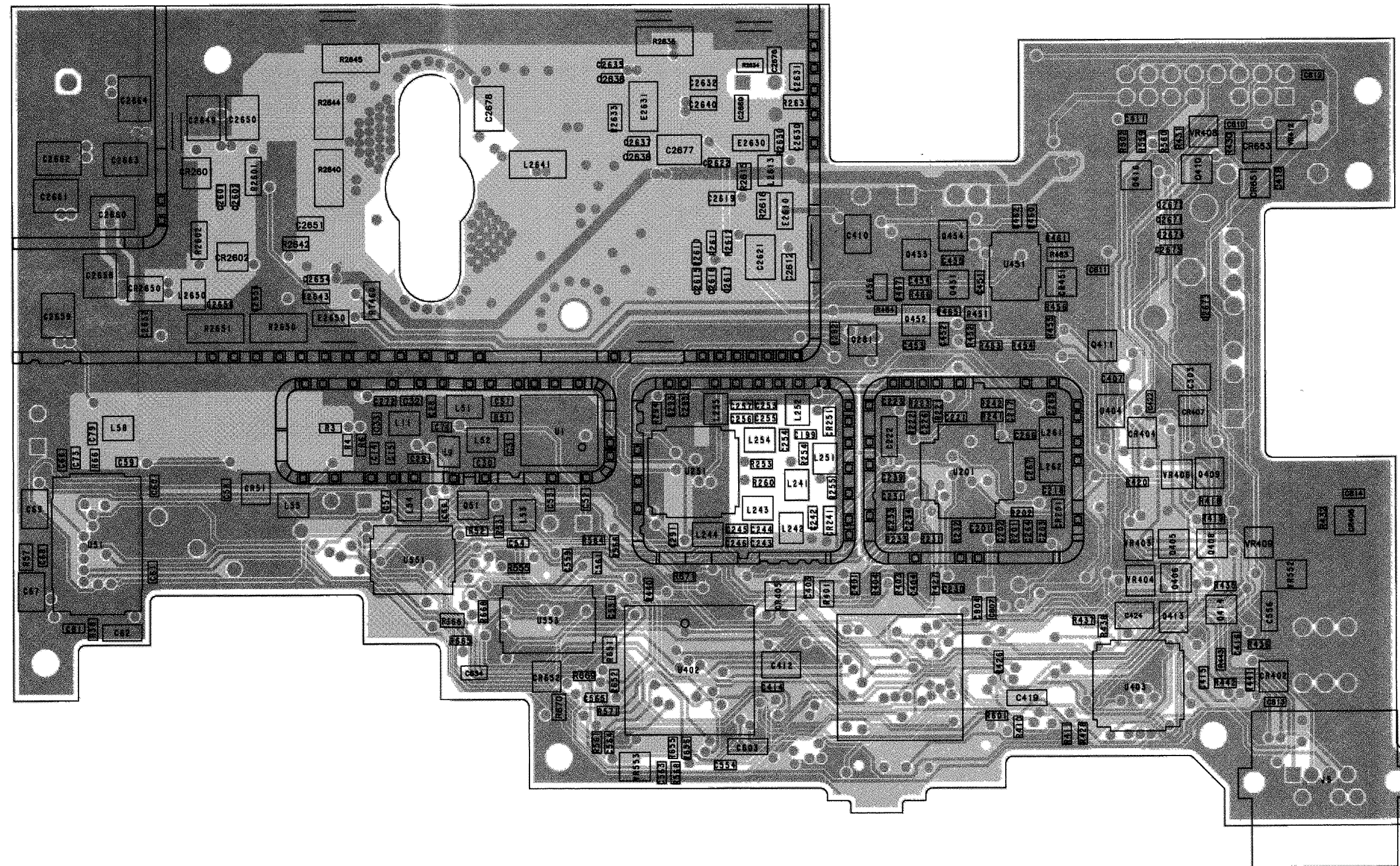
Circuit Board Details for
 VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 10-25 W
 (Part of PMUD1030A, PMUD1031A, PMUD1086A, and PMUD1087A Radios)



COMPONENT SIDE (GRAY)
SOLDER SIDE (PINK)
OVERLAY -----

RCB-95108-O (REV)
 RCB-95111-O (REV)
 RCB-95113-O

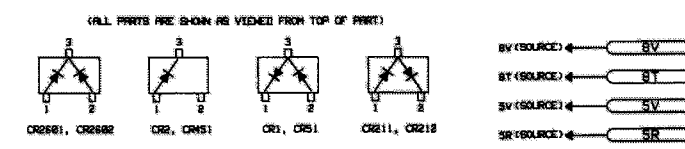
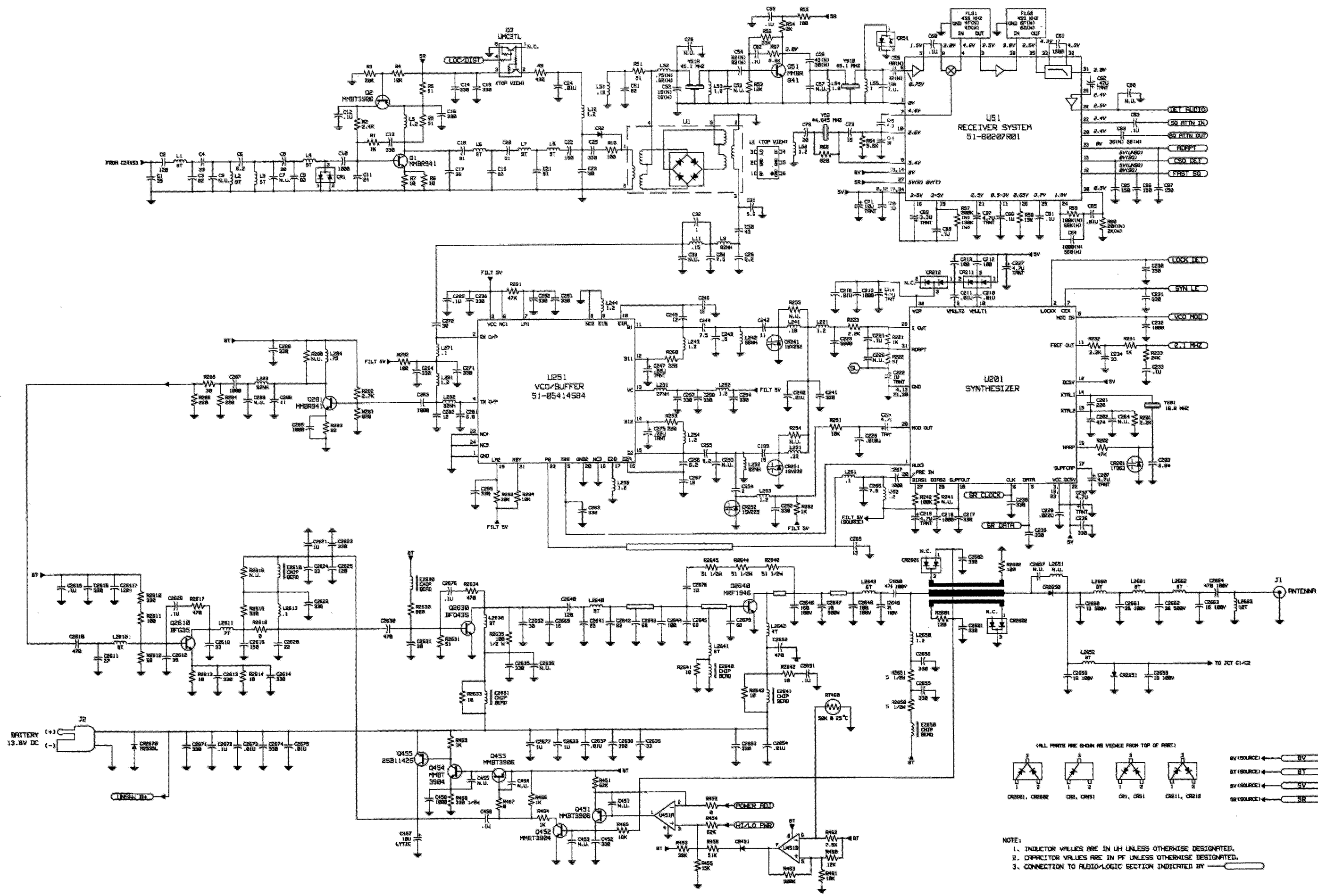
SOLDER SIDE VIEW



COMPONENT SIDE INNER LAYER (GRAY)
SOLDER SIDE INNER LAYER (PINK)
OVERLAY -----

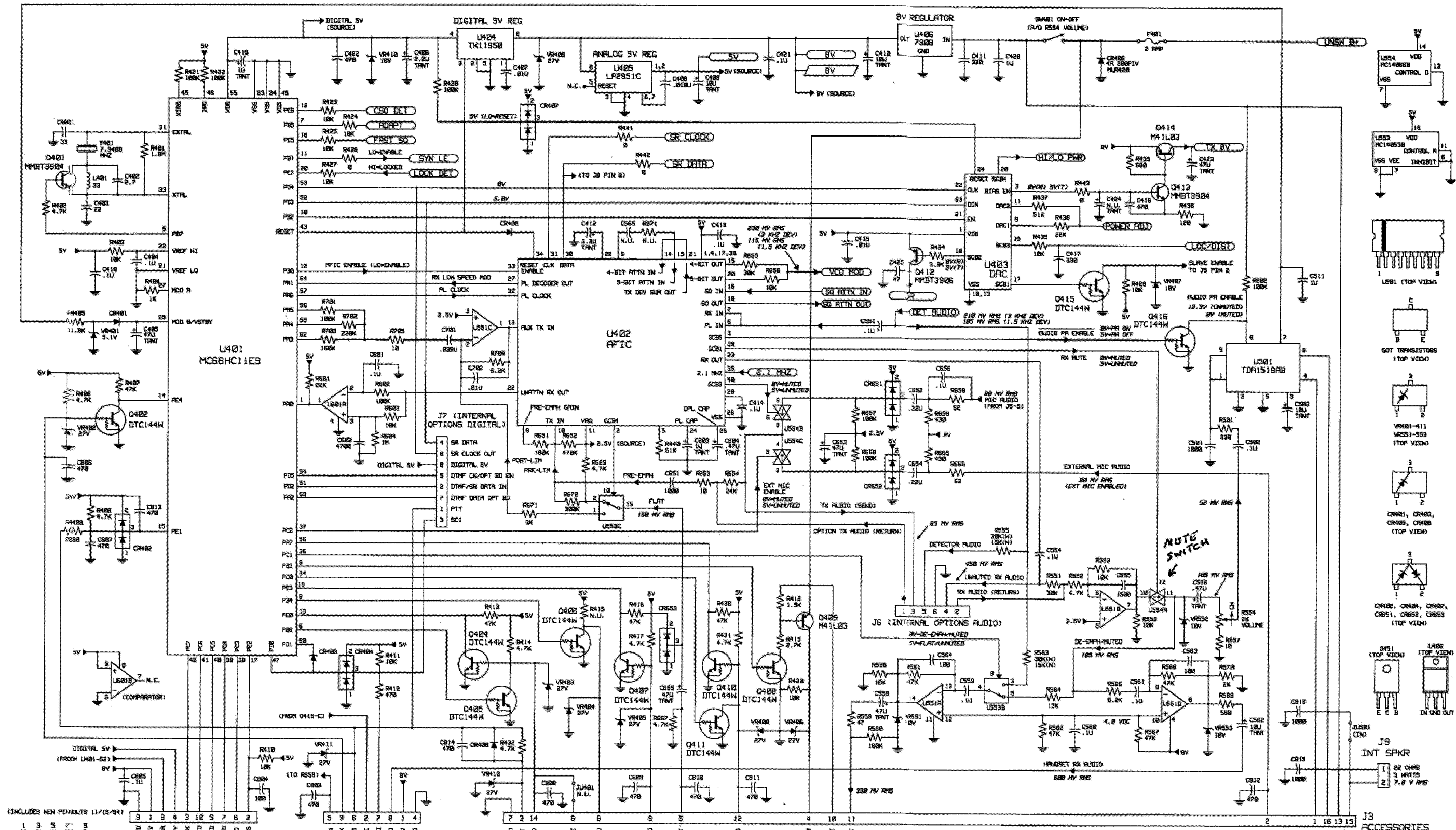
RCB-95109-O (REV)
 RCB-95110-O (REV)
 RCB-95113-O

SOLDER SIDE VIEW

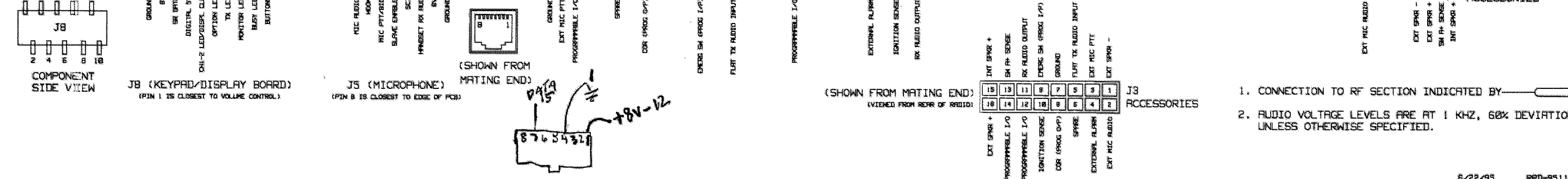


NOTE:
 1. INDUCTOR VALUES ARE IN UH UNLESS OTHERWISE DESIGNATED.
 2. CAPACITOR VALUES ARE IN PF UNLESS OTHERWISE DESIGNATED.
 3. CONNECTION TO AUDIO-LOGIC SECTION INDICATED BY

Schematic Diagram for
 VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 10-25 W
 (Part of PMUD1030A, PMUD1031A, PMUD1086A, and PMUD1087A Radios)
 (Sheet 1 of 2)

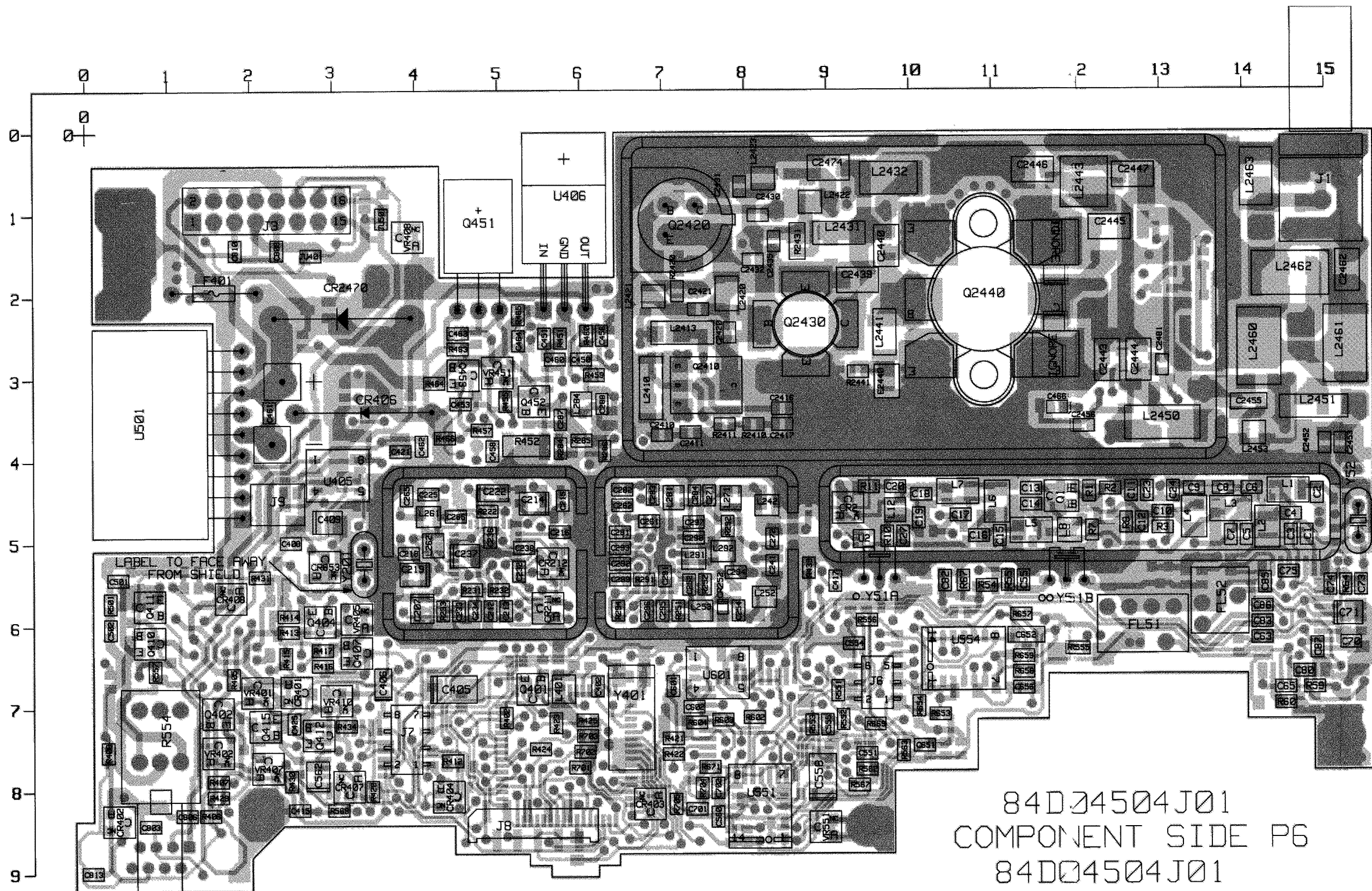


Schematic Diagram for VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 10-25 W (Part of PMUD1030A, PMUD1031A, PMUD1086A, and PMUD1087A Radios) (Sheet 2 of 2)



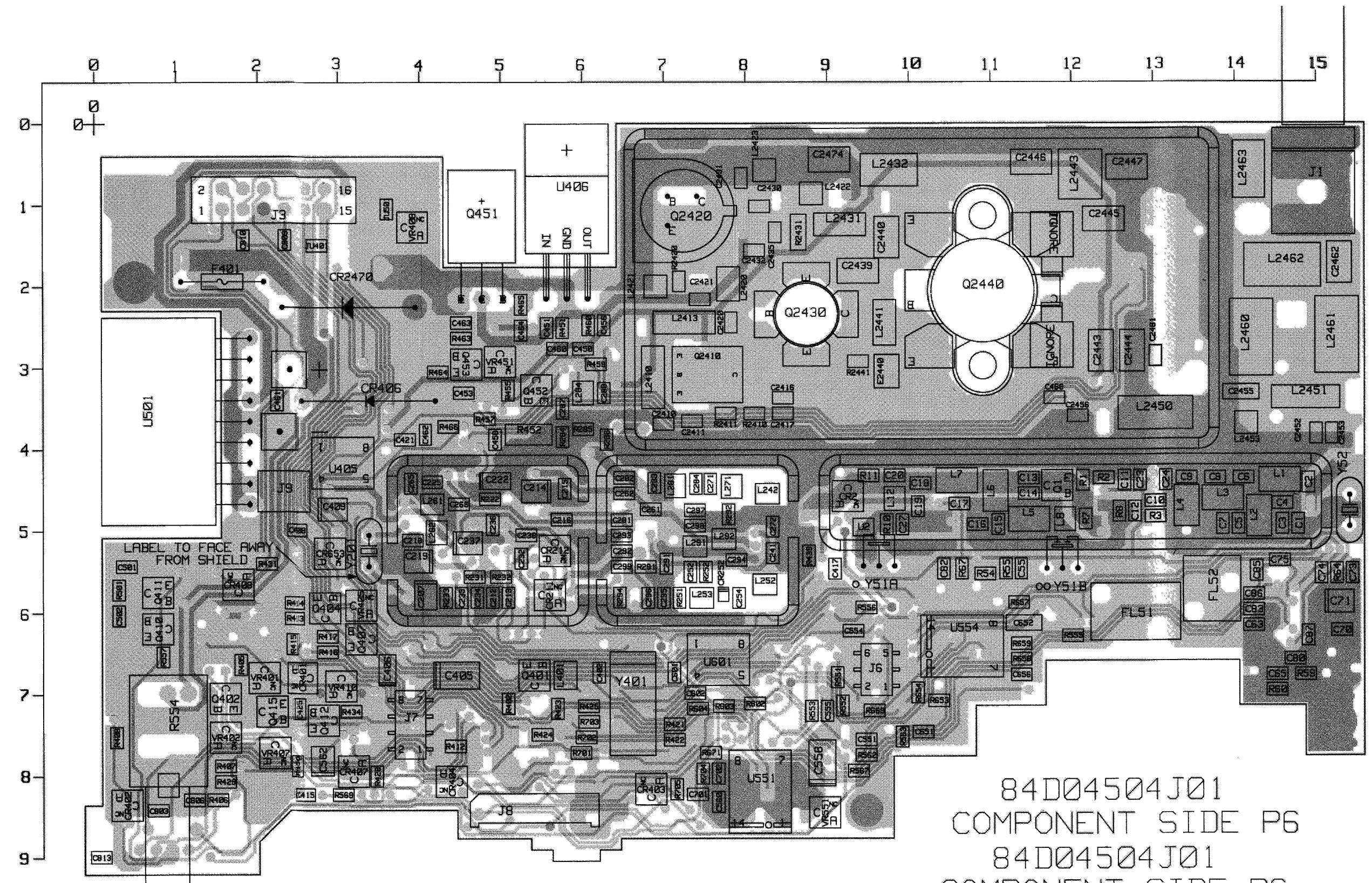
1. CONNECTION TO RF SECTION INDICATED BY ———
2. AUDIO VOLTAGE LEVELS ARE AT 1 KHZ, 60% DEVIATION UNLESS OTHERWISE SPECIFIED.

Handwritten note: 8763431 +8V-12



COMPONENT SIDE (GRAY) RCB-95114-O
 SOLDER SIDE (PINK) RCB-95117-O
 OVERLAY ----- RCB-95118-O

COMPONENT SIDE VIEW

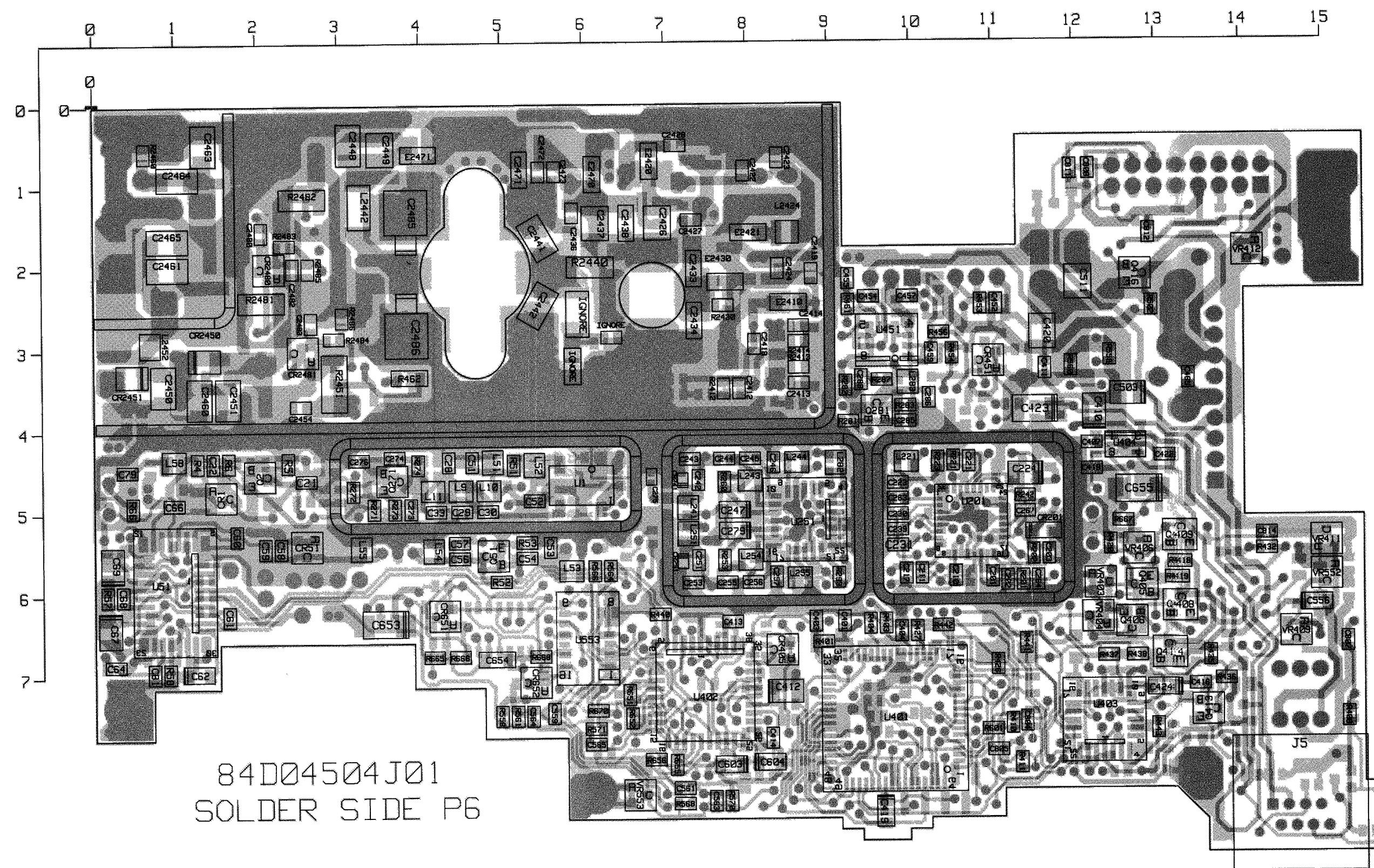


COMPONENT SIDE INNER LAYER (GRAY) RCB-95115-O
 SOLDER SIDE INNER LAYER (PINK) RCB-95116-O
 OVERLAY ----- RCB-95118-O

COMPONENT SIDE VIEW

84D04504J01
 COMPONENT SIDE P6
 84D04504J01
 COMPONENT SIDE P6
 LEADED PARTS

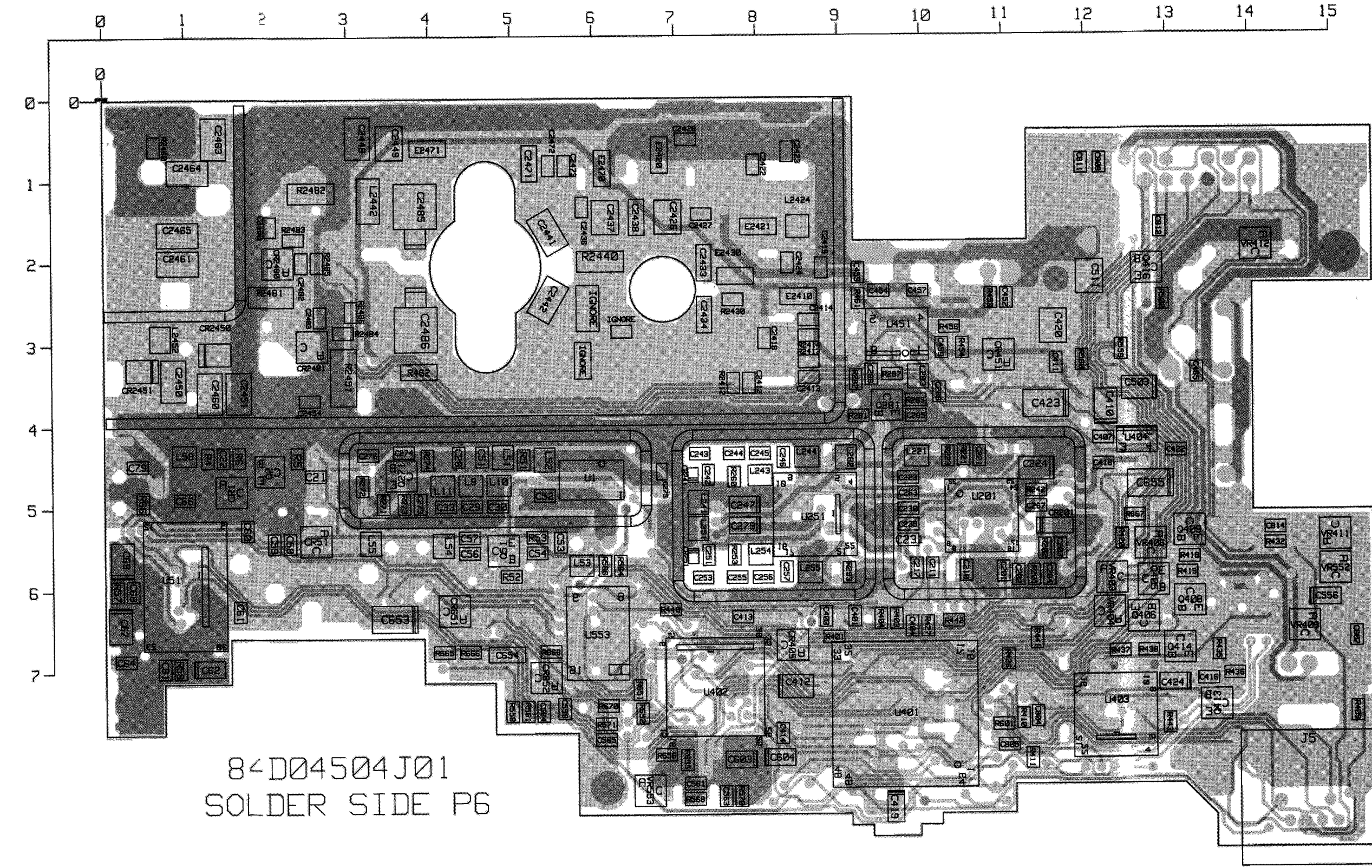
Circuit Board Details for
 VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 40 W
 (Part of PMUD1067A, PMUD1068A, PMUD1088A, PMUD1089A Radios)



84D04504J01
SOLDER SIDE P6

COMPONENT SIDE (GRAY) RCB-95114-O (REV)
SOLDER SIDE (PINK) RCB-95117-O (REV)
OVERLAY ----- RCB-95119-O (REV)

SOLDER SIDE VIEW

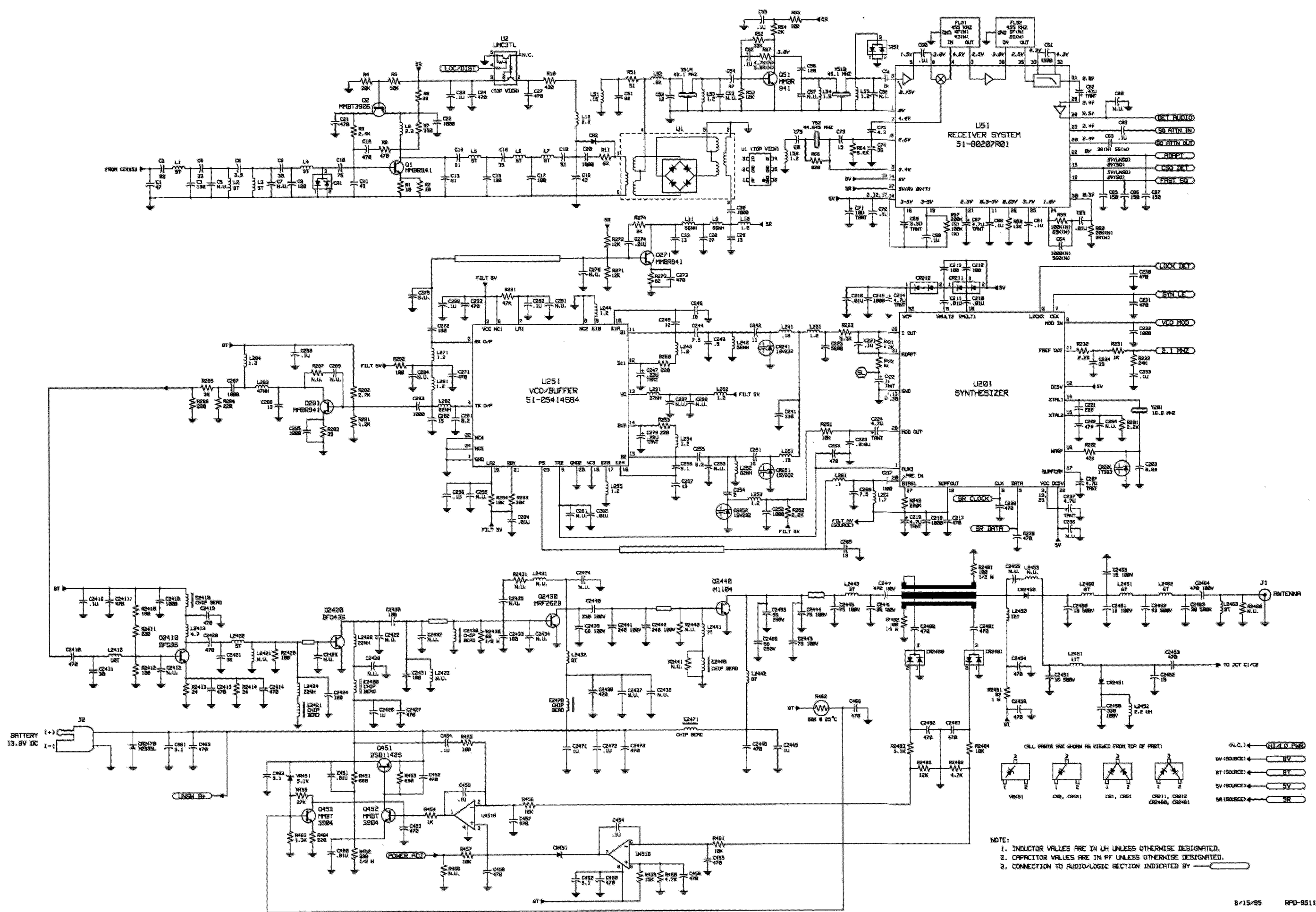


84D04504J01
SOLDER SIDE P6

COMPONENT SIDE INNER LAYER (GRAY) RCB-95115-O (REV)
SOLDER SIDE INNER LAYER (PINK) RCB-95116-O (REV)
OVERLAY ----- RCB-95119-O (REV)

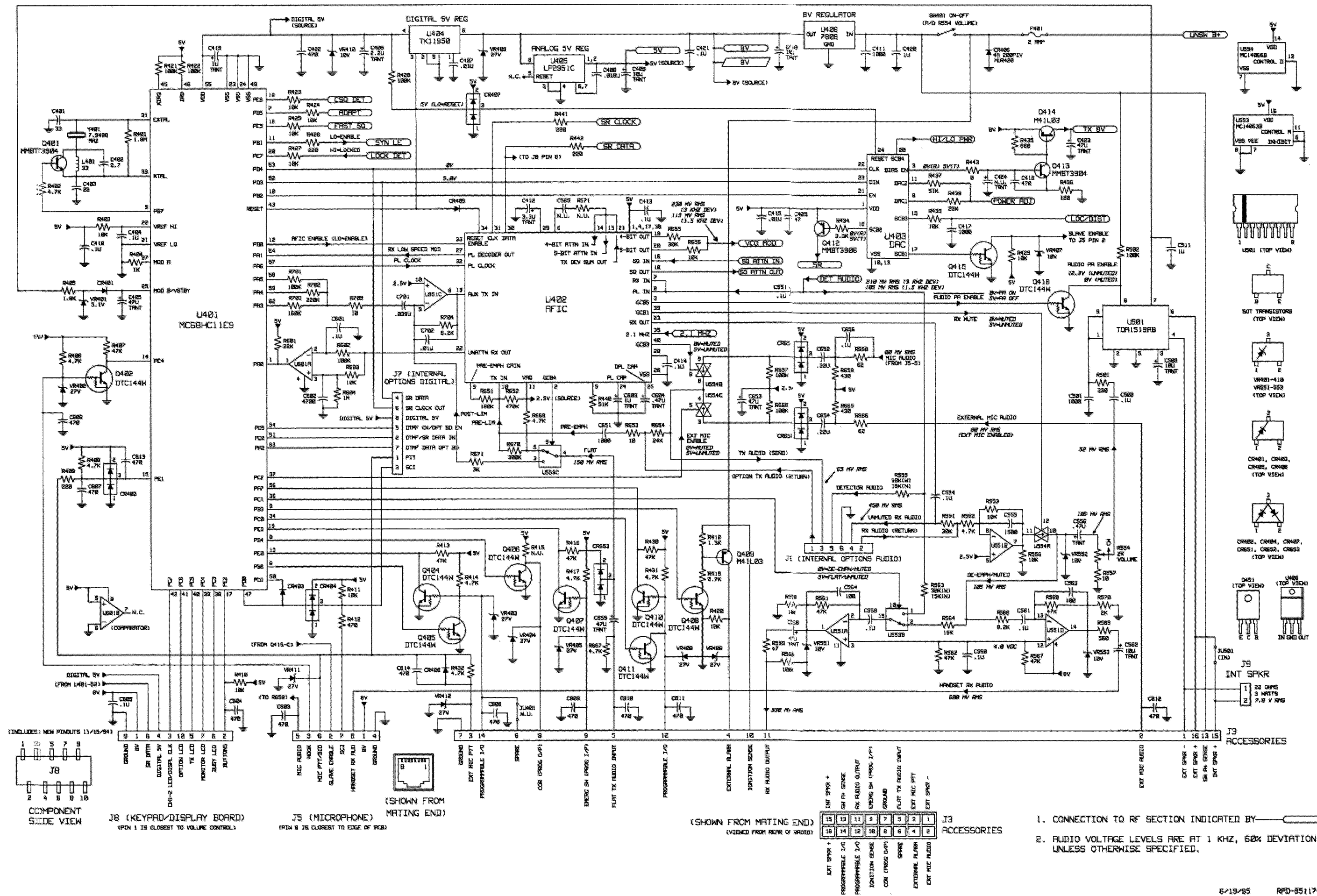
SOLDER SIDE VIEW

Circuit Board Details for
VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 40 W
(Part of PMUD1067A, PMUD1068A, PMUD1088A, PMUD1089A Radios)



Schematic Diagrams for
 VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 40 W
 (Part of PMUD1067A, PMUD1068A, PMUD1088A, PMUD1089A Radios)
 (Sheet 1 of 2)

- NOTE:
1. INDUCTOR VALUES ARE IN LH UNLESS OTHERWISE DESIGNATED.
 2. CAPACITOR VALUES ARE IN PF UNLESS OTHERWISE DESIGNATED.
 3. CONNECTION TO AUDIO/LOGIC SECTION INDICATED BY



Schematic Diagrams for
 VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 40 W
 (Part of PMUD1067A, PMUD1068A, PMUD1088A, PMUD1089A Radios)
 (Sheet 2 of 2)

1. CONNECTION TO RF SECTION INDICATED BY —
2. AUDIO VOLTAGE LEVELS ARE AT 1 KHZ, 50% DEVIATION UNLESS OTHERWISE SPECIFIED.

Parts List

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
12.5 kHz (N) (used in PMUD1067 & PMUD1088)
SM50/SM120 VHF Main Board, 150-170 MHz, 40 Watts
20/25/30 kHz (W) (used in PMUD1068 & PMUD1089) PL-951010-A

Table with columns: REFERENCE SYMBOL, MOTOROLA PART NO., DESCRIPTION. Lists various electronic components like capacitors, resistors, and diodes.

note: For optimum performance, diodes, transistors, and integrated circuits must be ordered by Motorola part numbers.

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Parts List for
VHF Main Boards, 150-170 MHz, 12.5 & 20/25/30 kHz, 40 W
(Part of PMUD1067A, PMUD1068A, PMUD1088A, PMUD1089A Radios)